

# October 2023 Executive Summary



PRELIMINARY, SUBJECT TO REVISION

# Overview

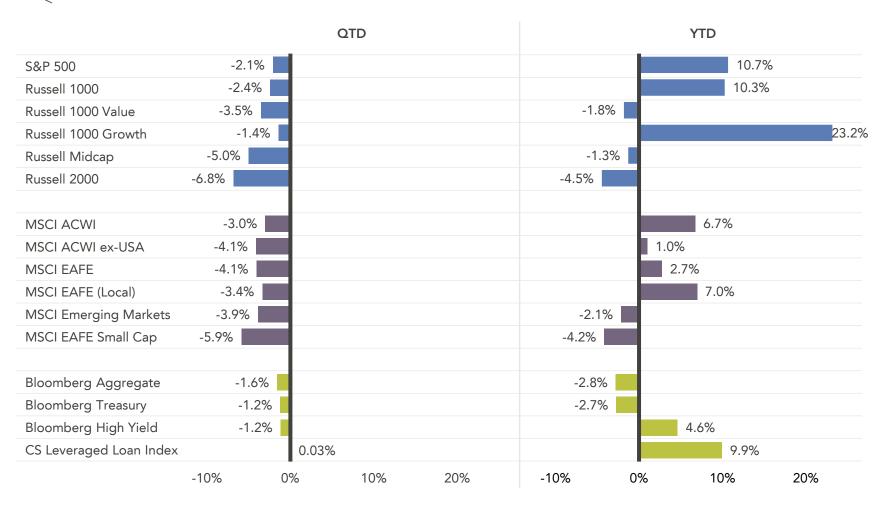
### **Year-to-date returns**

2023 YTD	2022	2021	2020	2019	2018	2017	2016	2015	2014	5yr	10yr
Large Cap 10.7%	Commodities 26.0%	Commodities 40.4%	Broad U.S. Equities 20.9%	Large Cap 31.5%	Bank Loans 1.1%	Emerging Markets 37.3%	Small Cap 21.3%	Intl Small Cap 9.6%	Large Cap 13.7%	Large Cap 11.0%	Large Cap 11.2%
Bank Loans 9.9%	Bank Loans -1.1%	Large Cap 28.7%	Small Cap 20.0%	Broad U.S. Equities 31.0%	Core Bond 0.0%	Intl Small Cap 33.0%	High Yield 17.1%	Large Cap 1.4%	Mid Cap 13.2%	Broad U.S. Equities 10.2%	Broad U.S. Equities 10.5%
Broad U.S. Equities 9.4%	High Yield -11.2%	Broad U.S. Equities 25.7%	Large Cap 18.4%	Mid Cap 30.5%	High Yield -2.1%	Broad Intl Equities 27.2%	Mid Cap 13.8%	Core Bond 0.5%	Broad U.S. Equities 12.6%	Mid Cap 7.1%	Mid Cap 8.1%
High Yield 4.6%	Core Bond -13.0%	Mid Cap 22.6%	Emerging Markets 18.3%	Small Cap 25.5%	Large Cap -4.4%	Intl Large Cap 25.0%	Broad U.S. Equities 12.7%	Broad U.S. Equities 0.5%	Core Bond 6.0%	Commodities 5.9%	Small Cap 5.6%
Commodities 2.8%	Intl Large Cap -14.5%	Small Cap 14.8%	Mid Cap 17.1%	Intl Small Cap 25.0%	Broad U.S. Equities -5.2%	Large Cap 21.8%	Large Cap 12.0%	Bank Loans -0.4%	Small Cap 4.9%	Bank Loans 4.3%	Bank Loans 4.3%
Intl Large Cap 2.7%	Broad Intl Equities -16.0%	Intl Large Cap 11.3%	Intl Small Cap 12.3%	Intl Large Cap 22.0%	Mid Cap -9.1%	Broad U.S. Equities 21.1%	Commodities 11.4%	Intl Large Cap -0.8%	High Yield 2.5%	Intl Large Cap 4.1%	High Yield 3.9%
Broad Intl Equities 1.0%	Mid Cap -17.3%	Intl Small Cap 10.1%	Broad Intl Equities 10.7%	Broad Intl Equities 21.5%	Small Cap -11.0%	Mid Cap 18.5%	Emerging Markets 11.2%	Mid Cap -2.4%	Bank Loans 2.1%	Broad Intl Equities 3.5%	Intl Small Cap 3.4%
Mid Cap -1.3%	Large Cap -18.1%	Broad Intl Equities 7.8%	Intl Large Cap 7.8%	Emerging Markets 18.4%	Intl Large Cap -13.8%	Small Cap 14.6%	Bank Loans 9.9%	Small Cap -4.4%	Emerging Markets -2.2%	Small Cap 3.3%	Intl Large Cap 3.1%
Emerging Markets -2.1%	Broad U.S. Equities -19.2%	Bank Loans 5.4%	Core Bond 7.5%	Commodities 17.6%	Commodities -13.8%	High Yield 7.5%	Broad Intl Equities 4.5%	High Yield -4.5%	Broad Intl Equities -3.9%	High Yield 3.1%	Broad Intl Equities 2.5%
Core Bond -2.8%	Emerging Markets -20.1%	High Yield 5.3%	High Yield 7.1%	High Yield 14.3%	Broad Intl Equities -14.2%	Commodities 5.8%	Core Bond 2.6%	Broad Intl Equities -5.7%	Intl Large Cap -4.9%	Intl Small Cap 1.6%	Emerging Markets 1.2%
Intl Small Cap -4.2%	Small Cap -20.4%	Core Bond -1.5%	Bank Loans 2.8%	Core Bond 8.7%	Emerging Markets -14.6%	Bank Loans 4.2%	Intl Small Cap 2.2%	Emerging Markets -14.9%	Intl Small Cap -4.9%	Emerging Markets 1.6%	Core Bond 0.9%
Small Cap -4.5%	Intl Small Cap -21.4%	Emerging Markets -2.5%	Commodities -23.7%	Bank Loans 8.2%	Intl Small Cap -17.9%	Core Bond 3.5%	Intl Large Cap 1.0%	Commodities -32.9%	Commodities -33.1%	Core Bond -0.1%	Commodities -2.8%

Source: Bloomberg as of October 31, 2023. Please see end of document for benchmark information.



### **Index summary**

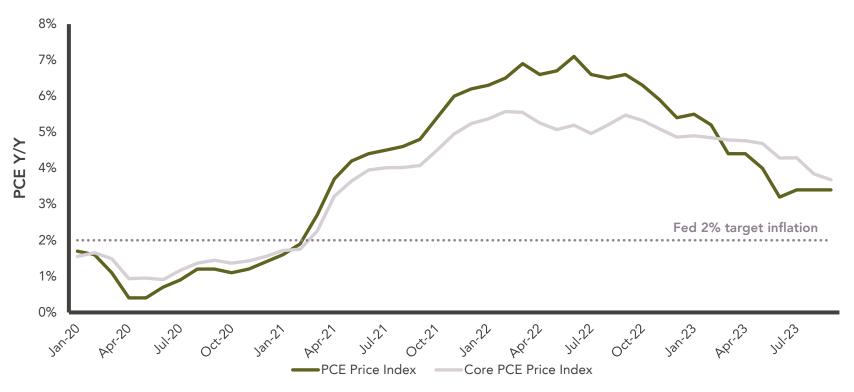


Source: Bloomberg as of October 31, 2023



### PCE

Despite recent moderation, core PCE levels — the Fed's preferred measure of inflation — remain above the 2% rate that the bank targets

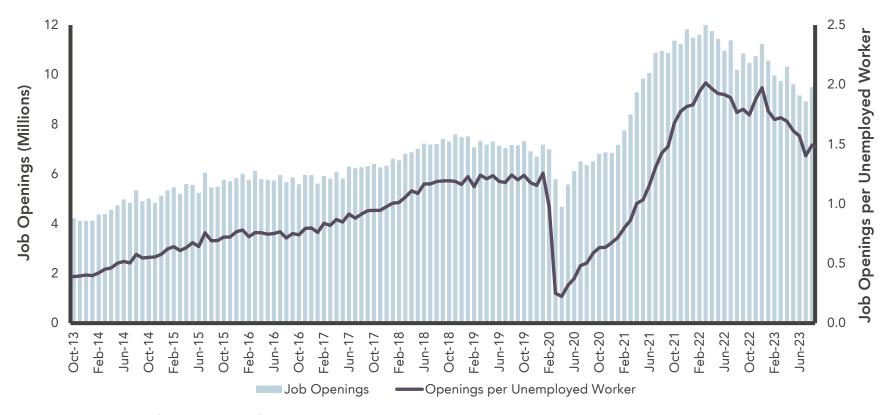


Source: Bloomberg, Bureau of Economic Analysis as of September 30, 2023



## Job openings

The Labor Department has recently estimated that there are upwards of 9.5 million job openings in the United States

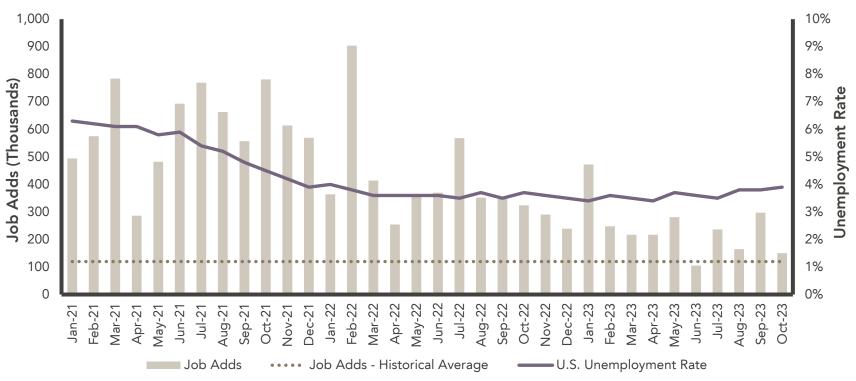


Source: Bloomberg, Bureau of Labor Statistics as of September 30, 2023



# Hiring and unemployment

Job growth slowed sharply in October, which may be a sign the U.S. economy is beginning to cool after a torrid summer

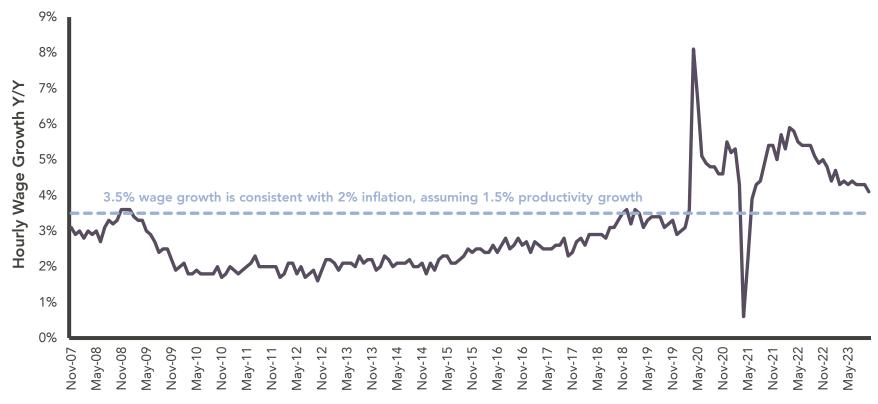


Source: Bloomberg, Bureau of Labor Statistics as of October 31, 2023. Job Adds – Historical Average represents the 30-year average prior to the onset of COVID-19 (March 1990 – February 2020).



## Wage growth

Despite moderating in recent months, wages continue to grow at around 4%, too high to be consistent with a 2% inflation target

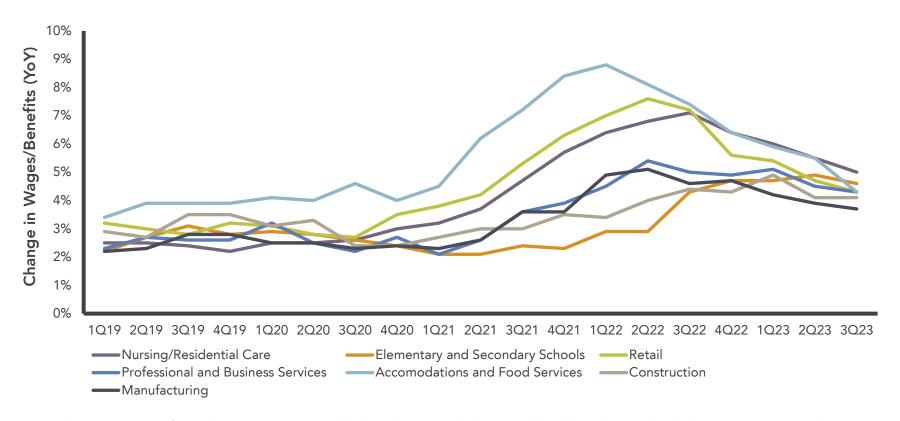


Source: Bloomberg, Bureau of Labor Statistics as of October 31, 2023



# Where exactly is the wage growth happening?

The nursing, food services, and retail spaces have seen the most significant wage growth over the last year

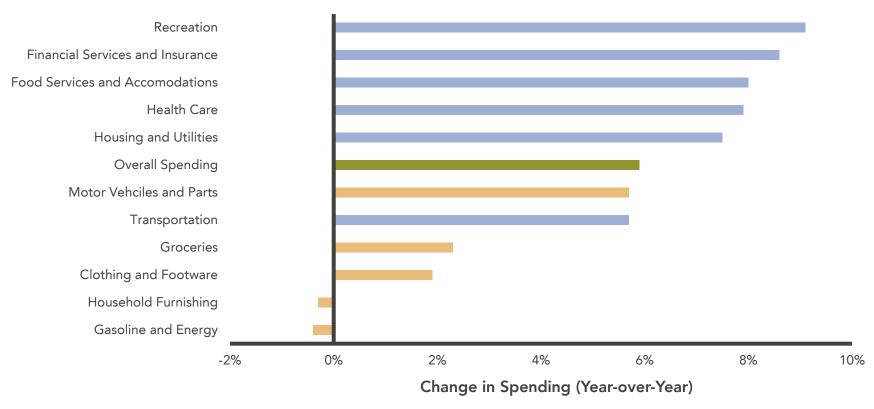


Source: Labor Department as of September 30, 2023. Not seasonally-adjusted. Nursing and education include public and private jobs. All others are private-sector only.



### Services sectors see tailwinds from consumer spending

### American consumers have increased spending across a variety of industries over the last year, particularly within services sectors

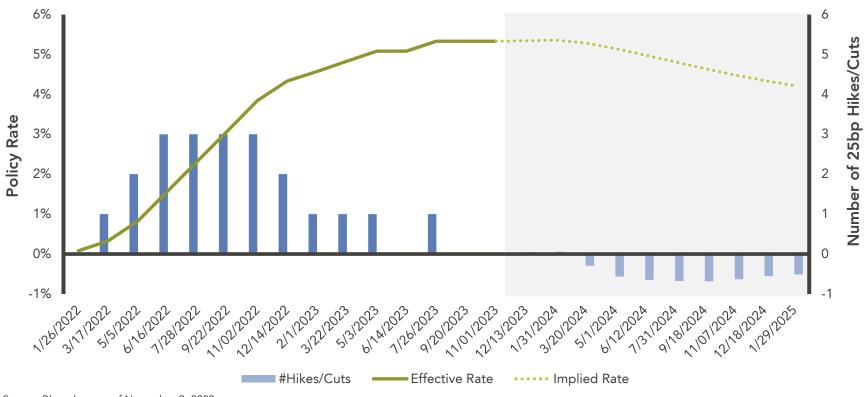


Source: Commerce Department as of September 30, 2023. Blue bars denote services sectors and orange bars denote goods sectors.



### Rate expectations

The market now expects the Fed to maintain its current policy rate for the next several months before eventual cuts in 2024



Source: Bloomberg as of November 3, 2023

# Fixed Income

## Fixed income performance

### Sharp increases in longer-maturity interest rates have led to broad negative performance across fixed income asset classes in recent time

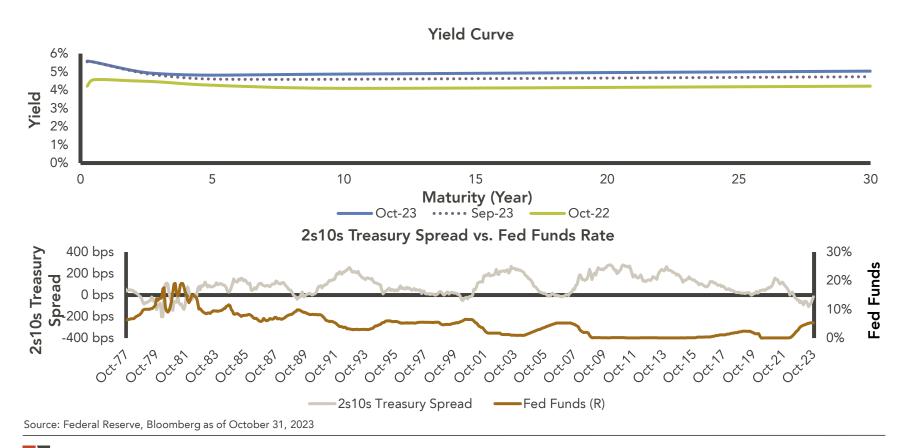
		MTD (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
Broad Market Indices	Bloomberg Aggregate	-1.6	-1.6	-2.8	0.4	-5.6	-0.1	0.9
Intermediate Indices	Bloomberg Int. Gov./Credit	-0.5	-0.5	0.2	2.2	-3.0	1.0	1.2
Government Only Indices	Bloomberg Long Gov.	-4.9	-4.9	-13.0	-8.4	-16.2	-3.2	0.1
	Bloomberg Int. Gov.	-0.3	-0.3	0.0	1.5	-3.2	0.6	0.7
	Bloomberg 1-3 Year Gov.	0.3	0.3	2.0	2.9	-0.8	1.1	0.8
	Bloomberg U.S. TIPS	-0.7	-0.7	-1.5	-0.7	-2.0	2.3	1.6
Credit Indices	Bloomberg U.S. Long Credit	-4.1	-4.1	-6.6	0.6	-10.1	-0.3	2.0
	Bloomberg High Yield	-1.2	-1.2	4.6	6.2	1.2	3.1	3.9
	CS Leveraged Loan Index	0.0	0.0	9.9	11.6	5.9	4.3	4.3
Securitized Bond Indices	Bloomberg MBS	-2.1	-2.1	-4.3	-0.8	-5.7	-1.1	0.3
	Bloomberg ABS	-0.2	-0.2	1.8	3.5	-0.9	1.4	1.4
	Bloomberg CMBS	-0.9	-0.9	-0.8	1.8	-3.8	0.8	1.5
Non-U.S. Indices	Bloomberg Global Aggregate Hedged	-0.7	-0.7	0.4	1.7	-3.9	0.5	1.7
	JPM EMBI Global Diversified	-1.4	-1.4	.04	8.4	-5.0	-0.2	2.1
	JPM GBI-EM Global Diversified	-1.4	-1.4	3.7	13.5	-3.0	-12.1	-1.2
Municipal Indices	Bloomberg Municipal 5 Year	-0.1	-0.1	-1.0	2.2	-1.7	1.0	1.3
	Bloomberg HY Municipal	-1.6	-1.6	-1.6	4.0	-1.3	1.7	3.8

Source: Bloomberg, Credit Suisse, JPMorgan as of October 31, 2023. The local currency GBI index is hedged and denominated in U.S. dollars.



