

# Employees' Retirement System of the City of Norfolk

**Performance Update**  
**As of August 31, 2023**

**Fund Evaluation Report**

- As concerns around higher interest rates for longer persisted, both stocks and bonds produced declines.
- The below table reflects the latest final valuation data through August 2023.

NERS	August 31, 2023	July 31, 2023	June 30, 2023
Total Fund Balance	\$1.28 Billion	\$1.31 Billion	\$1.25 Billion
Funded Status	83%	85%	81%
NERS Assumed Rate of Return	6.75%	6.75%	6.75%
FYTD Rate of Return	0.2%	2.0%	8.4%
Monthly Rate of Return	-1.8%	2.0%	3.1%
Monthly Gains/Losses	-\$24.2 million	\$26.5 million	\$37.7 million
Monthly Net Cash Flow	-\$7.6 million	\$33.9 million	-\$7.0 million

- The Actuarial Determined Contribution rates for Fiscal Year 2024 are:
  - NERS: 20.96%
  - VRS: 12.94%
- As of August 31, the System was inside of its target asset allocation ranges for all asset classes. Meketa has completed the transition towards the new policy targets and manager roster during the first half of 2023.

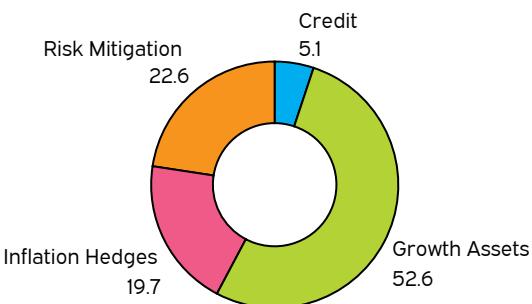
#### Portfolio Objective

The Employees' Retirement System of the City of Norfolk is a long-term investor whose objective is to enable the System to provide retirement income for plan participants and beneficiaries. The System's strategy is to generate a return that meets the long-term return objective, while minimizing volatility.

#### Return Summary



#### Current Allocation