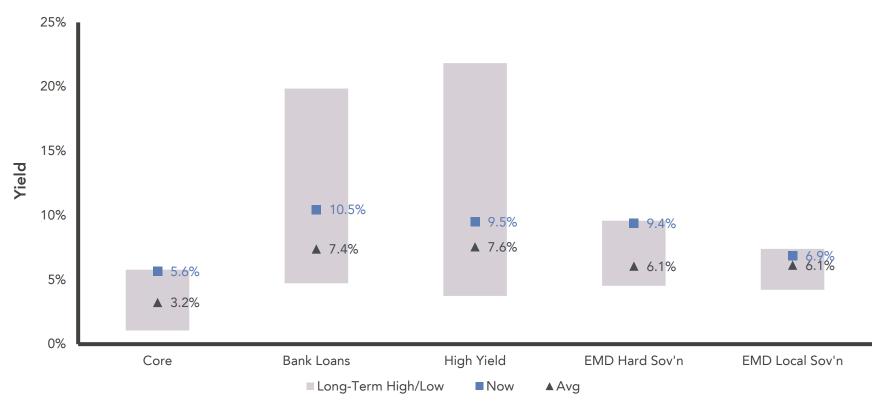
## U.S. Treasury yield curve and steepness

With the Fed reiterating a commitment to higher-for-longer rates, the yield curve flattened as back-end rates repriced higher in October



## Fixed income yields

Yields moved upwards as Treasury rates rose; yields should provide an income cushion against widening spreads or higher Treasury rates

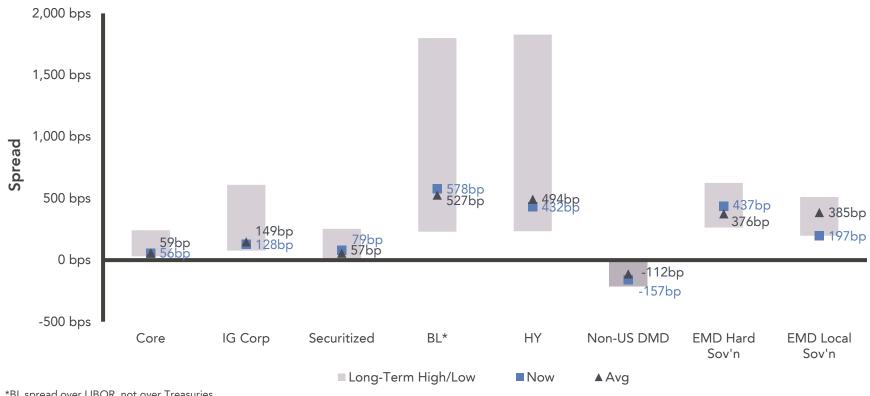


Source: Bloomberg, Credit Suisse, JPMorgan as of October 31, 2023. Long-term high, low, and average based on longest available data for each index.



# Fixed income spreads

### Spreads widened slightly in October and still show minimal value with most sectors tight (at or below long-term averages)

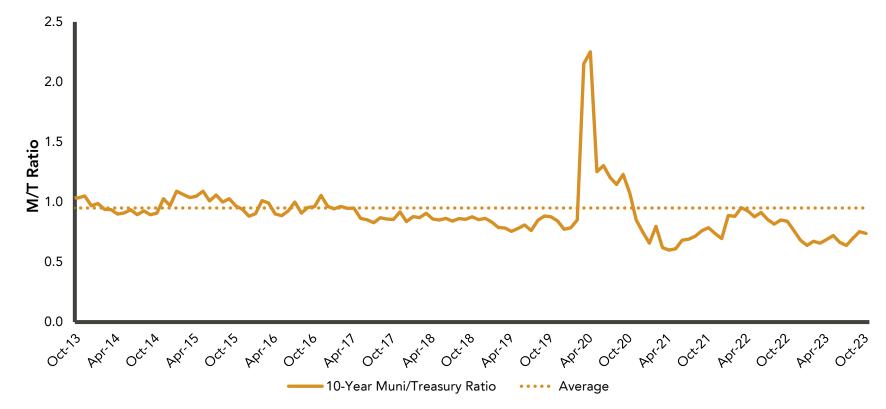


\*BL spread over LIBOR, not over Treasuries. Source: Bloomberg, Credit Suisse, JPMorgan as of October 31, 2023. Long-term high, low, and average based on longest available data for each index.



## **Municipal-to-Treasury ratio**

The Municipal-to-Treasury ratio fell slightly in October and remains below its long-term average



Source: Bloomberg, Federal Reserve as of October 31, 2023.



### Municipal-to-Treasury ratios

### Long-dated ratios fell slightly in October as the back end of the Treasury curve increased at a faster rate than the muni curve

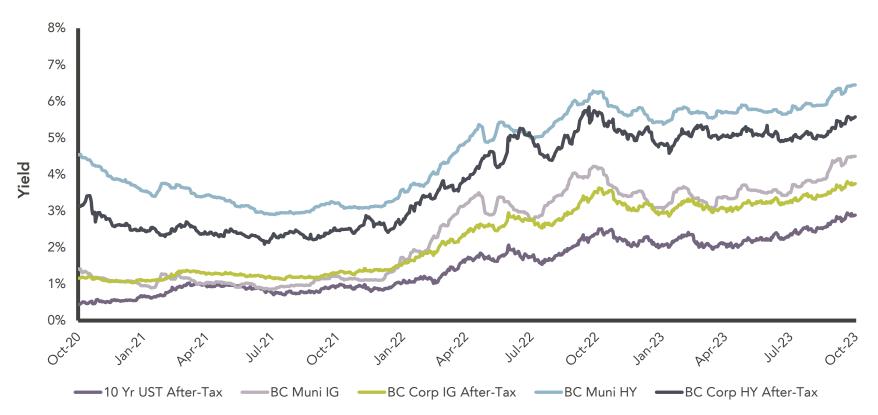
	MUN	TSY	<b>Ratio</b> (10/31/23)	<b>Ratio</b> (12/31/22)	<b>Ratio</b> (12/31/21)	<b>Ratio</b> (12/31/20)
1Y	3.79	5.42	0.70	0.60	0.49	1.21
3Y	3.61	4.89	0.74	0.61	0.35	0.87
5Y	3.52	4.77	0.73	0.64	0.48	0.59
7Y	3.54	4.82	0.72	0.65	0.59	0.57
10Y	3.62	4.80	0.74	0.68	0.70	0.75
30Y	4.59	4.95	0.91	0.91	0.81	0.89

Source: Bloomberg, U.S. Treasury as of October 31, 2023



## Municipal vs. corporate after-tax yields

Municipal yields look attractive with both IG and high yield municipals having a yield pick-up over after-tax corporate yields

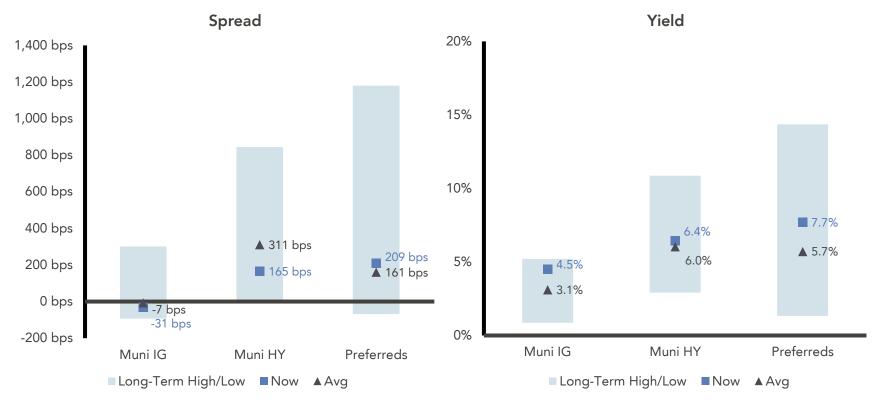


Source: Bloomberg as of October 31, 2023; based on 37% highest tax bracket and 3.8% net investment income tax



## Municipal spreads and yields

Municipal spreads are relatively unattractive, but yields continue to be compelling vs. taxable fixed income yields



Source: Bloomberg as of October 31, 2023



# U.S. Equities

## **U.S.** equity performance

### All major U.S. equity indices notched negative returns in October, with small-cap equities now in negative territory on a year-to-date basis

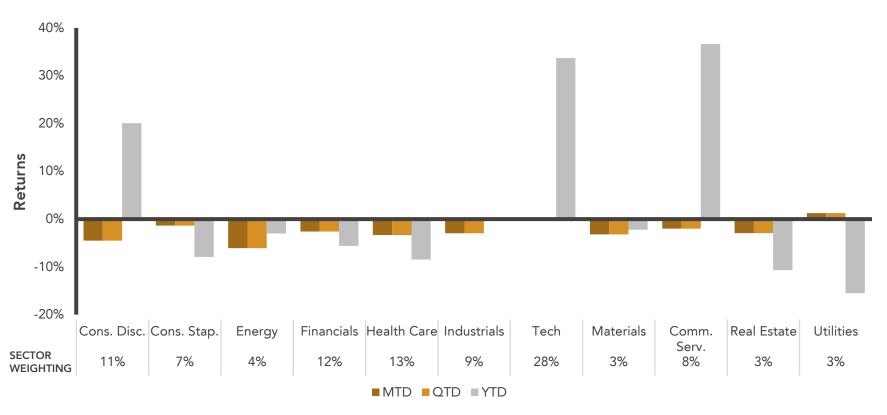
MTD (%)         QTD (%)         YTD (%)         1 Yr (%)         3 Yr (%)         5 Yr (%)         10 Yr (%)           Broad Market Indices         Dow Jones         -1.3         -1.3         -1.3         1.4         3.2         9.8         8.0         10.3           Wilshire 5000         -2.7         -2.7         9.4         8.4         9.2         10.2         10.5           Large-Cap Market Indices         5&P 500         -2.1         -2.1         10.7         10.1         10.4         11.0         11									
Wilshire 5000       -2.7       -2.7       9.7       8.2       8.6       9.9       10.3         Russell 3000       -2.7       -2.7       9.4       8.4       9.2       10.2       10.5         Large-Cap Market Indices       S&P 500       -2.1       -2.1       10.7       10.1       10.4       11.0       11.2         Russell 1000       -2.4       -2.4       10.3       9.5       9.5       10.7       10.9         Russell 1000 Value       -3.5       -3.5       -1.8       0.1       10.2       6.6       7.6         Russell 1000 Growth       -1.4       -1.4       23.2       19.0       8.7       14.2       13.8         Mid-Cap Market Indices       Russell Mid-Cap       -5.0       -5.0       -1.3       -1.0       6.0       7.1       8.1         Russell Mid-Cap Value       -5.0       -5.0       -4.4       -3.6       8.8       5.7       6.9         Small-Cap Market Indices       Russell 2000       -6.8       -6.8       -4.5       -8.6       3.9       3.3       5.6         Russell 2000 Value       -6.0       -6.0       -6.5       -9.9       9.7       3.3       5.2			MTD (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
Russell 3000 -2.7 -2.7 9.4 8.4 9.2 10.2 10.5  Large-Cap Market Indices S&P 500 -2.1 -2.1 10.7 10.1 10.4 11.0 11.2  Russell 1000 -2.4 -2.4 10.3 9.5 9.5 10.7 10.9  Russell 1000 Value -3.5 -3.5 -1.8 0.1 10.2 6.6 7.6  Russell 1000 Growth -1.4 -1.4 23.2 19.0 8.7 14.2 13.8  Mid-Cap Market Indices Russell Mid-Cap -5.0 -5.0 -1.3 -1.0 6.0 7.1 8.1  Russell Mid-Cap Value -5.0 -5.0 -4.4 -3.6 8.8 5.7 6.9  Russell Mid-Cap Growth -5.1 -5.1 4.3 3.3 0.8 8.1 9.1  Small-Cap Market Indices Russell 2000 -6.8 -6.8 -4.5 -8.6 3.9 3.3 5.6  Russell 2000 Value -6.0 -6.0 -6.5 -9.9 9.7 3.3 5.2	Broad Market Indices	Dow Jones	-1.3	-1.3	1.4	3.2	9.8	8.0	10.3
Large-Cap Market Indices         S&P 500         -2.1         -2.1         10.7         10.1         10.4         11.0         11.2           Russell 1000         -2.4         -2.4         10.3         9.5         9.5         10.7         10.9           Russell 1000 Value         -3.5         -3.5         -1.8         0.1         10.2         6.6         7.6           Russell 1000 Growth         -1.4         -1.4         23.2         19.0         8.7         14.2         13.8           Mid-Cap Market Indices         Russell Mid-Cap         -5.0         -5.0         -1.3         -1.0         6.0         7.1         8.1           Russell Mid-Cap Value         -5.0         -5.0         -4.4         -3.6         8.8         5.7         6.9           Russell Mid-Cap Growth         -5.1         -5.1         4.3         3.3         0.8         8.1         9.1           Small-Cap Market Indices         Russell 2000         -6.8         -6.8         -4.5         -8.6         3.9         3.3         5.6           Russell 2000 Value         -6.0         -6.0         -6.5         -9.9         9.7         3.3         5.2		Wilshire 5000	-2.7	-2.7	9.7	8.2	8.6	9.9	10.3
Russell 1000 -2.4 -2.4 10.3 9.5 9.5 10.7 10.9 Russell 1000 Value -3.5 -3.5 -1.8 0.1 10.2 6.6 7.6 Russell 1000 Growth -1.4 -1.4 23.2 19.0 8.7 14.2 13.8  Mid-Cap Market Indices Russell Mid-Cap -5.0 -5.0 -1.3 -1.0 6.0 7.1 8.1 Russell Mid-Cap Value -5.0 -5.0 -4.4 -3.6 8.8 5.7 6.9 Russell Mid-Cap Growth -5.1 -5.1 4.3 3.3 0.8 8.1 9.1  Small-Cap Market Indices Russell 2000 -6.8 -6.8 -4.5 -8.6 3.9 3.3 5.6 Russell 2000 Value -6.0 -6.0 -6.5 -9.9 9.7 3.3 5.2		Russell 3000	-2.7	-2.7	9.4	8.4	9.2	10.2	10.5
Russell 1000 Value -3.5 -3.5 -1.8 0.1 10.2 6.6 7.6 Russell 1000 Growth -1.4 -1.4 23.2 19.0 8.7 14.2 13.8  Mid-Cap Market Indices Russell Mid-Cap -5.0 -5.0 -1.3 -1.0 6.0 7.1 8.1 Russell Mid-Cap Value -5.0 -5.0 -4.4 -3.6 8.8 5.7 6.9 Russell Mid-Cap Growth -5.1 -5.1 4.3 3.3 0.8 8.1 9.1  Small-Cap Market Indices Russell 2000 -6.8 -6.8 -4.5 -8.6 3.9 3.3 5.6 Russell 2000 Value -6.0 -6.0 -6.5 -9.9 9.7 3.3 5.2	Large-Cap Market Indices	S&P 500	-2.1	-2.1	10.7	10.1	10.4	11.0	11.2
Russell 1000 Growth       -1.4       -1.4       -1.4       23.2       19.0       8.7       14.2       13.8         Mid-Cap Market Indices       Russell Mid-Cap       -5.0       -5.0       -5.0       -1.3       -1.0       6.0       7.1       8.1         Russell Mid-Cap Value       -5.0       -5.0       -4.4       -3.6       8.8       5.7       6.9         Russell Mid-Cap Growth       -5.1       -5.1       4.3       3.3       0.8       8.1       9.1         Small-Cap Market Indices       Russell 2000       -6.8       -6.8       -4.5       -8.6       3.9       3.3       5.6         Russell 2000 Value       -6.0       -6.0       -6.5       -9.9       9.7       3.3       5.2		Russell 1000	-2.4	-2.4	10.3	9.5	9.5	10.7	10.9
Mid-Cap Market Indices         Russell Mid-Cap         -5.0         -5.0         -1.3         -1.0         6.0         7.1         8.1           Russell Mid-Cap Value         -5.0         -5.0         -4.4         -3.6         8.8         5.7         6.9           Russell Mid-Cap Growth         -5.1         -5.1         4.3         3.3         0.8         8.1         9.1           Small-Cap Market Indices         Russell 2000         -6.8         -6.8         -4.5         -8.6         3.9         3.3         5.6           Russell 2000 Value         -6.0         -6.0         -6.5         -9.9         9.7         3.3         5.2		Russell 1000 Value	-3.5	-3.5	-1.8	0.1	10.2	6.6	7.6
Russell Mid-Cap Value -5.0 -5.0 -4.4 -3.6 8.8 5.7 6.9  Russell Mid-Cap Growth -5.1 -5.1 4.3 3.3 0.8 8.1 9.1  Small-Cap Market Indices Russell 2000 -6.8 -6.8 -4.5 -8.6 3.9 3.3 5.6  Russell 2000 Value -6.0 -6.0 -6.5 -9.9 9.7 3.3 5.2		Russell 1000 Growth	-1.4	-1.4	23.2	19.0	8.7	14.2	13.8
Russell Mid-Cap Growth -5.1 -5.1 4.3 3.3 0.8 8.1 9.1  Small-Cap Market Indices Russell 2000 -6.8 -6.8 -4.5 -8.6 3.9 3.3 5.6  Russell 2000 Value -6.0 -6.0 -6.5 -9.9 9.7 3.3 5.2	Mid-Cap Market Indices	Russell Mid-Cap	-5.0	-5.0	-1.3	-1.0	6.0	7.1	8.1
Small-Cap Market Indices         Russell 2000         -6.8         -6.8         -4.5         -8.6         3.9         3.3         5.6           Russell 2000 Value         -6.0         -6.0         -6.5         -9.9         9.7         3.3         5.2		Russell Mid-Cap Value	-5.0	-5.0	-4.4	-3.6	8.8	5.7	6.9
Russell 2000 Value -6.0 -6.0 -6.5 -9.9 9.7 3.3 5.2		Russell Mid-Cap Growth	-5.1	-5.1	4.3	3.3	0.8	8.1	9.1
	Small-Cap Market Indices	Russell 2000	-6.8	-6.8	-4.5	-8.6	3.9	3.3	5.6
Russell 2000 Growth -7.7 -7.7 -2.9 -7.6 -1.8 2.7 5.7		Russell 2000 Value	-6.0	-6.0	-6.5	-9.9	9.7	3.3	5.2
		Russell 2000 Growth	-7.7	-7.7	-2.9	-7.6	-1.8	2.7	5.7

Source: Bloomberg as of October 31, 2023



# **S&P 500 sector performance**

Utilities was the only positive sector in October, but remains the most challenged sector on a year-to-date basis

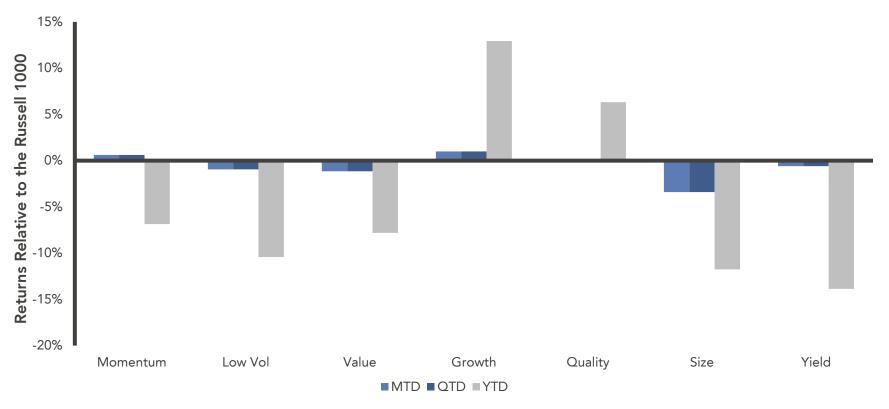


Source: Bloomberg as of October 31, 2023. Sector weightings are as of September 30, 2023



### Russell 1000 factor performance

The growth factor regained market leadership in October, bolstering its strength on a year-to-date basis



Source: Bloomberg as of October 31, 2023



## **S&P 500 enters correction territory**

### The S&P 500 experienced a shallow, short correction relative to history, but has risen more than 5% since its trough on October 27

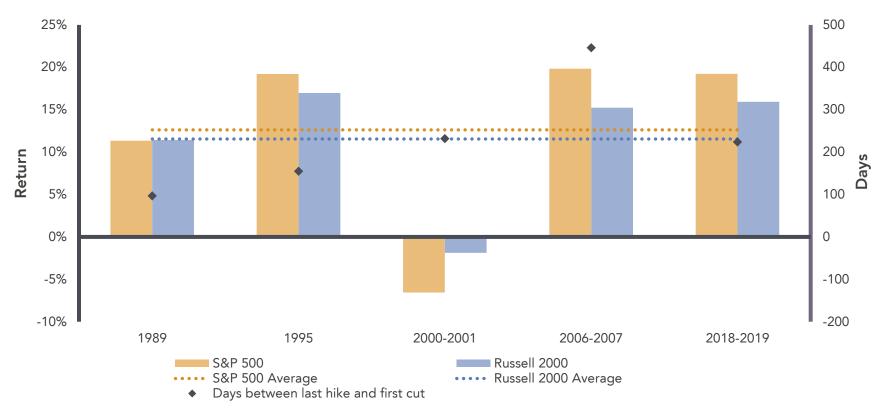
Days	Drawdown	Correction End (Trough)	Correction Start (Peak)
929	-49.1%	10/9/2002	3/24/2000
104	-14.7%	3/11/2003	11/27/2002
517	-56.8%	3/9/2009	10/9/2007
70	-16.0%	7/2/2010	4/23/2010
157	-19.4%	10/3/2011	4/29/2011
96	-12.4%	8/25/2015	5/21/2015
100	-13.3%	2/11/2016	11/3/2015
13	-10.2%	2/8/2018	1/26/2018
95	-19.8%	12/24/2018	9/20/2018
33	-33.9%	3/23/2020	2/19/2020
282	-25.4%	10/12/2022	1/3/2022
88	-10.3%	10/27/2023	7/31/2023
207	-23.4%	Average	
98	-17.7%	Median	

Source: Bloomberg as of November 3, 2023



# The end of hikes and the beginning of strength?

Following a final Fed hike, domestic equities tend to generate positive returns in the period leading up to a subsequent first cut

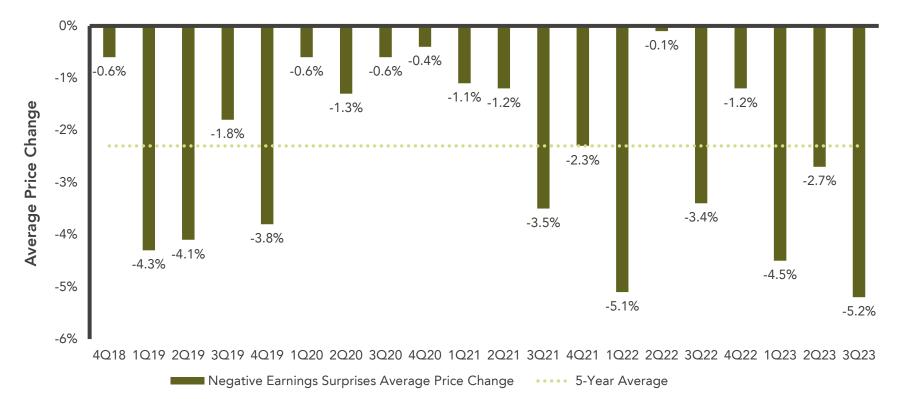


Source: Bloomberg



# Stock prices decline on negative earnings

The market reacted more harshly than usual toward companies that reported negative earnings surprises over the last few weeks



Source: FactSet as of November 3, 2023. 81% of companies reported. Average price change is the difference between stock prices two days before and two days after the earnings report.



# Non-U.S. Equities

## Global equity performance

### Global equity benchmarks were down in October, and EAFE Small Cap and Emerging Markets indices are now negative on a year-to-date basis

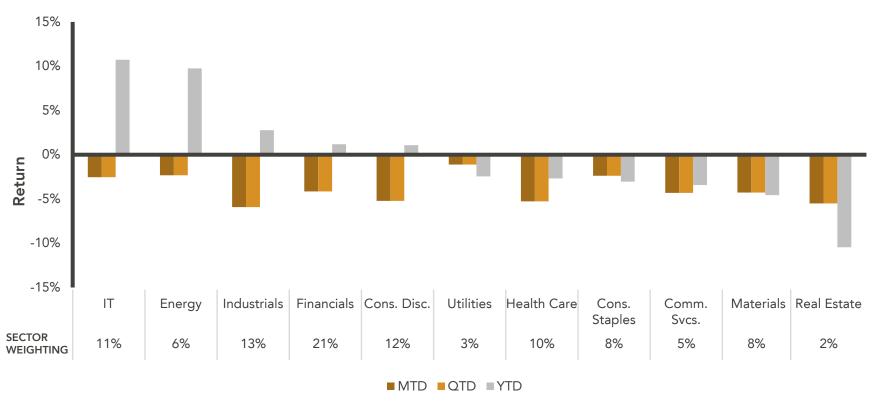
		MTD (%)	QTD (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
Global Equity Market Indices	MSCI ACWI	-3.0	-3.0	6.7	10.5	6.7	7.5	6.8
	MSCI ACWI ex-USA	-4.1	-4.1	1.0	12.1	3.0	3.5	2.5
Developed Markets Indices	MSCI EAFE	-4.1	-4.1	2.7	14.4	5.7	4.1	3.1
	MSCI EAFE Local	-3.4	-3.4	7.0	10.4	11.0	6.4	6.0
Emerging Markets Indices	MSCI Emerging Markets	-3.9	-3.9	-2.1	10.8	-3.7	1.6	1.2
	MSCI EM Local	-3.6	-3.6	0.3	9.8	-1.1	3.6	4.2
Small-Cap Market Indices	MSCI EAFE Small Cap	-5.9	-5.9	-4.2	6.5	0.3	1.6	3.4
	MSCI EM Small Cap	-4.8	-4.8	8.2	17.2	9.0	7.8	3.7
Frontier Markets Index	MSCI Frontier	-5.8	-5.8	1.1	4.8	-0.6	1.1	1.4

Source: Bloomberg as of October 31, 2023



## MSCI ACWI ex-USA sector performance

Every sector of the MSCI ACWI ex-USA Index was negative in October; Information Technology stocks still lead on a year-to-date basis

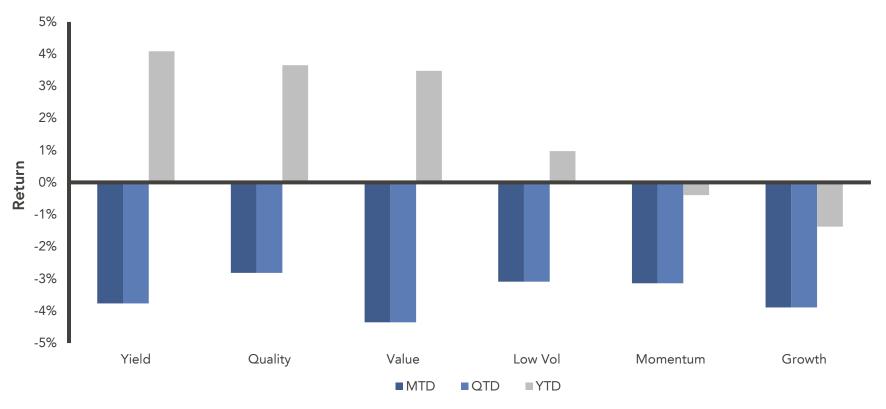


Source: Bloomberg as of October 31, 2023. Sector weightings as of September 30, 2023.



### MSCI ACWI ex-USA factor performance

Value-oriented equities saw pronounced pullbacks in October, though the value factor continues to outpace growth on a year-to-date basis

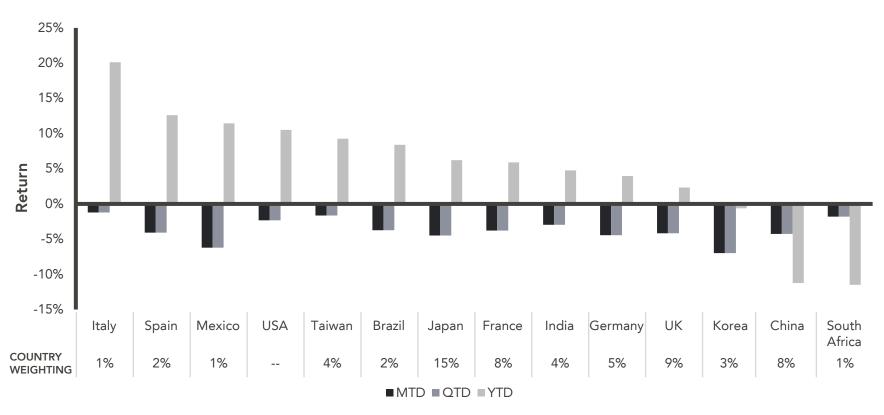


Source: Bloomberg as of October 31, 2023



# **Country performance**

Chinese equities notched another negative month in October and the country remains one of the most significant laggards in 2023



Source: Bloomberg as of October 31, 2023. Returns based on individual MSCI country indices. Country weights based on the MSCI ACWI ex-USA Index as of September 30, 2023.



## China's pain is India's gain

The correlation between Chinese equities and Indian equities is the lowest in its history due to a significant performance divergence

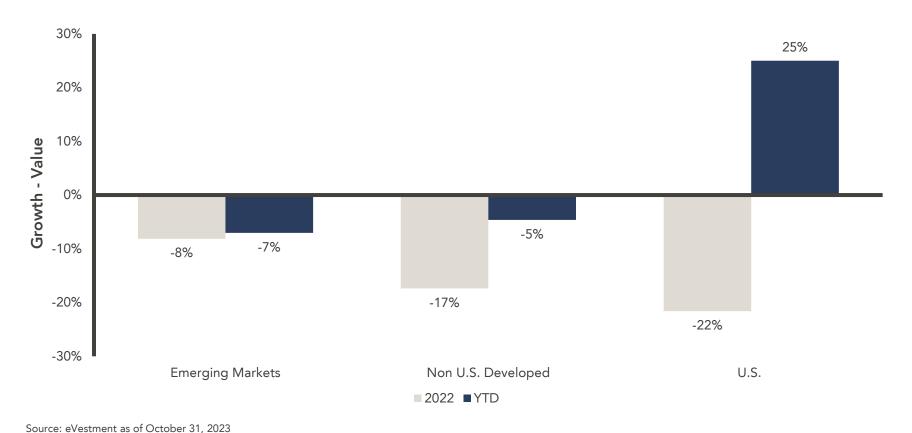


Source: Bloomberg as of October 31, 2023



## Diverging factor performance trends

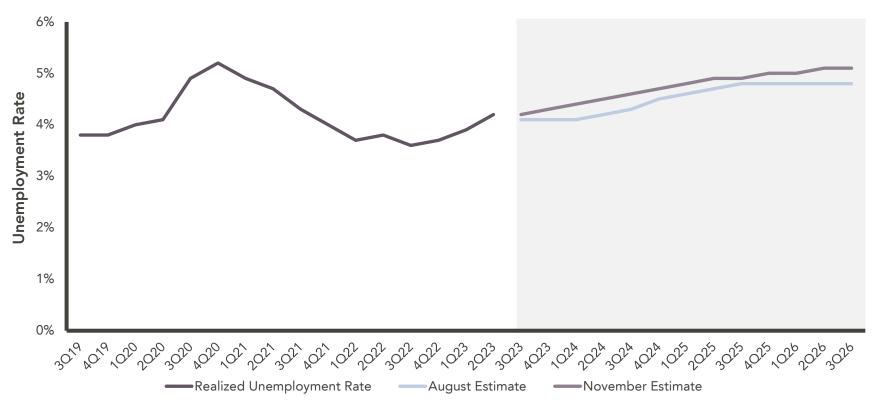
While U.S. equities are exhibiting a sharp contrast in style leadership this year relative to last, this trend has not materialized in international markets





### The UK: Things may get worse before they get better

The Bank of England now sees UK unemployment above 5% in the next two years, indicating a continuation of headwinds for the region



Source: Bank of England and Bloomberg as of November 1, 2023



# Real Estate

# Real estate performance

# Valuation write-downs, particularly in the office sector, drove negative performance for the fourth consecutive quarter

	QTD (%)	YTD (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)
NPI	-1.4	-5.1	-8.4	6.0	5.3	7.4
Income	1.1	3.2	4.1	4.1	4.2	4.6
Appreciation	-2.4	-8.1	-12.1	1.9	1.0	2.7
NFI-ODCE	-1.9	-7.6	-12.1	7.1	5.7	8.2
Income	0.9	2.6	3.5	3.7	3.8	4.2
Appreciation	-2.8	-10.0	-15.2	3.4	1.8	3.8
FTSE NAREIT All Eq. REITs	-8.3	-5.6	-1.7	2.7	2.8	6.1
Property Type						
NPI Multifamily	-1.4	-4.5	-7.6	7.4	6.0	7.3
NPI Industrial	-0.3	-1.8	-5.3	19.1	16.1	14.8
NPI Office	-3.7	-12.9	-17.1	-3.6	-0.4	4.1
NPI Retail	-0.1	0.2	-1.4	1.9	0.1	4.8
NPI Hotel	1.9	8.4	12.0	6.7	-0.4	3.9
Geographic Sectors						
NPI East	-1.6	-6.4	-10.0	3.2	3.1	5.4
NPI Midwest	-0.7	-3.5	-6.8	3.5	2.5	5.4
NPI South	-0.5	-2.2	-4.6	8.8	6.8	8.4
NPI West	-1.8	-6.0	-9.6	7.3	6.6	9.0

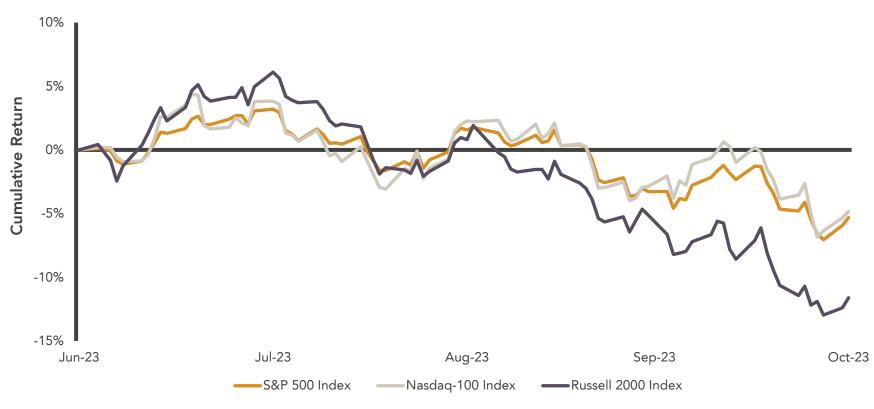
Source: NCREIF as of September 30, 2023



# October Charts of the Week

# The chart for red October

#### Domestic stock indices enter correction territory after recent slide

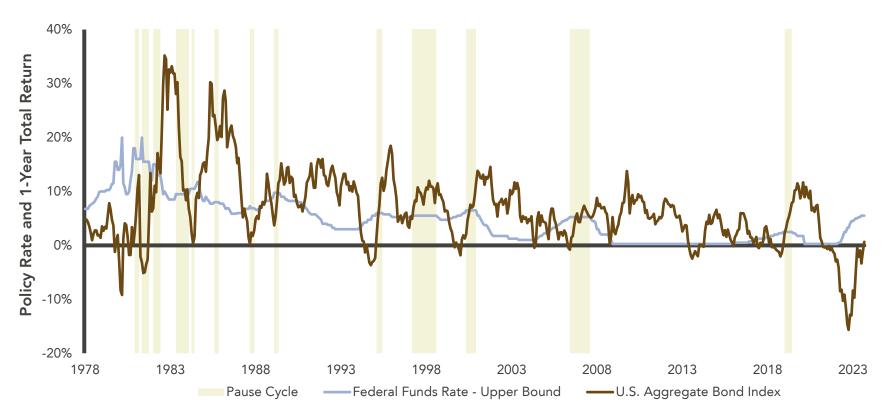


Source: Bloomberg as of October 31, 2023



### Pause for effect

# Fixed income performance has typically been robust during pause cycles that follow rate increases

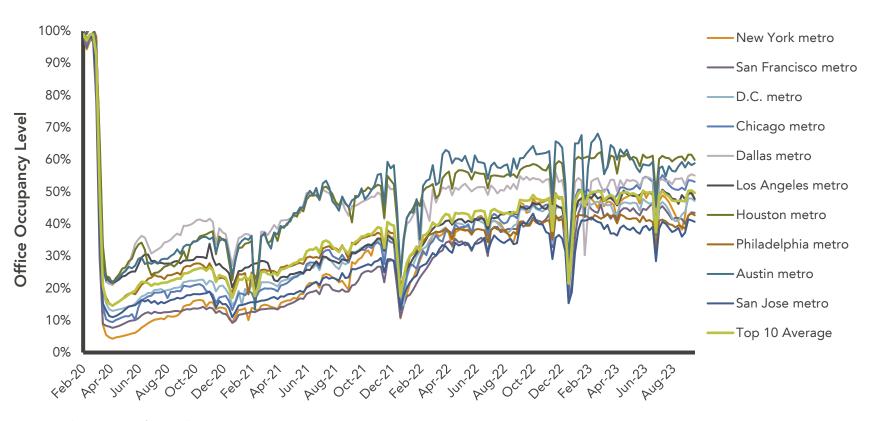


Source: Bloomberg as of September 30, 2023



## The back to work barometer

# Average office occupancy in the largest U.S. cities has plateaued at around 50% of pre-pandemic levels

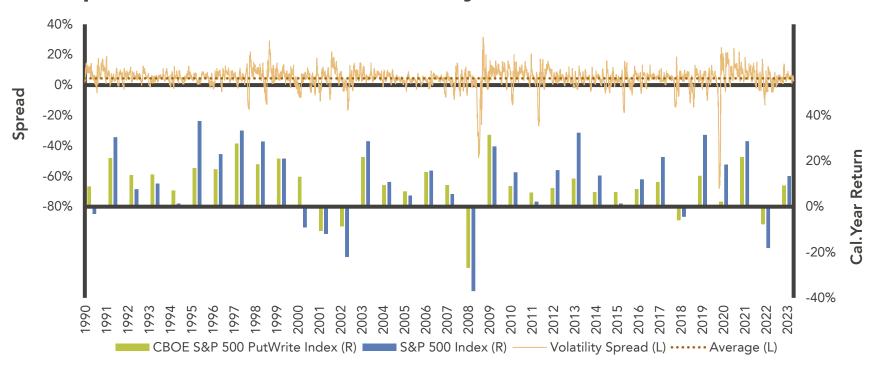


Source: Kastle Systems as of September 30, 2023



# Selling insurance: An option for diversification

Over the last few decades, options-based strategies have generated compelling patterns of performance thanks to differences between implied and realized market volatility



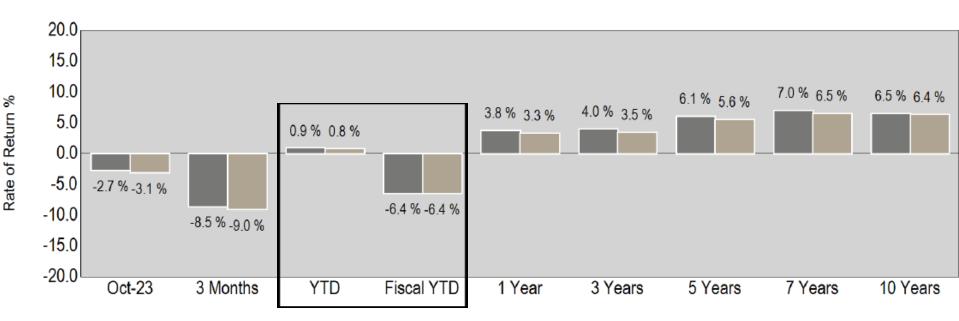
Source: Bloomberg and eVestment as of September 30, 2023. Volatility spread is calculated as the difference between implied volatility, as measured by the VIX Index, and realized volatility of the S&P 500 Index over the subsequent 1-month period (21 trading days). Realized volatility is calculated as the standard deviation of daily logarithmic returns multiplied by an annualization factor.



# Performance Overview - COAG

### **COA General Employees' YTD Performance (Net of Fees)**





- Total Fund Composite
  Total Fund Policy Benchmark
  - Emerging Markets Equity composite outperformed its benchmark
  - Fixed Income, Domestic Equity, International Equity, Global Equity and Real Estate composites underperformed their benchmarks

<sup>\*</sup> Year-to-date performance as of October 31, 2023



# **COA General Employees' Manager Contribution – YTD Performance**

Top Performers	Absolute Performance	Benchmark Performance	Strategy
Channing SCV	1.5%	-6.5%	U.S. Equity
Artisan	9.9%	2.7%	International Equity
Earnest EM	0.5%	-2.1%	<b>Emerging Markets Equity</b>

Bottom Performers	Absolute Performance	Benchmark Performance	Strategy
Legato SCG	-7.6%	-2.9%	U.S. Equity
Hardman Johnston	-3.6%	1.0%	International Equity
Brown SC	-4.3%	-0.8%	International Equity

<sup>\*</sup> Year-to-date performance as of October 31, 2023

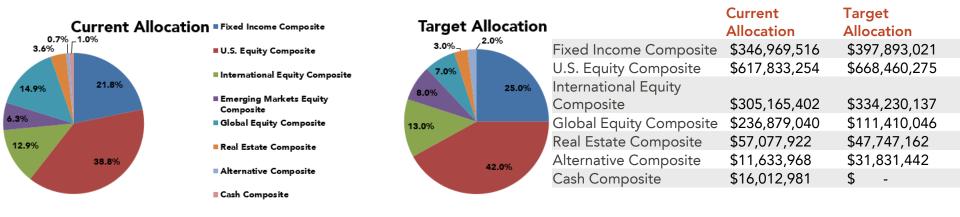


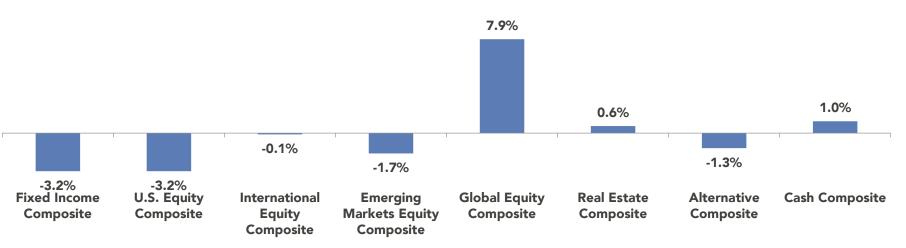
# **COA General Employees' – Manager Excess Performance**

		Ending October 31, 2	Ending October 31, 2023	
	Benchmark	3 Mo Perf vs Benchmark 6 Mo Perf	vs Benchmark	
Total Fund Composite	Total Fund Policy Benchmark	0.5%	0.1%	
Fixed Income Composite	Bloomberg US Aggregate TR	-0.4%	-0.5%	
Mesirow	Bloomberg US Aggregate TR	0.0%	0.1%	
Garcia Hamilton	Bloomberg US Aggregate TR	-2.0%	-2.8%	
State Street U.S. Aggregate Bond Index SL Fund	Bloomberg US Aggregate TR	0.0%	0.0%	
U.S. Equity Composite	Russell 3000	-1.3%	-2.4%	
Large Cap Composite	S&P 500	1.3%	-0.3%	
Union Heritage Large Cap Core	S&P 500	2.5%	-0.5%	
Blackrock S&P 500 Equity Index Fund	S&P 500	0.1%	0.0%	
Mid Cap Composite	S&P 400 MidCap	0.0%	0.1%	
BlackRock MidCap Equity Index	S&P 400 MidCap	0.0%	0.1%	
Small Cap Composite	Russell 2000	1.2%	0.3%	
Channing Capital Management	Russell 2000 Value	1.3%	2.9%	
Earnest Partners SCC	Russell 2000	1.7%	0.3%	
Legato	Russell 2000 Growth	0.0%	-1.9%	
Essex	Russell 2000 Growth	-3.0%	-4.7%	
Bridge City	Russell 2000 Growth	1.8%	1.5%	
Lebenthal Lisanti	Russell 2000 Growth	-0.3%	-4.8%	
Nicholas	Russell 2000 Growth	2.0%	2.6%	
Rich Hall James	Russell 2000 Growth	-		
International Equity Composite	MSCIEAFE	-0.1%	1.0%	
Artisan Partners International Value Fund (APHKX)	MSCI EAFE	5.2%	5.6%	
Hardman Johnston	MSCI ACWI ex USA	-3.0%	-2.8%	
Brown Capital International Small Cap	MSCI ACWI ex US Small Cap	-6.4%	-5.6%	
Emerging Markets Equity Composite	MSCI Emerging Markets	0.7%	1.2%	
Earnest Partners EM	MSCI Emerging Markets	0.6%	2.0%	
Goldman Sachs Emerging Markets Equity	MSCI Emerging Markets	1.0%	-0.8%	
Global Equity Composite	MSCI ACWI	2.7%	-1.1%	
Globalt Tactical ETF	Globalt Benchmark	1.4%	1.5%	
BlackRock MSCI ACWI Min Volatility Index	MSCI ACWI Minimum Volatility Index	0.0%	0.1%	
Real Estate Composite	NFI-ODCE	-0.7%	-2.5%	
Intercontinental U.S. Real Estate	NFI-ODCE	0.4%	-3.2%	
JP Morgan U.S. Real Estate	NFI-ODCE	-3.2%	-1.1%	
Alternative Composite	Custom Alternative Target Benchmark	6.1%	-3.2%	
Consequent Alternative Partners II, LP	Consequent Alt BM	0.0%	0.0%	



# COA General Employees' Asset Allocation vs Target Allocation





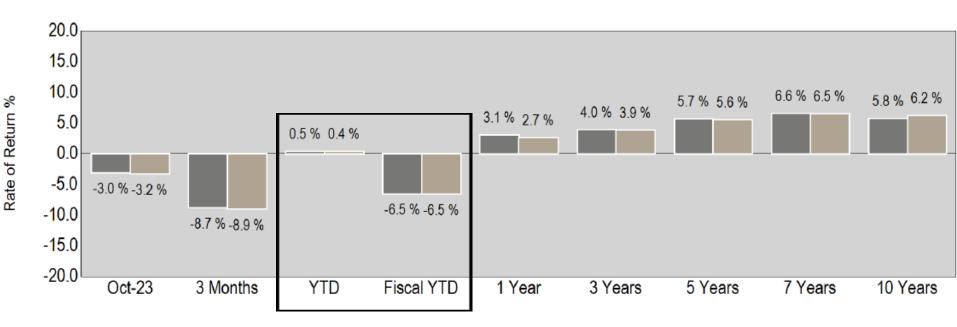
<sup>\*</sup> Year-to-date performance and allocation as of October 31, 2023



# Performance Overview - COAP

### **COA Police Officers' YTD Performance (Net of Fees)**

Return Summary Ending October 31, 2023



- Total Fund Composite
  Total Fund Policy Benchmark
  - International Equity composite outperformed its benchmark; Domestic Equity and passive strategies performed in-line with benchmarks
  - Fixed Income and Alternative composites underperformed their benchmarks

<sup>\*</sup> Year-to-date performance as of October 31, 2023



# **COA Police Officers' Manager Contribution – YTD Performance**

	<b>Absolute</b>	<b>Benchmark</b>	
Top Performers	Performance	Performance	Strategy
Artisan	9.9%	2.7%	International Equity
Driehaus SCG	0.0%	-2.9%	U.S. Equity

<b>Bottom Performers</b>	Absolute Performance	Benchmark Performance	Strategy
Hardman Johnston	-3.7%	1.0%	International Equity
Brown SC	-4.3%	-0.8%	International Equity

<sup>\*</sup> Year-to-date performance as of October 31, 2023

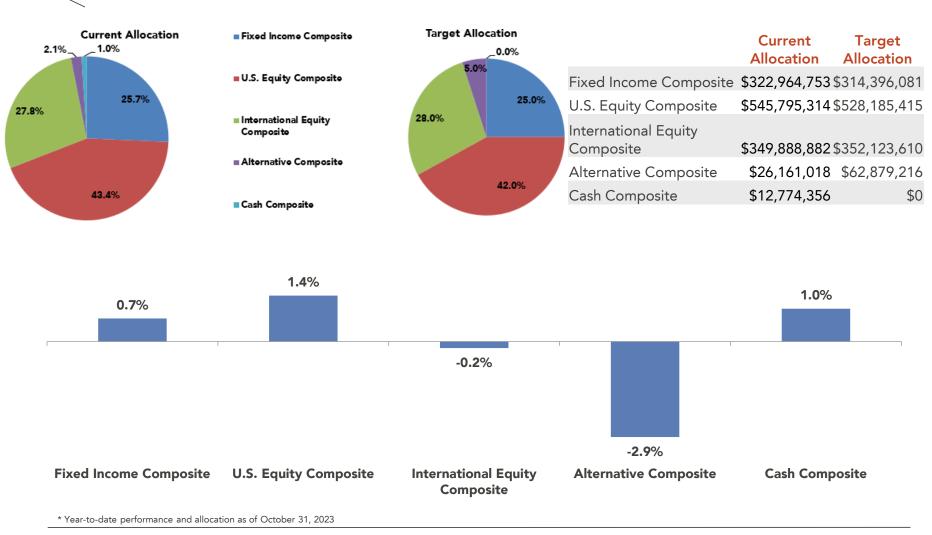


# **COA Police Officers' – Manager Excess Performance**

	Benchmark	3 Mo Perf vs Benchmark 6 Mo Perf	vs Benchmark
Total Fund Composite	Total Fund Policy Benchmark	0.2%	0.0%
Fixed Income Composite	Fixed Income Composite Blended Benchmark	-1.1%	-1.2%
Mesirow	Bloomberg US Aggregate TR	0.0%	0.0%
Garcia Hamilton	Bloomberg US Govt/Credit Int TR	-2.7%	-2.9%
BlackRock U.S.Aggregate Bond Index	Bloomberg US Aggregate TR	0.0%	0.0%
U.S. Equity Composite	Domestic Equity Composite Blended Benchmark	0.5%	0.1%
BlackRock Russell 1000 Index Fund	Russell 1000	0.0%	0.0%
BlackRock Mid Cap Equity Index Fund	S&P 400 MidCap	0.0%	0.1%
Macquarie SCC	Russell 2000	1.0%	-1.9%
Earnest Partners SCC	Russell 2000	2.0%	0.7%
Driehaus SCG	Russell 2000 Growth	2.8%	3.5%
International Equity Composite	International Equity Composite Blended Benchmark	0.5%	0.7%
Artisan International Large Cap Value (APHKX)	MSCI EAFE	5.2%	5.6%
Hardman Johnston	MSCI ACWI ex USA	-3.0%	-2.8%
BlackRock MSCI EAFE Small Cap Index	MSCI EAFE Small Cap	0.0%	0.3%
Brown Capital International Small Cap	MSCI ACWI ex US Small Cap	-6.4%	-5.6%
BlackRock Emerging Markets Free Fund	MSCI Emerging Markets	0.1%	-0.1%
Goldman Sachs Emerging Markets Equity	MSCI Emerging Markets	1.0%	-0.8%
BlackRock MSCI ACWI Min Volatility Index	MSCI ACWI Minimum Volatility Index	0.0%	0.1%
Alternative Composite	Alternatives Custom Benchmark	0.2%	-2.8%
Intercontinental U.S. Real Estate	NFI-ODCE	0.4%	-3.2%
Consequent Alternative Partners II, LP	Custom Consequent Alt BM	0.0%	0.0%
Pharos Capital Partners III	Cambridge Associates All PE	0.0%	-10.3%



#### **COA Police Officers' Asset Allocation vs Target Allocation**

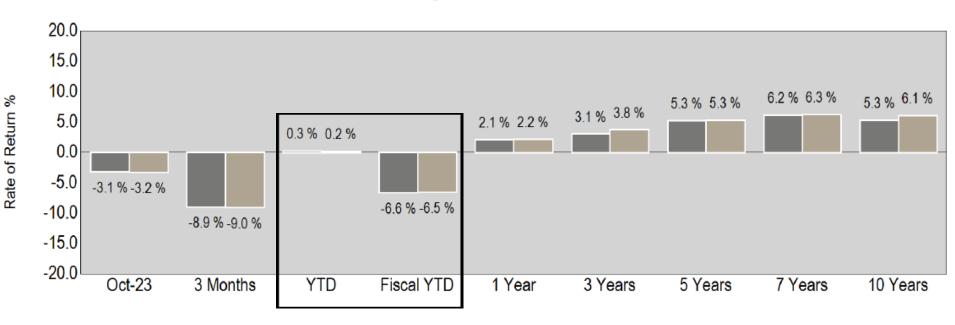




# Performance Overview - COAF

### **COA Firefighters' YTD Performance (Net of Fees)**

Return Summary Ending October 31, 2023



# Total Fund Composite Total Fund Policy Benchmark

- International Equity composite outperformed its benchmark; Passive strategies performed in-line with their benchmarks
- Fixed Income and Domestic Equity composites underperformed their benchmarks; Real Estate strategy has underperformed its benchmark

<sup>\*</sup> Year-to-date performance as of October 31, 2023



# **COA Firefighters' Manager Contribution – YTD Performance**

Top Performers	Absolute Performance	Benchmark Performance	Strategy
Ativo	7.6%	1.0%	International Equity
Driehaus SCG	0.0%	-2.9%	U.S. Equity

<b>Bottom Performers</b>	Absolute Performance	Benchmark Performance	Strategy
Hardman Johnston	-3.7%	1.0%	International Equity
Brown SC	-4.3%	-0.8%	International Equity

<sup>\*</sup> Year-to-date performance as of October 31, 2023

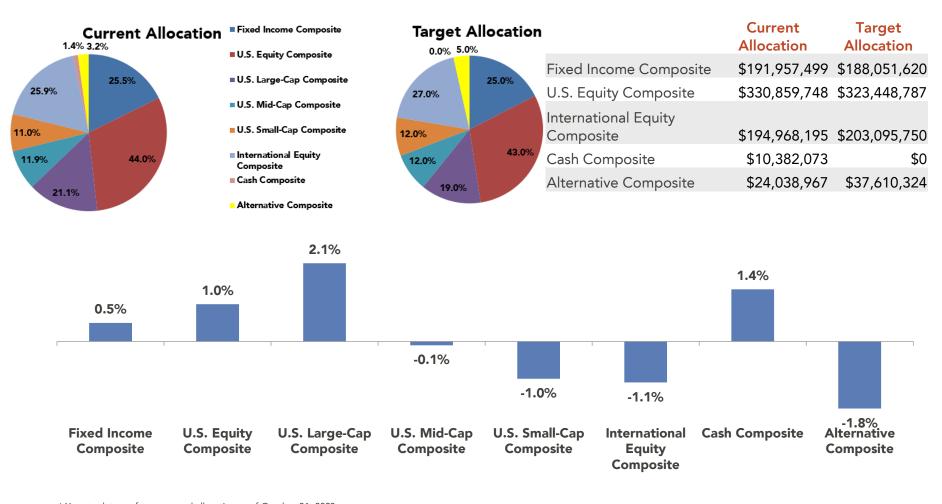


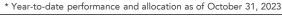
# **COA Firefighters' – Manager Excess Performance**

	Benchmark	3 Mo Perf vs Benchmark 6 Mo Perf vs Benchr	nark
Total Fund Composite	Total Fund Policy Benchmark	0.1%	0.0%
Fixed Income Composite	Fixed Income Composite Custom Benchmark	-0.6%	0.8%
Garcia Hamilton	Bloomberg US Aggregate TR	-2.0%	2.7%
Mesirow	Bloomberg US Aggregate TR	0.0%	0.0%
U.S. Equity Composite	Russell 3000	-2.4%	2.7%
Large Cap Composite	Russell 1000	0.0%	0.0%
BlackRock 1000 Index Fund	Russell 1000	0.0%	0.0%
Mid Cap Composite	S&P 400 MidCap	0.0%	0.1%
BlackRock Mid Cap Equity Index Fund	S&P 400 MidCap	0.0%	0.1%
Small Cap Composite	Russell 2000	1.3%	0.8%
Northern Trust Collective Russell 2000 Index	Russell 2000	0.0%	0.1%
Earnest SCC	Russell 2000	2.0%	0.7%
Driehaus SCG	Russell 2000 Growth	2.8%	3.5%
International Equity Composite	International Equity Composite Custom Benchmark	-0.1%	0.4%
Ativo Capital	MSCI ACWI ex USA	2.0%	4.3%
Hardman Johnston	MSCI ACWI ex USA	-3.0%	2.9%
BlackRock MSCI EAFE Small Cap	MSCI EAFE Small Cap	0.0%	0.3%
Brown Capital International Small Cap	MSCI ACWI ex US Small Cap	-6.4%	5.6%
BlackRock Emerging Markets Free Fund	MSCI Emerging Markets	0.1%	0.1%
Goldman Sachs Emerging Markets Equity	MSCI Emerging Markets	1.0%	0.8%
BlackRock MSCI ACWI Min Volatility Index	MSCI ACWI Minimum Volatility Index	0.0%	0.1%
Alternative Composite	Alternatives Custom Benchmark		
Intercontinental U.S. Real Estate	NFI-ODCE	0.4%	3.2%
Consequent Alternative Partners II, L.P.	Consequent Alt BM	0.0%	0.0%



# **COA Firefighters' Asset Allocation vs Target Allocation**







Purpose:

# Empower our clients to meet their investment objectives

#### **Vision**

Be a trusted partner to our clients through effective investment programs

#### Mission

Provide independent and thoughtful investment guidance

#### Why Marquette?

- ✓ Our people
- ✓ Independent expertise
- √ Focused client service
- ✓ Careful research

# Periodic table benchmarks

Core Bond	Bloomberg Aggregate
High Yield	Bloomberg High Yield
Bank Loans	Credit Suisse Leveraged Loan
Broad U.S. Equities	Russell 3000
Large Cap	S&P 500
Mid Cap	Russell Mid Cap
Small Cap	Russell 2000
Broad Intl Equities	MSCI ACWI ex-USA
Intl Large Cap	MSCI EAFE
Intl Small Cap	MSCI EAFE Small Cap
Emerging Markets	MSCI EM
Commodities	S&P GSCI



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#### (Preliminary, Subject to Change)



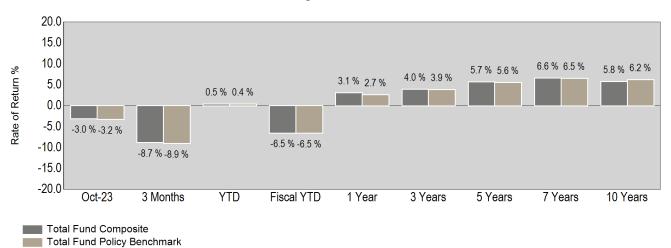
#### **Pension Fund**

City of Atlanta Police Officers
Pension Fund
Executive Summary
October 31, 2023

#### **Total Fund Composite**

Market Value: \$1,257.6 Million and 100.0% of Fund

#### Return Summary Ending October 31, 2023



#### **Return Summary YTD**

	Total Return
Total Fund Composite	0.5%
Fixed Income Composite	-2.7%
U.S. Equity Composite	2.6%
International Equity Composite	1.1%
Alternative Composite	-7.6%

#### Asset Allocation vs. Target

	Current	Current	Policy	Difference	%
Fixed Income Composite	\$322,964,753	25.7%	25.0%	\$8,568,673	0.7%
U.S. Equity Composite	\$545,795,314	43.4%	42.0%	\$17,609,898	1.4%
International Equity Composite	\$349,888,882	27.8%	28.0%	-\$2,234,729	-0.2%
Alternative Composite	\$26,161,018	2.1%	5.0%	-\$36,718,198	-2.9%
Cash Composite	\$12,774,356	1.0%	0.0%	\$12,774,356	1.0%
Total	\$1,257,584,322	100.0%	100.0%		

#### **Summary of Cash Flows**

	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$1,388,983,727	\$1,281,909,624	\$1,253,498,327
Net Cash Flow	-\$11,577,603	-\$33,322,819	-\$38,356,705
Net Investment Change	-\$119,821,801	\$8,997,518	\$42,442,700
Ending Market Value	\$1,257,584,322	\$1,257,584,322	\$1,257,584,322

#### **Total Fund Composite**

Market Value: \$1,257.6 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,257,584,322	-11,577,603	100.0	100.0	0
Fixed Income Composite		322,964,753	-1,295	25.7	25.0	8,568,673
Mesirow	Core Fixed Income	183,727,231	-1,230	14.6		
Garcia Hamilton	Int. Govt. Fixed Income	52,044,151	-65	4.1		
BlackRock U.S.Aggregate Bond Index	Core Fixed Income	87,193,372	0	6.9		
U.S. Equity Composite		545,795,314	-1,751	43.4	42.0	17,609,898
BlackRock Russell 1000 Index Fund	Large-Cap Core	231,463,190	0	18.4		
BlackRock Mid Cap Equity Index Fund	Mid-Cap Core	189,596,997	0	15.1		
Macquarie SCC	Small-Cap Core	55,897,378	-1,178	4.4		
Earnest Partners SCC	Small-Cap Core	41,135,078	-574	3.3		
Driehaus SCG	Small-Cap Growth	27,702,669	0	2.2		
International Equity Composite		349,888,882	0	27.8	28.0	-2,234,729
Artisan International Large Cap Value (APHKX)	Non-U.S. Large-Cap Value	88,173,639	0	7.0		
Hardman Johnston	Non-U.S. Large-Cap Core	65,477,168	0	5.2		
BlackRock MSCI EAFE Small Cap Index	Non-U.S. Small-Cap Core	7,892,473	0	0.6		
Brown Capital International Small Cap	Non-U.S. Small-Cap Core	10,193,205	0	0.8		
BlackRock Emerging Markets Free Fund	Emerging Markets	10,977,902	0	0.9		
Goldman Sachs Emerging Markets Equity	Emerging Markets	18,078,093	0	1.4		
Global Low Volatility Composite		149,096,401	0	11.9	-	149,096,401
BlackRock MSCI ACWI Min Volatility Index	Global Low-Volatility	149,096,401	0	11.9		
Alternative Composite		26,161,018	-190,846	2.1	5.0	-36,718,198
Intercontinental U.S. Real Estate	Core Real Estate	14,922,920	-190,846	1.2		
Consequent Alternative Partners II, LP	U.S. Private Equity FoF	8,696,805	0	0.7		
Pharos Capital Partners III	LBO Private Equity	2,541,293	0	0.2		
Cash Composite		12,774,356	-11,383,710	1.0	0.0	12,774,356
Cash	Cash & Equivalents	8,299,137	-8,768,746	0.7		
Transition Cash Account	Cash & Equivalents	5,353	-2	0.0		
NT Operating	Cash & Equivalents	4,469,867	-2,614,963	0.4		

#### Annualized Performance (Net of Fees)

Market Value: \$1,257.6 Million and 100.0% of Fund

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs		10 Yrs	Inception	Inception Date
Total Fund Composite	-3.0%	-8.7%	0.5%	-6.5%	3.1%	-7.2%	4.0%	5.7%	6.6%	5.8%	7.7%	Jan-88
Total Fund Policy Benchmark	-3.2%	-8.9%	0.4%	-6.5%	2.7%	-7.1%	3.9%	5.6%	6.5%	6.2%	8.5%	Jan-88
Fixed Income Composite	-1.6%	-4.6%	-2.7%	-4.6%	0.3%	-7.3%	-5.2%	-0.3%	-0.3%	0.7%	2.2%	Sep-07
Fixed Income Composite Blended Benchmark	-1.2%	-3.5%	-1.6%	-3.5%	1.1%	-6.5%	-4.6%	0.2%	0.0%	1.0%	2.5%	Sep-07
Mesirow	-1.7%	-4.7%	-2.9%	-4.7%	0.2%	-7.8%	-5.5%	0.1%	-0.1%	1.0%	1.7%	May-10
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	1.7%	May-10
Garcia Hamilton	-1.5%	-4.2%	-2.5%	-4.2%	0.6%	-4.5%	-3.4%	0.3%	0.3%		1.0%	Apr-14
Bloomberg US Govt/Credit Int TR	-0.5%	-1.5%	0.2%	-1.3%	2.2%	-4.1%	-3.0%	1.0%	0.6%	1.2%	1.1%	Apr-14
BlackRock U.S.Aggregate Bond Index	-1.6%	-4.7%	-2.5%	-4.7%	0.4%	-7.9%	-5.5%				-3.8%	Mar-20
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	-3.9%	Mar-20
U.S. Equity Composite	-4.4%	-11.7%	2.6%	-8.3%	1.4%	-7.3%	7.4%	7.7%	9.3%	7.8%	6.9%	Jan-08
Domestic Equity Composite Blended Benchmark	-4.5%	-12.2%	2.6%	-8.4%	1.2%	-7.6%	7.6%	8.3%	9.9%	9.2%	8.9%	Jan-08
BlackRock Russell 1000 Index Fund	-2.4%	-8.6%	10.3%	-5.5%	9.5%	-4.3%	9.5%				9.9%	Oct-19
Russell 1000	-2.4%	-8.6%	10.3%	-5.5%	9.5%	-4.3%	9.5%	10.7%	11.9%	10.9%	9.9%	Oct-19
BlackRock Mid Cap Equity Index Fund	-5.3%	-12.9%	-1.2%	-9.3%	-1.0%	-6.4%	9.3%				5.9%	Nov-19
S&P 400 MidCap	-5.3%	-12.9%	-1.3%	-9.3%	-1.1%	-6.4%	9.2%	7.0%	8.3%	8.0%	5.9%	Nov-19
Macquarie SCC	-6.2%	-15.7%	-6.0%	-12.2%	-7.3%	-10.8%	7.0%	4.8%			4.5%	Sep-17
Russell 2000	-6.8%	-16.7%	-4.5%	-11.6%	-8.6%	-13.7%	3.9%	3.3%	6.3%	5.6%	3.2%	Sep-17
Earnest Partners SCC	-6.0%	-14.7%	-4.7%	-10.6%	-8.6%	-10.4%					-10.4%	Oct-21
Russell 2000	-6.8%	-16.7%	-4.5%	-11.6%	-8.6%	-13.7%	3.9%	3.3%	6.3%	5.6%	-13.7%	Oct-21
Driehaus SCG	-8.3%	-15.5%	0.0%	-12.1%	-7.4%	-19.9%					-19.9%	Oct-21
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	-17.3%	Oct-21

#### Annualized Performance (Net of Fees)

Market Value: \$1,257.6 Million and 100.0% of Fund

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
International Equity Composite	-2.4%	-8.5%	1.1%	-6.0%	10.5%	-7.9%	3.9%	7.0%	7.1%	5.5%	7.8%	Jun-10
International Equity Composite Blended Benchmark	-3.2%	-9.0%	0.3%	-6.2%	8.4%	-6.8%	4.3%	3.8%	4.7%	2.8%	5.2%	Jun-10
Artisan International Large Cap Value (APHKX)	-1.1%	-5.7%	9.9%	-4.1%	22.7%	1.9%	14.4%	9.1%	8.1%	6.3%	9.5%	Jun-10
MSCI EAFE	-4.1%	-10.9%	2.7%	-8.0%	14.4%	-6.1%	5.7%	4.1%	5.0%	3.1%	5.6%	Jun-10
Hardman Johnston	-4.1%	-14.3%	-3.7%	-9.9%	13.4%	-16.9%	-3.3%	6.0%	6.7%	5.2%	6.4%	Jun-10
MSCI ACWI ex USA	-4.1%	-11.3%	1.0%	-7.7%	12.1%	-8.2%	3.0%	3.5%	4.3%	2.5%	4.7%	Jun-10
BlackRock MSCI EAFE Small Cap Index	-5.8%	-13.0%	-3.6%	-9.1%	7.2%	-13.3%	0.8%				5.0%	Apr-20
MSCI EAFE Small Cap	-5.9%	-13.0%	-4.2%	-9.2%	6.5%	-13.8%	0.3%	1.6%	3.5%	3.4%	4.5%	Apr-20
Brown Capital International Small Cap	-6.5%	-18.1%	-4.3%	-15.7%	1.5%						-20.5%	Dec-21
MSCI ACWI ex US Small Cap	-5.6%	-11.7%	-0.8%	-7.2%	8.8%	-11.3%	3.0%	3.5%	4.2%	3.4%	-11.9%	Dec-21
BlackRock Emerging Markets Free Fund	-3.9%	-12.1%	-2.3%	-6.8%	10.7%	-12.7%	-3.8%				2.2%	Apr-20
MSCI Emerging Markets	-3.9%	-12.2%	-2.1%	-6.7%	10.8%	-12.6%	-3.7%	1.6%	2.6%	1.2%	2.3%	Apr-20
Goldman Sachs Emerging Markets Equity	-3.1%	-11.2%	-2.5%	-7.6%	10.4%						-15.2%	Feb-22
MSCI Emerging Markets	-3.9%	-12.2%	-2.1%	-6.7%	10.8%	-12.6%	-3.7%	1.6%	2.6%	1.2%	-11.1%	Feb-22
BlackRock MSCI ACWI Min Volatility Index	-1.7%	-5.7%	-0.2%	-4.1%	4.0%	-3.5%	3.9%				4.6%	Apr-20
MSCI ACWI Minimum Volatility Index	-1.7%	-5.7%	-0.5%	-4.2%	3.6%	-3.8%	3.6%	4.4%	5.6%	6.0%	4.2%	Apr-20
Alternative Composite	0.0%	-0.6%	-7.6%	-0.6%	-10.1%	-3.9%	4.6%	2.3%	3.8%	3.6%	3.6%	Dec-12
Alternatives Custom Benchmark	0.0%	-0.8%	-5.5%	-1.2%	-6.9%	-5.1%	5.5%	2.9%	4.1%			Dec-12
Intercontinental U.S. Real Estate	0.0%	-1.0%	-10.7%	-1.0%	-16.4%	1.0%	5.0%	5.0%	6.4%		7.7%	Aug-14
NFI-ODCE	0.0%	-1.4%	-8.1%	-2.1%	-11.3%	1.4%	6.1%	4.6%	5.3%	7.1%	6.7%	Aug-14
Consequent Alternative Partners II, LP	0.0%	0.0%	-2.4%	0.0%	-0.8%	-8.0%	3.3%	-0.6%	1.3%	0.9%		Oct-12
Custom Consequent Alt BM	0.0%	0.0%	-2.4%	0.0%	-0.8%	-8.0%	3.3%	-0.6%	1.3%	0.9%		Oct-12

#### Calendar Performance (Net of Fees)

Market Value: \$1,257.6 Million and 100.0% of Fund

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	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
otal Fund Composite	-14.7%	13.8%	17.7%	21.3%	-6.2%	15.6%	9.2%	-1.9%	5.0%	22.5%	12.8%
Total Fund Policy Benchmark	-14.7%	13.6%	15.7%	22.0%	-5.4%	15.0%	9.9%	-0.3%	8.3%	21.3%	12.9%
InvMetrics Public DB > \$1B Net Rank	94	68	2	6	89	50	10	85	56	1	46
Fixed Income Composite	-11.7%	-1.8%	6.8%	7.5%	-0.1%	3.9%	2.9%	0.5%	4.2%	-1.8%	4.0%
Fixed Income Composite Blended Benchmark	-11.2%	-1.5%	7.0%	7.5%	0.2%	3.7%	2.3%	0.8%	5.0%	-2.0%	4.2%
InvMetrics Public DB Total Fix Inc Net Rank	55	95	62	72	46	65	65	39	38	68	87
Mesirow	-12.5%	-1.9%	8.8%	8.8%	-0.6%	3.2%	2.9%	-0.1%	6.3%	-2.2%	5.4%
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
eV US Core Fixed Inc Net Rank	24	86	31	60	75	82	58	85	23	79	60
Garcia Hamilton	-6.4%	-1.8%	5.7%	5.8%	1.2%	2.0%	2.9%	1.2%	-	-	
Bloomberg US Govt/Credit Int TR	-8.2%	-1.4%	6.4%	6.8%	0.9%	2.1%	2.1%	1.1%	3.1%	-0.9%	3.9%
eV US Interm Duration Fixed Inc Net Rank	3	92	78	88	9	82	20	27			-
BlackRock U.S.Aggregate Bond Index	-13.0%	-1.6%									-
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
eV US Core Fixed Inc Net Rank	47	59									
J.S. Equity Composite	-17.6%	22.1%	20.6%	27.0%	-7.1%	18.8%	12.6%	-3.2%	6.3%	33.6%	5.0%
Domestic Equity Composite Blended Benchmark	-17.7%	23.1%	20.0%	29.9%	-7.2%	19.3%	14.6%	-0.7%	12.0%	34.4%	16.6%
InvMetrics Public DB US Eq Net Rank	54	95	15	95	71	80	53	90	96	68	99
BlackRock Russell 1000 Index Fund	-19.1%	26.5%	21.0%								
Russell 1000	-19.1%	26.5%	21.0%	31.4%	-4.8%	21.7%	12.1%	0.9%	13.2%	33.1%	16.4%
eV US Large Cap Core Equity Net Rank	75	56	18	-							
BlackRock Mid Cap Equity Index Fund	-13.0%	24.7%	13.8%	_				-			
S&P 400 MidCap	-13.1%	24.8%	13.7%	26.2%	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%
eV US Passive Mid Cap Equity Net Rank	7	1	25	-							
Macquarie SCC	-15.9%	23.8%	15.6%	26.3%	-11.1%						
Russell 2000	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%
eV US Small Cap Core Equity Net Rank	41	55	44	34	50						-
Earnest Partners SCC	-15.7%			_						_	
Russell 2000	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%
eV US Small Cap Equity Net Rank	45										
Driehaus SCG	-34.0%			-		-					
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
eV US Small Cap Growth Equity Net Rank	76										

#### Calendar Performance (Net of Fees)

Market Value: \$1,257.6 Million and 100.0% of Fund

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	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
nternational Equity Composite	-15.8%	8.1%	21.7%	29.2%	-14.5%	30.9%	3.4%	-1.0%	-0.1%	23.7%	19.3%
International Equity Composite Blended Benchmark	-14.3%	10.3%	9.1%	21.8%	-14.0%	26.1%	2.7%	-3.3%	-4.4%	19.0%	17.1%
InvMetrics Public DB Dev Mkt ex-US Eq Net Rank	21	45	7	16	54	14	21	36	1	7	26
Artisan International Large Cap Value (APHKX)	-6.8%	17.0%	8.8%	24.2%	-15.4%	24.1%	5.7%	-1.5%	-0.4%	30.7%	23.0%
MSCI EAFE	-14.5%	11.3%	7.8%	22.0%	-13.8%	25.0%	1.0%	-0.8%	-4.9%	22.8%	17.3%
Foreign Large Blend MStar MF Rank	1	5	56	24	54	81	9	62	9	2	9
Hardman Johnston	-23.6%	1.3%	35.6%	33.8%	-13.7%	37.7%	1.1%	-0.4%	0.3%	17.4%	15.6%
MSCI ACWI ex USA	-16.0%	7.8%	10.7%	21.5%	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%
eV ACWI ex-US Large Cap Equity Net Rank	79	92	4	6	33	7	50	29	6	60	81
BlackRock MSCI EAFE Small Cap Index	-20.8%	10.4%									
MSCI EAFE Small Cap	-21.4%	10.1%	12.3%	25.0%	-17.9%	33.0%	2.2%	9.6%	-4.9%	29.3%	20.0%
eV EAFE Small Cap Equity Net Rank	50	64									
Brown Capital International Small Cap	-31.4%			_							
MSCI ACWI ex US Small Cap	-20.0%	12.9%	14.2%	22.4%	-18.2%	31.6%	3.9%	2.6%	-4.0%	19.7%	18.5%
Foreign Small/Mid Growth MStar MF Rank	66										
BlackRock Emerging Markets Free Fund	-20.2%	-2.7%		_	_						
MSCI Emerging Markets	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%
eV Emg Mkts Large Cap Equity Net Rank	70	63									
Goldman Sachs Emerging Markets Equity		-				-			-		
MSCI Emerging Markets	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%
eV Emg Mkts All Cap Equity Net Rank						-					
BlackRock MSCI ACWI Min Volatility Index	-10.0%	14.1%		-	-		-	-	-	-	-
MSCI ACWI Minimum Volatility Index	-10.3%	13.9%	2.7%	21.1%	-1.6%	17.9%	7.4%	2.8%	11.0%	16.9%	10.1%
eV Global Low Volatility Equity Net Rank	55	76									
Iternative Composite	-0.8%	17.3%	15.9%	-10.0%	6.4%	8.0%	3.3%	2.3%	2.4%	4.8%	
Alternatives Custom Benchmark	-5.2%	20.9%	19.3%	-10.5%	6.0%	8.2%	2.1%	3.3%			
InvMetrics Public DB Alts Net Rank	58	72	9	99	35	41	85	64	84	92	
Intercontinental U.S. Real Estate	7.2%	20.2%	1.1%	8.2%	9.3%	7.5%	11.1%	12.4%			
NFI-ODCE	6.5%	21.1%	0.3%	4.4%	7.4%	6.7%	7.8%	14.0%	11.5%	12.9%	9.8%
Consequent Alternative Partners II, LP	-11.2%	15.6%	22.3%	-20.0%	4.9%	7.0%	0.1%	0.2%	2.4%	-2.1%	
Custom Consequent Alt BM	-11.2%	15.6%	22.3%	-20.0%	4.9%	7.0%	0.1%	0.2%	2.4%	-2.1%	



Private Markets Composite Performance Summary

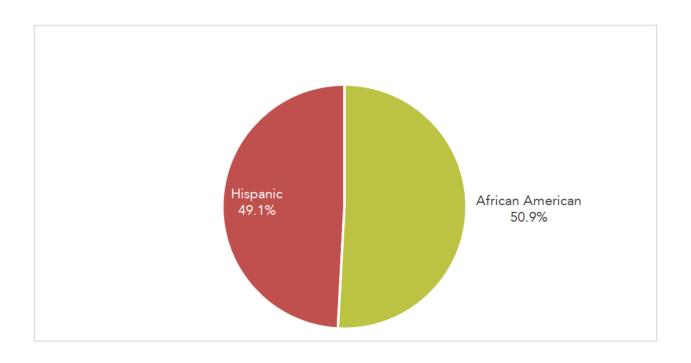
#### **Private Market Investments Overview**

Investments	Investments Commitments		Contributions &	Distributions	Valuations			Performance			
Investment Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	TVPI	RVPI	IRR (%)
GrayCo Alternative Partners II, L.P.	2012	21,000,000	2,715,486	21,637,389	16,142,323	8,696,805	24,839,128	0.74	1.14	0.40	1.96
Pharos Capital Partners III, L.P.	2013	4,000,000	80,000	3,920,000	4,576,406	2,541,293	7,117,699	1.17	1.82	0.65	11.36
Total		25,000,000	2,795,486	25,557,389	20,718,729	11,238,098	31,956,827	0.81	1.25	0.44	3.30

MWDBE Composite Market Values

		Asset Class		Market Value	% of Portfolio	% of Total Fund
Total MWDBE Composite				\$105,913,727	100.0%	8.4%
Garcia Hamilton	(H)	Int. Govt. Fixed	Income	\$52,044,151	49.1%	4.1%
Earnest Partners SCC	(AA)	Small-Cap Core	e	\$41,135,078	38.8%	3.3%
Brown Capital International Small Cap	(AA)	Non-U.S. Small	l-Cap Core	\$10,193,205	9.6%	0.8%
Pharo Capital Partners III	(AA)	LBO Private Eq	uity	\$2,541,293	2.4%	0.2%
(AA) African American						
(A) Asian			Actual %			
(H) Hispanic		Minority	8.4%			
(NA) Native American		Female	0.0%			
(W) Women		Disabled	0.0%			

<sup>\*</sup>Please note: our calculations do not include Consequent Capital Management



#### **Total Fund Composite**

#### Fee Schedule

Market Value: \$1,257.6 Million and 100.0% of Fund

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Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Median <sup>2</sup>
Core Fixed Income	Mesirow	0.35% on the first \$10 million 0.25% on the next \$50 million 0.20% on the next \$150 million 0.15% on the next \$300 million 0.125% on the next \$500 million 0.10% on the balance	0.22% \$407,454	0.22%
Int. Govt. Fixed Income	Garcia Hamilton	0.25% on the first \$50 million 0.11% on the next \$50 million 0.06% on the balance	0.24% \$127,249	0.25%
Core Fixed Income	BlackRock U.S.Aggregate Bond Index	0.0175% on the balance	0.02% \$15,259	0.06%
Large-Cap Core	BlackRock Russell 1000 Index Fund	0.015% on the balance	0.02% \$34,719	0.04%
Mid-Cap Core	BlackRock Mid Cap Equity Index Fund	0.01% on the balance	0.01% \$18,960	0.05%
Small-Cap Core	Macquarie SCC	0.65% on the first \$50 million 0.55% on the next \$50 million 0.45% on the balance	0.64% \$357,436	0.77%
Small-Cap Core	Earnest Partners SCC	0.80% on the first \$10 million 0.65% on the next \$10 million 0.50% on the balance	0.61% \$250,675	0.85%
Small-Cap Growth	Driehaus SCG	0.60% on the first \$50 million 0.50% on the next \$50 million 0.45% on the balance	0.60% \$166,216	0.90%
Non-U.S. Large-Cap Value	Artisan International Large Cap Value (APHKX)	1.03% on the balance	1.03% \$908,188	0.92%
Non-U.S. Large-Cap Core	Hardman Johnston	0.75% on the first \$25 million 0.60% on the next \$50 million 0.50% on the balance	0.66% \$430,363	0.65%
Non-U.S. Small-Cap Core	BlackRock MSCI EAFE Small Cap Index	0.045% on the balance	0.05% \$3,552	0.25%
Non-U.S. Small-Cap Core	Brown Capital International Small Cap	1.06% on the balance	1.06% \$108,048	1.29%
Emerging Markets	BlackRock Emerging Markets Free Fund	0.09% on the balance	0.09% \$9,880	0.20%
Emerging Markets	Goldman Sachs Emerging Markets Equity	0.45% on the balance	0.45% \$81,351	0.90%
Global Low-Volatility	BlackRock MSCI ACWI Min Volatility Index	0.025% on the balance	0.03% \$37,274	0.36%
Core Real Estate	Intercontinental U.S. Real Estate	1.10% on the first \$25 million 1.00% on the next \$25 million 0.85% on the next \$50 million 0.75% on the balance	1.10% \$164,152	1.00%
U.S. Private Equity FoF	Consequent Alternative Partners II, LP	1.00% on Committed Capital	2.41% \$210,000	2.41%
LBO Private Equity	Pharos Capital Partners III	2.00% on Committed Capital	3.15% \$80,000	3.15%
Total Investment Management I	Fees		0.27% \$3,410,777	0.35%

<sup>&</sup>lt;sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Month End.

<sup>&</sup>lt;sup>2</sup> Source: 2019 Marquette Associates Investment Management Fee Study.



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### (Preliminary, Subject to Change)

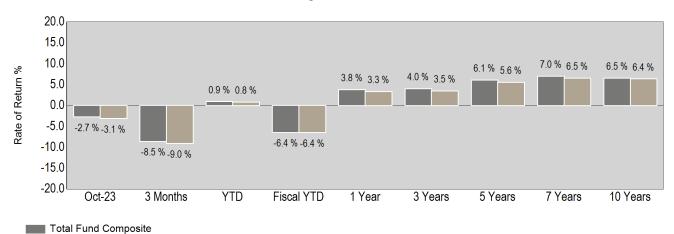


#### **Pension Fund**

City of Atlanta General Employees
Pension Fund
Executive Summary
October 31, 2023

Market Value: \$1,591.6 Million and 100.0% of Fund

#### Return Summary Ending October 31, 2023



#### **Return Summary YTD**

Total Fund Policy Benchmark

	Total Return
Total Fund Composite	0.9%
Fixed Income Composite	-3.2%
U.S. Equity Composite	4.0%
Large Cap Composite	10.0%
Mid Cap Composite	-1.2%
Small Cap Composite	-4.5%
International Equity Composite	2.0%
Emerging Markets Equity Composite	-0.4%
Global Equity Composite	2.6%
Real Estate Composite	-9.8%
Alternative Composite	-2.3%

#### Asset Allocation vs. Target

	Current	Current	Policy	Difference	%
Fixed Income	\$346,969,516	21.8%	25.0%	-\$50,923,504	-3.2%
U.S. Equity	\$617,833,254	38.8%	42.0%	-\$50,627,021	-3.2%
Non-U.S. Equity	\$452,748,606	28.4%	28.0%	\$7,108,423	0.4%
Real Assets	\$57,077,922	3.6%	3.0%	\$9,330,759	0.6%
Private Equity	\$11,633,968	0.7%	2.0%	-\$20,197,474	-1.3%
Other	\$105,308,817	6.6%		\$105,308,817	6.6%
Total	\$1,591,572,083	100.0%	100.0%		

### **Summary of Cash Flows**

	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$1,758,835,968	\$1,626,412,708	\$1,590,668,017
Net Cash Flow	-\$19,200,428	-\$55,386,782	-\$65,422,885
Net Investment Change	-\$148,063,457	\$20,546,157	\$66,326,952
Ending Market Value	\$1,591,572,083	\$1,591,572,083	\$1,591,572,083

Market Value: \$1,591.6 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,591,572,083	-19,200,428	100.0	100.0	0
Fixed Income Composite		346,969,516	-1,471	21.8	25.0	-50,923,504
Mesirow	Core Fixed Income	197,508,885	-1,397	12.4		
Garcia Hamilton	Core Fixed Income	69,260,168	-74	4.4		
State Street U.S. Aggregate Bond Index SL Fund	Core Fixed Income	80,200,463	0	5.0		
U.S. Equity Composite		617,833,254	-4,315	38.8	42.0	-50,627,021
Large Cap Composite		361,669,314	-2,271	22.7	18.0	75,186,339
Union Heritage Large Cap Core	Large-Cap Core	180,707,123	-2,271	11.4		
Blackrock S&P 500 Equity Index Fund	Large-Cap Core	180,962,191	0	11.4		
Mid Cap Composite		79,405,310	0	5.0	12.0	-111,583,340
BlackRock MidCap Equity Index	Mid-Cap Core	79,405,310	0	5.0		
Small Cap Composite		176,758,630	-2,044	11.1	12.0	-14,230,020
Channing Capital Management	Small-Cap Value	36,149,981	-396	2.3		
Earnest Partners SCC	Small-Cap Core	103,196,291	-1,296	6.5		
Legato		37,412,358	-38,995	2.4		37,412,358
Essex	Small-Cap Growth	8,183,033	-2,461,892	0.5		
Bridge City	Small-Cap Growth	8,816,166	-2,958,319	0.6		
Lebenthal Lisanti	Small-Cap Growth	5,824,512	-4,678,531	0.4		
Nicholas	Smid-Cap Growth	5,937,641	-63	0.4		
Rich Hall James	Small-Cap Growth	8,651,006	10,098,453	0.5		
International Equity Composite		204,841,594	-12,000,000	12.9	13.0	-2,062,777
Artisan Partners International Value Fund (APHKX)	Non-U.S. Large-Cap Value	88,140,473	-12,000,000	5.5		
Hardman Johnston	Non-U.S. Large-Cap Core	96,314,712	0	6.1		
Brown Capital International Small Cap	Non-U.S. Small-Cap Core	20,386,410	0	1.3		
Emerging Markets Equity Composite		100,323,808	0	6.3	8.0	-27,001,959
Earnest Partners EM	Emerging Markets	71,573,808	0	4.5		
Goldman Sachs Emerging Markets Equity	Emerging Markets	28,750,000	0	1.8		
Global Equity Composite		236,879,040	-10,057,650	14.9	7.0	125,468,994
Globalt Tactical ETF	Global Balanced	147,583,204	-6,271	9.3		
BlackRock MSCI ACWI Min Volatility Index	Global Low-Volatility	89,295,836	-10,000,000	5.6		
Real Estate Composite		57,077,922	-270,950	3.6	3.0	9,330,759
Intercontinental U.S. Real Estate	Core Real Estate	39,404,161	-69,326	2.5		
JP Morgan U.S. Real Estate	Core Plus Real Estate	17,673,761	-201,624	1.1		

Market Value: \$1,591.6 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Alternative Composite		11,633,968	0	0.7	2.0	-20,197,474
Consequent Alternative Partners II, LP	U.S. Private Equity FoF	11,633,968	0	0.7		
Cash Composite		16,012,981	3,082,579	1.0	0.0	16,012,981
Cash	Cash & Equivalents	725,965	153,672	0.0		
SEC Lending	Cash & Equivalents	0	0	0.0		
NT Operating	Cash & Equivalents	15,287,016	2,928,907	1.0		

## Annualized Performance (Net of Fees)

Market Value: \$1,591.6 Million and 100.0% of Fund

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	-2.7%	-8.5%	0.9%	-6.4%	3.8%	-6.4%	4.0%	6.1%	7.0%	6.5%	7.1%	Jan-97
Total Fund Policy Benchmark	-3.1%	-9.0%	0.8%	-6.4%	3.3%	-7.0%	3.5%	5.6%	6.5%	6.4%	7.0%	Jan-97
Fixed Income Composite	-1.8%	-5.1%	-3.2%	-5.2%	0.1%	-7.9%	-5.6%	-0.2%	-0.2%	0.8%	4.9%	Apr-88
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	5.2%	Apr-88
Mesirow	-1.7%	-4.7%	-2.8%	-4.7%	0.4%	-7.9%	-5.5%	0.1%	-0.1%	1.0%	3.1%	Jun-06
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	2.8%	Jun-06
Garcia Hamilton	-2.3%	-6.7%	-4.9%	-7.2%	-1.2%	-8.0%	-5.9%	-0.6%			0.0%	Nov-16
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	0.1%	Nov-16
State Street U.S. Aggregate Bond Index SL Fund	-1.6%	-4.7%	-2.6%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%		0.4%	Sep-15
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	0.4%	Sep-15
U.S. Equity Composite	-3.6%	-10.4%	4.0%	-7.5%	2.6%	-5.5%	8.3%	9.1%	10.8%	9.7%	8.5%	Dec-99
Russell 3000	-2.7%	-9.1%	9.4%	-5.8%	8.4%	-4.9%	9.2%	10.2%	11.6%	10.5%	6.6%	Dec-99
Large Cap Composite	-1.7%	-7.0%	10.0%	-5.0%	10.1%	-1.0%	10.7%	11.6%	12.9%	11.7%	9.4%	Jan-97
S&P 500	-2.1%	-8.3%	10.7%	-5.3%	10.1%	-3.0%	10.4%	11.0%	12.2%	11.2%	8.4%	Jan-97
Union Heritage Large Cap Core	-1.2%	-5.8%	9.3%	-4.7%	10.0%	1.4%	10.4%	12.1%	13.9%	12.5%	11.2%	Dec-94
S&P 500	-2.1%	-8.3%	10.7%	-5.3%	10.1%	-3.0%	10.4%	11.0%	12.2%	11.2%	10.0%	Dec-94
Blackrock S&P 500 Equity Index Fund	-2.1%	-8.2%	10.7%	-5.3%	10.1%	-3.0%	10.4%	11.0%	12.2%		12.2%	Sep-15
S&P 500	-2.1%	-8.3%	10.7%	-5.3%	10.1%	-3.0%	10.4%	11.0%	12.2%	11.2%	12.2%	Sep-15
Mid Cap Composite	-5.3%	-12.9%	-1.2%	-9.3%	-1.0%	-6.4%	9.3%	6.0%	7.8%	7.2%	7.6%	Oct-95
S&P 400 MidCap	-5.3%	-12.9%	-1.3%	-9.3%	-1.1%	-6.4%	9.2%	7.0%	8.3%	8.0%	10.6%	Oct-95
BlackRock MidCap Equity Index	-5.3%	-12.9%	-1.2%	-9.3%	-1.0%	-6.4%	9.3%				16.6%	Mar-20
S&P 400 MidCap	-5.3%	-12.9%	-1.3%	-9.3%	-1.1%	-6.4%	9.2%	7.0%	8.3%	8.0%	16.5%	Mar-20
Small Cap Composite	-6.6%	-15.5%	-4.5%	-11.6%	-8.5%	-12.5%	5.2%	6.3%	8.4%	7.5%	9.3%	Oct-95
Russell 2000	-6.8%	-16.7%	-4.5%	-11.6%	-8.6%	-13.7%	3.9%	3.3%	6.3%	5.6%	7.8%	Oct-95
Channing Capital Management	-6.1%	-13.9%	1.5%	-9.9%	-2.8%	-8.1%	9.2%	5.4%	6.1%	5.5%	7.3%	Feb-13
Russell 2000 Value	-6.0%	-15.2%	-6.5%	-8.7%	-9.9%	-10.3%	9.7%	3.3%	5.5%	5.2%	6.6%	Feb-13
Earnest Partners SCC	-6.2%	-15.0%	-5.5%	-10.8%	-9.3%	-10.7%	6.0%	7.7%	9.5%	9.1%	10.0%	Jul-99
Russell 2000	-6.8%	-16.7%	-4.5%	-11.6%	-8.6%	-13.7%	3.9%	3.3%	6.3%	5.6%	6.9%	Jul-99

## Annualized Performance (Net of Fees)

Market Value: \$1,591.6 Million and 100.0% of Fund

								,				
	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Legato	-8.0%	-18.3%	-7.6%	-15.4%	-11.9%	-20.6%	-0.7%	2.9%	7.3%		4.4%	Mar-15
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	4.6%	Mar-15
Essex	-10.2%	-21.3%	-9.7%	-17.4%	-13.0%	-21.4%	3.3%	3.8%	-		6.4%	Mar-17
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	4.5%	Mar-17
Bridge City	-7.9%	-16.5%	-5.7%	-12.9%	-7.8%	-12.0%	3.5%	4.6%	8.7%		7.8%	Jul-16
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	5.7%	Jul-16
Lebenthal Lisanti	-7.8%	-18.6%	-10.4%	-17.4%	-17.6%	-26.7%	-7.7%	1.4%	8.0%		7.5%	Jul-16
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	5.7%	Jul-16
Nicholas	-7.5%	-16.3%	-0.8%	-13.3%	-4.7%	-19.2%					-11.8%	May-21
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	-13.4%	May-21
Rich Hall James	-6.4%										-12.1%	Aug-23
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	-13.8%	Aug-23
International Equity Composite	-3.1%	-11.0%	2.0%	-8.1%	16.0%	-9.6%	3.6%	7.0%	7.0%	5.4%	6.8%	Oct-10
MSCI EAFE	-4.1%	-10.9%	2.7%	-8.0%	14.4%	-6.1%	5.7%	4.1%	5.0%	3.1%	4.5%	Oct-10
Artisan Partners International Value Fund (APHKX)	-1.1%	-5.7%	9.9%	-4.1%	22.7%	1.9%	14.4%	9.1%	8.1%	6.3%	9.5%	Jun-10
MSCI EAFE	-4.1%	-10.9%	2.7%	-8.0%	14.4%	-6.1%	5.7%	4.1%	5.0%	3.1%	5.6%	Jun-10
Hardman Johnston	-4.1%	-14.3%	-3.6%	-9.9%	13.4%	-16.9%	-3.3%	5.9%	6.6%	5.1%	5.7%	Oct-10
MSCI ACWI ex USA	-4.1%	-11.3%	1.0%	-7.7%	12.1%	-8.2%	3.0%	3.5%	4.3%	2.5%	3.6%	Oct-10
Brown Capital International Small Cap	-6.5%	-18.1%	-4.3%	-15.7%	1.5%						-20.5%	Dec-21
MSCI ACWI ex US Small Cap	-5.6%	-11.7%	-0.8%	-7.2%	8.8%	-11.3%	3.0%	3.5%	4.2%	3.4%	-11.9%	Dec-21
Emerging Markets Equity Composite	-3.1%	-11.5%	-0.4%	-6.9%	13.1%	-8.6%	2.7%	3.4%	3.8%	-	5.8%	Sep-15
MSCI Emerging Markets	-3.9%	-12.2%	-2.1%	-6.7%	10.8%	-12.6%	-3.7%	1.6%	2.6%	1.2%	4.3%	Sep-15
Earnest Partners EM	-3.1%	-11.6%	0.5%	-6.6%	14.2%	-5.5%	5.0%	4.8%	4.7%		6.7%	Sep-15
MSCI Emerging Markets	-3.9%	-12.2%	-2.1%	-6.7%	10.8%	-12.6%	-3.7%	1.6%	2.6%	1.2%	4.3%	Sep-15
Goldman Sachs Emerging Markets Equity	-3.1%	-11.2%	-2.5%	-7.6%	10.4%						-15.2%	Feb-22
MSCI Emerging Markets	-3.9%	-12.2%	-2.1%	-6.7%	10.8%	-12.6%	-3.7%	1.6%	2.6%	1.2%	-11.1%	Feb-22
Global Equity Composite	-1.7%	-6.9%	2.6%	-4.8%	5.8%	-5.0%	3.6%	6.4%	7.2%	6.7%	7.1%	Mar-13
MSCI ACWI	-3.0%	-9.6%	6.7%	-6.3%	10.5%	-6.0%	6.7%	7.5%	8.4%	6.8%	7.5%	Mar-13
Globalt Tactical ETF	-1.7%	-7.7%	4.7%	-5.2%	7.2%	-5.5%	3.4%	6.4%	7.1%	6.5%	6.9%	Mar-13
Globalt Benchmark	-3.0%	-9.1%	2.7%	-6.5%	5.4%	-6.8%	3.7%	5.7%	6.6%	6.0%	6.6%	Mar-13
BlackRock MSCI ACWI Min Volatility Index	-1.7%	-5.7%	-0.2%	-4.1%	4.0%	-3.5%	3.9%			-	4.6%	Apr-20
MSCI ACWI Minimum Volatility Index	-1.7%	-5.7%	-0.5%	-4.2%	3.6%	-3.8%	3.6%	4.4%	5.6%	6.0%	4.2%	Apr-20

## Annualized Performance (Net of Fees)

Market Value: \$1,591.6 Million and 100.0% of Fund

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Real Estate Composite	0.0%	-2.1%	-9.8%	-2.1%	-15.5%	1.5%	5.0%	4.3%	5.4%		6.4%	Feb-15
NFI-ODCE	0.0%	-1.4%	-8.1%	-2.1%	-11.3%	1.4%	6.1%	4.6%	5.3%	7.1%	6.4%	Feb-15
Intercontinental U.S. Real Estate	0.0%	-1.0%	-10.7%	-1.0%	-16.3%	1.2%	5.0%	5.0%	6.4%		7.2%	Mar-15
NFI-ODCE	0.0%	-1.4%	-8.1%	-2.1%	-11.3%	1.4%	6.1%	4.6%	5.3%	7.1%	6.3%	Mar-15
JP Morgan U.S. Real Estate	0.0%	-4.6%	-7.9%	-4.6%	-13.7%	1.8%	4.8%	3.2%	4.3%		4.4%	Jul-16
NFI-ODCE	0.0%	-1.4%	-8.1%	-2.1%	-11.3%	1.4%	6.1%	4.6%	5.3%	7.1%	5.4%	Jul-16
Alternative Composite	0.0%	0.0%	-2.3%	0.0%	-0.8%	-7.9%	3.3%	-0.6%	1.3%	1.0%	2.1%	Oct-12
Custom Alternative Target Benchmark	-1.7%	-6.1%	6.5%	-3.7%	6.2%	-3.3%	7.6%	8.3%	9.0%	8.2%	9.3%	Oct-12
Consequent Alternative Partners II, LP	0.0%	0.0%	-2.3%	0.0%	-0.8%	-7.9%	3.3%	-0.6%	1.3%	0.9%	1.6%	Jan-13
Consequent Alt BM	0.0%	0.0%	-2.3%	0.0%	-0.8%	-7.9%	3.3%	-0.6%	1.3%	0.9%	1.6%	Jan-13

# Calendar Performance (Net of Fees)

Market Value: \$1,591.6 Million and 100.0% of Fund

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	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total Fund Composite	-14.0%	13.8%	16.4%	22.0%	-5.9%	18.6%	8.4%	-0.6%	8.0%	23.0%	13.4%
Total Fund Policy Benchmark	-15.0%	13.4%	15.0%	22.4%	-6.0%	17.3%	9.1%	0.2%	8.8%	20.4%	12.4%
InvMetrics Public DB > \$1B Net Rank	87	68	4	4	86	6	29	56	4	1	26
Fixed Income Composite	-12.5%	-1.9%	8.2%	8.2%	0.2%	3.5%	2.7%	0.8%	4.9%	-1.7%	4.8%
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
InvMetrics Public DB Total Fix Inc Net Rank	68	96	37	63	41	70	68	31	27	59	59
Mesirow	-12.7%	-1.9%	8.6%	8.8%	-0.3%	3.4%	3.1%	-0.2%	6.2%	-2.1%	6.1%
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
eV US Core Fixed Inc Net Rank	34	81	37	60	61	77	51	89	27	75	44
Garcia Hamilton	-11.1%	-2.3%	8.1%	7.1%	0.8%	3.6%	-	-	-	-	
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
eV US Core Fixed Inc Net Rank	8	94	52	93	10	64					
State Street U.S. Aggregate Bond Index SL Fund	-13.2%	-1.6%	7.5%	8.7%	0.0%	3.6%	2.7%				
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
eV US Core Fixed Inc Net Rank	61	54	74	68	34	65	71				
U.S. Equity Composite	-16.2%	23.8%	19.2%	30.3%	-6.3%	22.3%	13.0%	-0.2%	10.9%	38.1%	16.5%
Russell 3000	-19.2%	25.7%	20.9%	31.0%	-5.2%	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%
InvMetrics Public DB US Eq Net Rank	23	82	28	40	58	13	45	51	51	6	24
Large Cap Composite	-14.2%	25.2%	19.1%	32.2%	-3.4%	23.5%	10.9%	2.7%	13.5%	32.7%	15.6%
S&P 500	-18.1%	28.7%	18.4%	31.5%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%
Union Heritage Large Cap Core	-9.9%	19.7%	19.5%	33.6%	-1.1%	28.0%	8.3%	5.5%	12.0%	32.8%	15.1%
S&P 500	-18.1%	28.7%	18.4%	31.5%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%
eV US Large Cap Core Equity Net Rank	15	92	24	12	9	4	62	5	59	39	46
Blackrock S&P 500 Equity Index Fund	-18.1%	28.7%	18.4%	31.5%	-4.4%	21.9%	12.0%				
S&P 500	-18.1%	28.7%	18.4%	31.5%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%
eV US Large Cap Core Equity Net Rank	64	29	29	28	31	46	20	-	-		
Mid Cap Composite	-13.0%	24.7%	13.1%	23.4%	-11.4%	19.9%	12.0%	-5.8%	13.2%	37.4%	19.9%
S&P 400 MidCap	-13.1%	24.8%	13.7%	26.2%	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%
BlackRock MidCap Equity Index	-13.0%	24.7%		-							
S&P 400 MidCap	-13.1%	24.8%	13.7%	26.2%	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%
eV US Passive Mid Cap Equity Net Rank	7	1									

# Calendar Performance (Net of Fees)

Market Value: \$1,591.6 Million and 100.0% of Fund

#### **Calendar Year**

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Small Cap Composite	-19.4%	20.9%	23.7%	29.5%	-12.2%	19.7%	21.1%	-3.0%	6.7%	37.3%	14.0%
Russell 2000	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%
Channing Capital Management	-17.3%	19.5%	16.4%	24.8%	-17.2%	6.7%	28.1%	-5.3%	4.5%		
Russell 2000 Value	-14.5%	28.3%	4.6%	22.4%	-12.9%	7.8%	31.7%	-7.5%	4.2%	34.5%	18.0%
eV US Small Cap Value Equity Net Rank	88	91	13	37	72	78	32	57	55		
Earnest Partners SCC	-15.7%	21.7%	22.3%	32.6%	-13.1%	24.1%	25.0%	-2.0%	9.4%	36.1%	15.8%
Russell 2000	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%
eV US Small Cap Equity Net Rank	45	59	37	15	61	19	27	38	10	73	43
Legato	-29.7%	19.3%	32.5%	25.7%	-5.5%	21.5%	2.9%	-	-	-	
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
Essex	-27.7%	28.7%	28.2%	26.3%	-6.5%				-		
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
eV US Small Cap Equity Net Rank	84	31	30	38	28						
Bridge City	-20.6%	20.3%	20.6%	25.0%	0.2%	16.0%	-		-		
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
eV US Small Cap Equity Net Rank	66	61	39	48	10	42					
Lebenthal Lisanti	-37.4%	11.8%	52.1%	28.2%	-1.7%	28.9%			-		
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
eV US Small Cap Equity Net Rank	97	82	11	28	14	8	-				
Nicholas	-31.0%								_		
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
eV US Small Cap Equity Net Rank	91										
Rich Hall James											
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
eV US Small Cap Equity Net Rank											



# Calendar Performance (Net of Fees)

Market Value: \$1,591.6 Million and 100.0% of Fund

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	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
International Equity Composite	-17.7%	8.0%	23.4%	29.1%	-14.6%	30.4%	3.4%	-1.0%	0.0%	24.0%	19.6%
MSCI EAFE	-14.5%	11.3%	7.8%	22.0%	-13.8%	25.0%	1.0%	-0.8%	-4.9%	22.8%	17.3%
Artisan Partners International Value Fund (APHKX)	-6.8%	17.0%	8.8%	24.2%	-15.4%	24.1%	5.7%	-1.5%	-0.4%	30.7%	23.0%
MSCI EAFE	-14.5%	11.3%	7.8%	22.0%	-13.8%	25.0%	1.0%	-0.8%	-4.9%	22.8%	17.3%
eV EAFE Large Cap Value Net Rank	37	3	1	6	35	47	29	38	1	4	5
Hardman Johnston	-23.6%	1.3%	35.7%	33.5%	-13.8%	37.4%	1.1%	-0.4%	0.4%	17.3%	15.6%
MSCI ACWI ex USA	-16.0%	7.8%	10.7%	21.5%	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%
eV ACWI ex-US Large Cap Equity Net Rank	79	92	4	7	34	8	51	30	5	60	81
Brown Capital International Small Cap	-31.4%					_		-	_		
MSCI ACWI ex US Small Cap	-20.0%	12.9%	14.2%	22.4%	-18.2%	31.6%	3.9%	2.6%	-4.0%	19.7%	18.5%
Foreign Small/Mid Growth MStar MF Rank	66			-	-		-				-
Emerging Markets Equity Composite	-15.3%	1.6%	12.4%	23.6%	-15.5%	36.0%	11.8%	-	-	-	
MSCI Emerging Markets	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%
Earnest Partners EM	-10.2%	1.6%	12.4%	23.6%	-15.5%	36.0%	11.9%				
MSCI Emerging Markets	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%
eV Emg Mkts Equity Net Rank	9	46	73	27	42	57	31				
Goldman Sachs Emerging Markets Equity		-	-	-	-	-	-	-	-	-	-
MSCI Emerging Markets	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%
eV Emg Mkts All Cap Equity Net Rank											
Global Equity Composite	-13.8%	13.1%	15.4%	22.4%	-4.8%	18.4%	7.6%	-1.0%	8.9%		
MSCI ACWI	-18.4%	18.5%	16.3%	26.6%	-9.4%	24.0%	7.9%	-2.4%	4.2%	22.8%	16.1%
eV Global Core Equity Net Rank	29	88	50	70	13	88	22	66	11		
Globalt Tactical ETF	-15.9%	12.7%	16.3%	22.4%	-5.1%	18.1%	7.3%	-1.3%	8.6%		
Globalt Benchmark	-16.4%	13.8%	15.1%	22.4%	-6.1%	17.3%	9.1%	-1.1%	6.8%		
eV Global Balanced Net Rank	61	47	30	34	17	12	54	39	13		
BlackRock MSCI ACWI Min Volatility Index	-10.0%	14.2%	-	-		-	-	-	-	-	-
MSCI ACWI Minimum Volatility Index	-10.3%	13.9%	2.7%	21.1%	-1.6%	17.9%	7.4%	2.8%	11.0%	16.9%	10.1%
eV Global Low Volatility Equity Net Rank	55	76									

# Calendar Performance (Net of Fees)

Market Value: \$1,591.6 Million and 100.0% of Fund

#### **Calendar Year**

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Real Estate Composite	5.8%	21.4%	-0.2%	5.6%	8.0%	6.7%	9.7%				
NFI-ODCE	6.5%	21.1%	0.3%	4.4%	7.4%	6.7%	7.8%	14.0%	11.5%	12.9%	9.8%
InvMetrics Public DB Real Estate Priv Net Rank	73	67	78	59	28	61	6				
Intercontinental U.S. Real Estate	7.4%	20.1%	1.0%	8.2%	9.2%	7.5%	11.1%	-			
NFI-ODCE	6.5%	21.1%	0.3%	4.4%	7.4%	6.7%	7.8%	14.0%	11.5%	12.9%	9.8%
JP Morgan U.S. Real Estate	2.4%	23.7%	-2.0%	2.1%	5.5%	5.6%					
NFI-ODCE	6.5%	21.1%	0.3%	4.4%	7.4%	6.7%	7.8%	14.0%	11.5%	12.9%	9.8%
Alternative Composite	-11.2%	15.6%	22.2%	-20.0%	4.8%	7.0%	0.1%	0.5%	0.4%	5.8%	
Custom Alternative Target Benchmark	-13.5%	19.2%	17.1%	22.3%	-4.1%	16.1%	8.7%	1.0%	9.6%	24.4%	12.5%
InvMetrics Public DB Alts Net Rank	90	79	6	99	44	52	96	74	89	90	
Consequent Alternative Partners II, LP	-11.2%	15.6%	22.2%	-20.0%	4.8%	7.0%	0.1%	0.4%	2.7%		
Consequent Alt BM	-11.2%	15.6%	22.2%	-20.0%	4.8%	7.0%	0.1%	0.4%	2.7%	4.1%	

Private Markets Composite Performance Summary

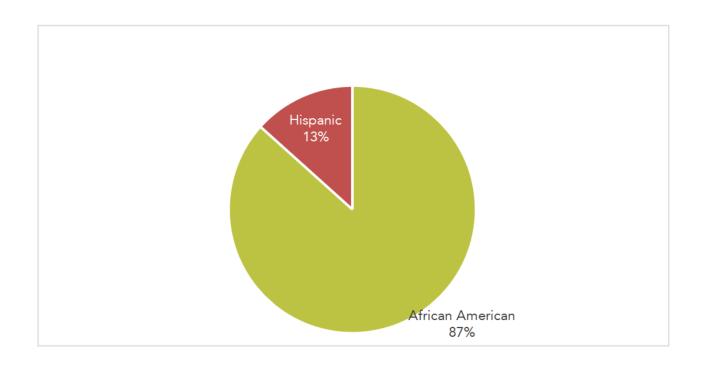
### **Private Market Investments Overview**

Investments		Commitments		Contributions & Distributions		Valuations		Performance			
Investment Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	TVPI	RVPI	IRR (%)
GrayCo Alternative Partners II, L.P.	2012	28,000,000	3,582,424	24,417,576	17,052,604	11,633,968	28,686,572	0.70	1.17	0.48	1.97
Total		28.000.000	3.582.424	24.417.576	17.052.604	11.633.968	28.686.572	0.70	1.17	0.48	1.97

MWDBE Composite Market Values

		Asset Class		Market Value	% of Portfolio	% of Total Fund
Total MWDBE Composite		7,0001 01000		\$518,686,139	100.0%	32.6%
Garcia Hamilton	(H)	Core Fixed Inco	ome	\$69,260,168	13.4%	4.4%
Union Heritage	(AA)	Large-Cap Core	е	\$180,707,123	34.8%	11.4%
Channing Capital Management	(AA)	Small-Cap Valu	ie	\$36,149,981	7.0%	2.3%
Earnest Partners SCC	(AA)	Small-Cap Core	е	\$103,196,291	19.9%	6.5%
Legato	(AA)	Small-Cap Grov	wth	\$37,412,358	7.2%	2.4%
Brown Capital International Small Cap	(AA)	Non-U.S. Small	l Cap Core	\$20,386,410	3.9%	1.3%
Earnest Partners EM	(AA)	<b>Emerging Mark</b>	ets	\$71,573,808	13.8%	4.5%
(AA) African American						
(A) Asian			Actual %			
(H) Hispanic		Minority	32.6%			
(NA) Native American		Female	0.0%			
(W) Women		Disabled	0.0%			

<sup>\*</sup>Please note: our calculations do not include Consequent Capital Management



### Fee Schedule

Market Value: \$1,591.6 Million and 100.0% of Fund

		iviain	et value: \$1,591.6 Million a	110 100.0% 01
Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Median <sup>2</sup>
Core Fixed Income	Mesirow	0.35% on the first \$10 million 0.25% on the next \$50 million 0.20% on the next \$150 million 0.15% on the next \$300 million 0.125% on the next \$500 million 0.10% on the balance	0.22% \$435,018	0.22%
Core Fixed Income	Garcia Hamilton	0.18% on the balance	0.18 <b>%</b> \$124,668	0.26%
Core Fixed Income	State Street US Agg	0.03% on the balance	0.03 <b>%</b> \$24,060	0.06%
Large-Cap Core	Union Heritage	0.50% on the first \$20 million 0.45% on the next \$15 million 0.35% on the balance	0.37% \$677,475	0.44%
Large-Cap Core	Blackrock S&P 500 Equity Index Fund	0.01% on the balance	0.01% \$18,096	0.02%
Mid-Cap Core	BlackRock MidCap Equity Index	0.01% on the balance	0.01% \$7,941	0.06%
Small-Cap Value	Channing Capital Management	0.75% on the first \$25 million 0.65% on the next \$25 million 0.60% on the next \$50 million 0.55% on the balance	0.72% \$259,975	0.90%
Small-Cap Core	Earnest Partners SCC	0.80% on the first \$10 million 0.65% on the next \$10 million 0.50% on the balance	0.54% \$560,981	0.77%
Small-Cap Cgrowth	Legato	0.60% on the balance	0.60% \$347,442	0.80%
Non-U.S. Large-Cap Core	Hardman Johnston	0.75% on the first \$25 million 0.60% on the next \$50 million 0.50% on the balance	0.62% \$594,074	0.65%
Non-U.S. Large-Cap Value	Artisan Partners International Value Fund (APHKX)	1.03% on the balance	1.03% \$907,847	0.92%
Emerging Markets	Earnest Partners EM	1.00% on the balance	1.00% \$715,738	0.85%
Emerging Markets	Goldman Sachs Emerging Markets Equity	0.45% on the balance	0.45% \$129,375	0.90%
Global Balanced	Globalt Tactical ETF	0.50% on the first \$50 million 0.30% on the next \$50 million 0.25% on the balance	0.35% \$518,958	0.85%
Core Real Estate	Intercontinental U.S. Real Estate	1.10% on the first \$25 million 1.00% on the next \$25 million 0.85% on the next \$50 million 0.75% on the balance	1.10% \$197,378	1.00%
Core Plus Real Estate	JP Morgan U.S. Real Estate	1.75% on the first \$10 million 1.05% on the next \$90 million	1.45% \$255,574	1.00%
U.S. Private Equity FoF	Consequent Alternative Partners II, LP	1.00% on Committed Capital	2.41% \$280,000	2.41%
Global Low-Volatility	BlackRock MSCI ACWI Min Volatility Index	0.025% on the balance	0.03% \$22,324	0.42%
Non-U.S. Small-Cap Core	Brown Capital International Small Cap	1.06% on the balance	1.06% \$216,096	1.29%
Total Investment Management Fees	ol Foo are Doord on Market Value at Month Food		0.40% \$6,293,020	0.46%

<sup>&</sup>lt;sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Month End.

<sup>&</sup>lt;sup>2</sup> Source: 2019 Marquette Associates Investment Management Fee Study.



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### (Preliminary, Subject to Change)

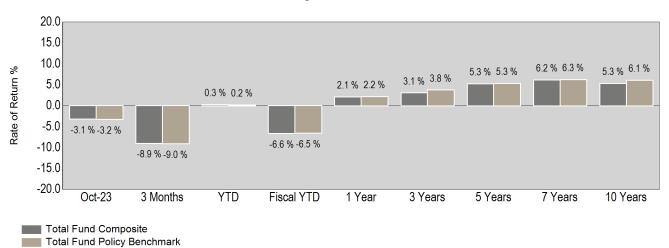


#### **Pension Fund**

City of Atlanta Firefighters
Pension Fund
Executive Summary
October 31, 2023

Market Value: \$752.2 Million and 100.0% of Fund

#### Return Summary Ending October 31, 2023



#### **Return Summary YTD**

	Total Return
Total Fund Composite	0.3%
Fixed Income Composite	-3.5%
U.S. Equity Composite	3.4%
International Equity Composite	0.1%
Alternative Composite	-8.1%

#### **Asset Allocation vs. Target**

	Current	Current	Policy	Difference	%
Fixed Income Composite	\$191,957,499	25.5%	25.0%	\$3,905,878	0.5%
U.S. Equity Composite	\$330,859,748	44.0%	43.0%	\$7,410,961	1.0%
International Equity Composite	\$194,968,195	25.9%	27.0%	-\$8,127,555	-1.1%
Alternative Composite	\$24,038,967	3.2%	5.0%	-\$13,571,357	-1.8%
Cash Composite	\$10,382,073	1.4%	0.0%	\$10,382,073	1.4%
Total	\$752,206,481	100.0%	100.0%		

#### **Summary of Cash Flows**

	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$826,992,326	\$772,576,334	\$765,904,403
Net Cash Flow	-\$1,368,901	-\$24,482,790	-\$31,956,984
Net Investment Change	-\$73,416,943	\$4,112,937	\$18,259,063
Ending Market Value	\$752,206,481	\$752,206,481	\$752,206,481

Market Value: \$752.2 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		752,206,481	-1,368,901	100.0	100.0	0
Fixed Income Composite		191,957,499	-772	25.5	25.0	3,905,878
Garcia Hamilton	Core Fixed Income	52,515,758	-50	7.0		
Mesirow	Core Fixed Income	139,441,740	-723	18.5		
U.S. Equity Composite		330,859,748	-573	44.0	43.0	7,410,961
Large Cap Composite		158,810,510	0	21.1	19.0	15,891,278
BlackRock 1000 Index Fund	Large-Cap Core	158,810,510	0	21.1		
Mid Cap Composite		89,402,013	0	11.9	12.0	-862,765
BlackRock Mid Cap Equity Index Fund	Mid-Cap Core	89,402,013	0	11.9		
Small Cap Composite		82,647,225	-573	11.0	12.0	-7,617,553
Northern Trust Collective Russell 2000 Index	Small-Cap Core	15,738,210	0	2.1		
Earnest SCC	Small-Cap Core	41,135,152	-573	5.5		
Driehaus SCG	Small-Cap Growth	25,773,863	0	3.4		
International Equity Composite		194,968,195	-4,921	25.9	27.0	-8,127,555
Ativo Capital	Non-U.S. Large-Cap Core	38,782,689	-4,921	5.2		
Hardman Johnston	Non-U.S. Large-Cap Core	8,996,768	0	1.2		
BlackRock MSCI EAFE Small Cap	Non-U.S. Small-Cap Core	14,313,468	0	1.9		
Brown Capital International Small Cap	Non-U.S. Small-Cap Core	10,193,205	0	1.4		
BlackRock Emerging Markets Free Fund	Emerging Markets	18,618,299	0	2.5		
Goldman Sachs Emerging Markets Equity	Emerging Markets	18,078,093	0	2.4		
Global Low Volatility Composite		85,985,673	0	11.4	-	85,985,673
BlackRock MSCI ACWI Min Volatility Index	Global Low-Volatility	85,985,673	0	11.4		
Alternative Composite		24,038,967	-190,846	3.2	5.0	-13,571,357
Intercontinental U.S. Real Estate	Core Real Estate	14,922,920	-190,846	2.0		
Consequent Alternative Partners II, L.P.	U.S. Private Equity FoF	6,212,004	0	0.8		
ICV Partners III, L.P.	LBO Private Equity	1,632,664	0	0.2		
Pharos Capital Partners III	LBO Private Equity	1,271,379	0	0.2		
Cash Composite		10,382,073	-1,171,789	1.4	0.0	10,382,073
Cash Account	Cash & Equivalents	972,032	202,828	0.1		
Transition Account	Cash & Equivalents	5,165	-2	0.0		
NT Operating	Cash & Equivalents	9,404,877	-1,374,614	1.3		

# Annualized Performance (Net of Fees)

Market Value: \$752.2 Million and 100.0% of Fund

								, ,				
	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
<b>Total Fund Composite</b>	-3.1%	-8.9%	0.3%	-6.6%	2.1%	-8.1%	3.1%	5.3%	6.2%	5.3%	7.9%	Jan-88
Total Fund Policy Benchmark	-3.2%	-9.0%	0.2%	-6.5%	2.2%	-7.7%	3.8%	5.3%	6.3%	6.1%	8.5%	Jan-88
Fixed Income Composite	-1.9%	-5.3%	-3.5%	-5.4%	-0.1%	-7.9%	-5.6%	-0.3%	-0.3%	0.7%	4.9%	Jan-88
Fixed Income Composite Custom Benchmark	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.2%	-0.3%	0.8%	5.2%	Jan-88
Garcia Hamilton	-2.3%	-6.7%	-4.9%	-7.1%	-1.1%	-8.0%	-5.9%	-0.6%			-0.1%	Dec-16
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	0.1%	Dec-16
Mesirow	-1.7%	-4.7%	-2.9%	-4.8%	0.2%	-7.8%	-5.5%	0.0%	-0.2%	0.9%	1.7%	May-10
Bloomberg US Aggregate TR	-1.6%	-4.7%	-2.8%	-4.8%	0.4%	-8.0%	-5.6%	-0.1%	-0.2%	0.9%	1.7%	May-10
U.S. Equity Composite	-4.3%	-11.5%	3.4%	-8.0%	1.7%	-7.9%	7.1%	7.7%	9.4%	7.6%	10.6%	Jan-88
Russell 3000	-2.7%	-9.1%	9.4%	-5.8%	8.4%	-4.9%	9.2%	10.2%	11.6%	10.5%	10.5%	Jan-88
Large Cap Composite	-2.4%	-8.6%	10.3%	-5.5%	9.5%	-4.3%	9.5%	10.7%	11.8%	10.1%	10.6%	Jan-88
Russell 1000	-2.4%	-8.6%	10.3%	-5.5%	9.5%	-4.3%	9.5%	10.7%	11.9%	10.9%	10.6%	Jan-88
BlackRock 1000 Index Fund	-2.4%	-8.6%	10.3%	-5.5%	9.5%	-4.3%	9.5%	10.7%			9.6%	Dec-17
Russell 1000	-2.4%	-8.6%	10.3%	-5.5%	9.5%	-4.3%	9.5%	10.7%	11.9%	10.9%	9.6%	Dec-17
Mid Cap Composite	-5.3%	-12.9%	-1.2%	-9.3%	-1.0%	-6.4%	9.3%	7.1%	8.7%	7.2%	7.7%	Jun-98
S&P 400 MidCap	-5.3%	-12.9%	-1.3%	-9.3%	-1.1%	-6.4%	9.2%	7.0%	8.3%	8.0%	9.2%	Jun-98
BlackRock Mid Cap Equity Index Fund	-5.3%	-12.9%	-1.2%	-9.3%	-1.0%	-6.4%	9.3%	7.1%			6.9%	Aug-17
S&P 400 MidCap	-5.3%	-12.9%	-1.3%	-9.3%	-1.1%	-6.4%	9.2%	7.0%	8.3%	8.0%	6.9%	Aug-17
Small Cap Composite	-6.9%	-15.4%	-3.2%	-11.3%	-8.2%	-14.3%	1.8%	3.1%	6.4%	3.0%	8.8%	Oct-01
Russell 2000	-6.8%	-16.7%	-4.5%	-11.6%	-8.6%	-13.7%	3.9%	3.3%	6.3%	5.6%	8.0%	Oct-01
Northern Trust Collective Russell 2000 Index	-6.8%	-16.7%	-4.3%	-11.6%	-8.4%	-13.6%	4.0%	3.4%		-	4.3%	Feb-17
Russell 2000	-6.8%	-16.7%	-4.5%	-11.6%	-8.6%	-13.7%	3.9%	3.3%	6.3%	5.6%	4.1%	Feb-17
Earnest SCC	-6.0%	-14.7%	-4.7%	-10.6%	-8.6%	-10.4%					-10.4%	Oct-21
Russell 2000	-6.8%	-16.7%	-4.5%	-11.6%	-8.6%	-13.7%	3.9%	3.3%	6.3%	5.6%	-13.7%	Oct-21
Driehaus SCG	-8.3%	-15.5%	0.0%	-12.1%	-7.4%	-19.9%					-19.9%	Oct-21
Russell 2000 Growth	-7.7%	-18.3%	-2.9%	-14.5%	-7.6%	-17.3%	-1.8%	2.7%	6.5%	5.7%	-17.3%	Oct-21

## Annualized Performance (Net of Fees)

Market Value: \$752.2 Million and 100.0% of Fund

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
International Equity Composite	-2.9%	-9.3%	0.1%	-6.4%	7.8%	-10.4%	0.5%	4.7%	5.0%	3.5%	5.2%	Jul-10
International Equity Composite Custom Benchmark	-3.2%	-9.2%	-0.8%	-6.1%	7.5%	-8.4%	2.4%	3.3%	4.1%	2.4%	4.6%	Jul-10
Ativo Capital	-2.7%	-9.3%	7.6%	-6.2%	15.1%	-3.8%	5.9%	4.6%	4.0%		3.5%	Jan-16
MSCI ACWI ex USA	-4.1%	-11.3%	1.0%	-7.7%	12.1%	-8.2%	3.0%	3.5%	4.3%	2.5%	4.4%	Jan-16
Hardman Johnston	-4.1%	-14.3%	-3.7%	-10.0%	13.3%	-17.0%	-3.4%	5.8%	6.5%	5.1%	6.3%	Jul-10
MSCI ACWI ex USA	-4.1%	-11.3%	1.0%	-7.7%	12.1%	-8.2%	3.0%	3.5%	4.3%	2.5%	4.7%	Jul-10
BlackRock MSCI EAFE Small Cap	-5.8%	-13.0%	-3.6%	-9.1%	7.2%	-13.3%	0.8%	2.1%			-0.3%	Dec-17
MSCI EAFE Small Cap	-5.9%	-13.0%	-4.2%	-9.2%	6.5%	-13.8%	0.3%	1.6%	3.5%	3.4%	-0.8%	Dec-17
Brown Capital International Small Cap	-6.5%	-18.1%	-4.3%	-15.7%	1.5%						-20.5%	Dec-21
MSCI ACWI ex US Small Cap	-5.6%	-11.7%	-0.8%	-7.2%	8.8%	-11.3%	3.0%	3.5%	4.2%	3.4%	-11.9%	Dec-21
BlackRock Emerging Markets Free Fund	-3.9%	-12.1%	-2.3%	-6.8%	10.7%	-12.7%	-3.8%	1.4%			-1.7%	Dec-17
MSCI Emerging Markets	-3.9%	-12.2%	-2.1%	-6.7%	10.8%	-12.6%	-3.7%	1.6%	2.6%	1.2%	-1.6%	Dec-17
Goldman Sachs Emerging Markets Equity	-3.1%	-11.2%	-2.5%	-7.6%	10.4%				-		-15.2%	Feb-22
MSCI Emerging Markets	-3.9%	-12.2%	-2.1%	-6.7%	10.8%	-12.6%	-3.7%	1.6%	2.6%	1.2%	-11.1%	Feb-22
BlackRock MSCI ACWI Min Volatility Index	-1.7%	-5.7%	-0.2%	-4.1%	4.0%	-3.5%	3.9%		-		4.6%	Apr-20
MSCI ACWI Minimum Volatility Index	-1.7%	-5.7%	-0.5%	-4.2%	3.6%	-3.8%	3.6%	4.4%	5.6%	6.0%	4.2%	Apr-20
Alternative Composite	0.0%	-0.6%	-8.1%	-0.6%	-11.3%	-3.8%	4.1%	2.0%	3.7%	3.7%	4.3%	Dec-12
Intercontinental U.S. Real Estate	0.0%	-1.0%	-10.7%	-1.0%	-16.4%	1.0%	5.0%	5.1%	6.7%		7.7%	Aug-14
NFI-ODCE	0.0%	-1.4%	-8.1%	-2.1%	-11.3%	1.4%	6.1%	4.6%	5.3%	7.1%	6.7%	Aug-14
Consequent Alternative Partners II, L.P.	0.0%	0.0%	-2.4%	0.0%	-0.8%	-8.0%	3.3%	-0.6%	1.3%	1.0%	1.3%	Dec-12
Consequent Alt BM	0.0%	0.0%	-2.4%	0.0%	-0.8%	-8.0%	3.3%	-0.6%	1.3%	1.0%	1.3%	Dec-12

# Calendar Performance (Net of Fees)

Market Value: \$752.2 Million and 100.0% of Fund

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	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total Fund Composite	-16.4%	13.3%	17.5%	21.5%	-6.4%	16.1%	8.6%	-2.5%	3.8%	22.4%	13.0%
Total Fund Policy Benchmark	-15.4%	14.5%	15.1%	22.1%	-6.5%	15.2%	9.7%	-0.2%	8.7%	21.9%	13.1%
InvMetrics Public DB > \$250mm Net Rank	94	62	6	6	92	33	14	88	81	1	34
Fixed Income Composite	-12.2%	-2.0%	7.6%	7.9%	-0.2%	4.4%	2.9%	0.4%	4.4%	-1.9%	4.2%
Fixed Income Composite Custom Benchmark	-13.0%	-1.5%	7.4%	8.0%	-0.2%	4.4%	2.2%	0.8%	5.0%	-2.0%	4.2%
InvMetrics Public DB Total Fix Inc Net Rank	63	97	53	68	49	60	64	40	34	69	74
Garcia Hamilton	-11.2%	-2.3%	8.0%	7.0%	0.8%	3.5%	_		-		
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
eV US Core Fixed Inc Net Rank	8	93	61	93	10	71					-
Mesirow	-12.5%	-1.8%	8.3%	8.8%	-0.6%	3.4%	2.8%	-0.1%	6.4%	-2.3%	5.5%
Bloomberg US Aggregate TR	-13.0%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%
eV US Core Fixed Inc Net Rank	26	77	43	67	75	78	65	86	22	82	60
U.S. Equity Composite	-19.0%	21.8%	20.3%	28.4%	-6.3%	18.9%	12.7%	-4.9%	5.1%	34.8%	16.8%
Russell 3000	-19.2%	25.7%	20.9%	31.0%	-5.2%	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%
InvMetrics Public DB US Eq Net Rank	80	97	18	87	58	79	50	97	98	36	21
Large Cap Composite	-19.1%	26.5%	21.0%	31.5%	-4.7%	20.7%	11.1%	-0.3%	7.2%	32.0%	16.1%
Russell 1000	-19.1%	26.5%	21.0%	31.4%	-4.8%	21.7%	12.1%	0.9%	13.2%	33.1%	16.4%
eV US Large Cap Core Equity Net Rank	75	56	18	29	34	59	26	58	96	49	29
BlackRock 1000 Index Fund	-19.1%	26.5%	21.0%	31.5%	-4.8%			-			
Russell 1000	-19.1%	26.5%	21.0%	31.4%	-4.8%	21.7%	12.1%	0.9%	13.2%	33.1%	16.4%
eV US Large Cap Core Equity Net Rank	75	56	18	29	37						

# Calendar Performance (Net of Fees)

Market Value: \$752.2 Million and 100.0% of Fund

#### **Calendar Year**

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Mid Cap Composite	-13.0%	24.8%	13.8%	26.3%	-6.6%	15.7%	15.3%	-9.1%	7.1%	40.1%	17.0%
S&P 400 MidCap	-13.1%	24.8%	13.7%	26.2%	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%
eV US Mid Cap Core Equity Net Rank	34	59	51	78	24	74	30	94	66	15	32
BlackRock Mid Cap Equity Index Fund	-13.0%	24.8%	13.8%	26.3%	-11.0%		-				
S&P 400 MidCap	-13.1%	24.8%	13.7%	26.2%	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%
eV US Mid Cap Core Equity Net Rank	34	59	51	78	51		-	-			-
Small Cap Composite	-23.0%	10.7%	27.7%	23.8%	-9.2%	19.1%	10.9%	-13.6%	-3.4%	43.6%	19.8%
Russell 2000	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%
eV US Small Cap Core Equity Net Rank	88	97	18	52	36	17	93	99	97	21	11
Northern Trust Collective Russell 2000 Index	-20.4%	14.8%	20.1%	25.7%	-10.9%						
Russell 2000	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%
eV US Small Cap Core Equity Net Rank	75	92	30	40	49	-	-				-
Earnest SCC	-15.8%										
Russell 2000	-20.4%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%
eV US Small Cap Equity Net Rank	46			-							
Driehaus SCG	-34.0%			-	-	-	_				
Russell 2000 Growth	-26.4%	2.8%	34.6%	28.5%	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%
eV US Small Cap Growth Equity Net Rank	76										



# Calendar Performance (Net of Fees)

Market Value: \$752.2 Million and 100.0% of Fund

#### **Calendar Year**

	2022	2024	2020	2010	2010	2017	2016	2015	2014	2013	2012
		2021		2019	2018	2017	2016				2012
International Equity Composite	-19.8%	6.1%	20.2%	25.8%	-14.4%	31.4%	-1.1%	-1.2%	-2.7%	18.5%	15.6%
International Equity Composite Custom Benchmark	-15.8%	8.3%	10.7%	21.4%	-14.7%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%
InvMetrics Public DB Dev Mkt ex-US Eq Net Rank	98	78	11	34	48	11	84	37	19	82	99
Ativo Capital	-17.5%	13.2%	7.5%	19.7%	-13.6%	21.2%	-3.6%	-	-	-	
MSCI ACWI ex USA	-16.0%	7.8%	10.7%	21.5%	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%
eV ACWI ex-US Large Cap Equity Net Rank	47	24	76	80	31	95	89				
Hardman Johnston	-23.7%	1.3%	35.6%	33.4%	-13.9%	37.5%	1.2%	-0.3%	0.4%	17.3%	15.6%
MSCI ACWI ex USA	-16.0%	7.8%	10.7%	21.5%	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%
eV EAFE Large Cap Core Net Rank	96	99	1	1	45	1	29	50	5	91	92
BlackRock MSCI EAFE Small Cap	-20.8%	10.4%	12.8%	25.6%	-17.5%	-			_		
MSCI EAFE Small Cap	-21.4%	10.1%	12.3%	25.0%	-17.9%	33.0%	2.2%	9.6%	-4.9%	29.3%	20.0%
eV EAFE Small Cap Equity Net Rank	50	64	38	38	26			-			-
Brown Capital International Small Cap	-31.4%	-				_			_		
MSCI ACWI ex US Small Cap	-20.0%	12.9%	14.2%	22.4%	-18.2%	31.6%	3.9%	2.6%	-4.0%	19.7%	18.5%
Foreign Small/Mid Growth MStar MF Rank	66	-	-	-	-		-	-			-
BlackRock Emerging Markets Free Fund	-20.2%	-2.7%	18.0%	18.2%	-14.6%	_	-	-	_	-	
MSCI Emerging Markets	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%
eV Emg Mkts Large Cap Equity Net Rank	70	63	44	65	24			-			
Goldman Sachs Emerging Markets Equity				-	-			-			
MSCI Emerging Markets	-20.1%	-2.5%	18.3%	18.4%	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%
eV Emg Mkts All Cap Equity Net Rank				-	-			-			
BlackRock MSCI ACWI Min Volatility Index	-10.0%	14.2%									
MSCI ACWI Minimum Volatility Index	-10.3%	13.9%	2.7%	21.1%	-1.6%	17.9%	7.4%	2.8%	11.0%	16.9%	10.1%
eV Global Low Volatility Equity Net Rank	55	76									
Alternative Composite	-0.4%	16.4%	12.8%	-7.9%	6.0%	7.7%	4.7%	4.4%	1.6%	4.8%	
InvMetrics Public DB Alts Net Rank	55	74	12	99	36	43	74	47	86	92	
Intercontinental U.S. Real Estate	7.2%	20.2%	1.1%	8.2%	9.8%	7.7%	12.1%	12.7%			
NFI-ODCE	6.5%	21.1%	0.3%	4.4%	7.4%	6.7%	7.8%	14.0%	11.5%	12.9%	9.8%
Consequent Alternative Partners II, L.P.	-11.2%	15.6%	22.3%	-20.0%	4.9%	7.0%	0.1%	0.2%	0.8%	4.0%	
Consequent Alt BM	-11.2%	15.6%	22.3%	-20.0%	4.9%	7.0%	0.1%	0.2%	0.8%	4.0%	

Private Markets Composite

# Performance Summary

#### **Private Market Investments Overview**

Investments		Commit	ments	Contributions &	Distributions	Valuat	ions		Perform	nance	
Investment Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	TVPI	RVPI	IRR (%)
GrayCo Alternative Partners II, L.P.	2012	15,000,000	1,939,632	13,060,368	9,135,321	6,212,004	15,347,325	0.70	1.18	0.48	1.97
ICV Partners III, L.P.	2014	2,000,000	18,723	2,279,484	1,243,869	1,632,664	2,876,533	0.55	1.26	0.72	3.97
Pharos Capital Partners III, L.P.	2014	2,000,000	40,000	1,960,000	2,288,620	1,271,379	3,559,999	1.17	1.82	0.65	11.27
Total		19,000,000	1,998,355	17,299,852	12,667,811	9,116,047	21,783,858	0.73	1.26	0.53	3.05

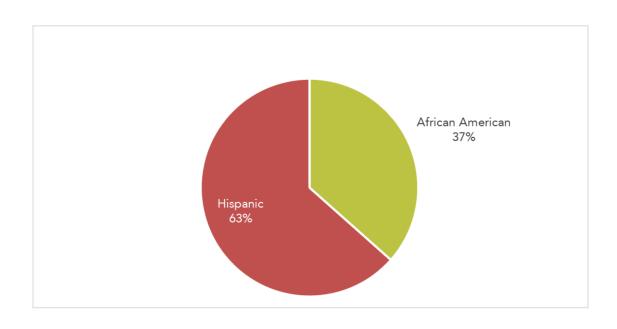
MWDBE Composite Market Values

		Asset Class	Market Value	% of Portfolio	% of Total Fund
Total MWDBE Composite			\$143,898,183	100.0%	19.1%
Garcia Hamilton	(H)	Core Fixed Income	\$52,515,758	36.5%	7.0%
Ativo	(H)	Non-U.S. Large-Cap Core	\$38,782,689	27.0%	5.2%
Earnest SCC	(AA)	Small-Cap Core	\$41,135,152	28.6%	5.5%
Brown Capital International Small Cap	(AA)	Non-U.S. Small-Cap Core	\$10,193,205	7.1%	1.4%
Pharos Capital Partners III	(AA)	LBO Private Equity	\$1,271,379	0.9%	0.2%

	American

(A) Asian		Actual %
(H) Hispanic	Minority	19.1%
(NA) Native American	Female	0.0%
(W) Women	Disabled	0.0%

<sup>\*</sup>Please note: our calculations do not include Consequent Capital Management



### Fee Schedule

Market Value: \$752.2 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Median <sup>2</sup>
Non-U.S. Large-Cap Core	Ativo Capital	0.65% on the first \$100 million 0.55% on the balance	0.65% \$252,087	0.68%
Large-Cap Core	BlackRock 1000 Index Fund	0.01% on the balance	0.01% \$15,881	0.04%
Mid-Cap Core	BlackRock Mid Cap Equity Index Fund	0.01% on the balance	0.01% \$8,940	0.06%
Core Fixed Income	Garcia Hamilton	0.25% on the first \$50 million 0.11% on the next \$50 million 0.06% on the balance	0.24% \$127,767	0.26%
U.S. Private Equity FoF	Consequent Alternative Partners II, L.P.	1.00% on Committed Capital	2.41% \$150,000	2.41%
LBO Private Equity	ICV Partners III, L.P.	2.00% on Committed Capital Plus 20.0% Carried Interest, over an 8% Hurdle	2.45% \$40,000	2.45%
Core Real Estate	Intercontinental U.S. Real Estate	1.10% on the first \$25 million 1.00% on the next \$25 million 0.85% on the next \$50 million 0.75% on the balance	1.10% \$164,152	1.00%
Non-U.S. Large-Cap Core	Hardman Johnston	0.75% on the first \$25 million 0.60% on the next \$50 million 0.50% on the balance	0.75% \$67,476	0.68%
Small-Cap Core	Earnest SCC	0.80% on the first \$10 million 0.65% on the next \$10 million 0.50% on the balance	0.61% \$250,676	0.85%
Core Fixed Income	Mesirow	0.35% on the first \$10 million 0.25% on the next \$50 million 0.20% on the next \$150 million 0.15% on the next \$300 million 0.125% on the next \$500 million 0.10% on the balance	0.23% \$318,883	0.26%
Small-Cap Core	Northern Trust Collective Russell 2000 Index	0.04% on the balance	0.04% \$6,295	0.05%
LBO Private Equity	Pharos Capital Partners III	2.00% on Committed Capital	3.15% \$40,000	3.15%
Emerging Markets	BlackRock Emerging Markets Free Fund	0.06% on the balance	0.06% \$11,171	0.20%
Emerging Markets	Goldman Sachs Emerging Markets Equity	0.45% on the balance	0.45% \$81,351	0.90%
Non-U.S. Small-Cap Core	BlackRock MSCI EAFE Small Cap	0.045% on the balance	0.05% \$6,441	0.25%
Global Low-Volatility	BlackRock MSCI ACWI Min Volatility Index	0.025% on the balance	0.03% \$21,496	0.42%
Small-Cap Growth	Driehaus SCG	0.60% on the first \$50 million 0.50% on the next \$50 million 0.45% on the balance	0.60% \$154,643	0.90%
Non-U.S. Small-Cap Core	Brown Capital International Small Cap	1.06% on the balance	1.06% \$108,048	1.29%
Total Investment Managemen	nt Fees		0.24% \$1,825,309	0.35%

<sup>&</sup>lt;sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Month End. <sup>2</sup> Source: 2019 Marquette Associates Investment Management Fee Study.



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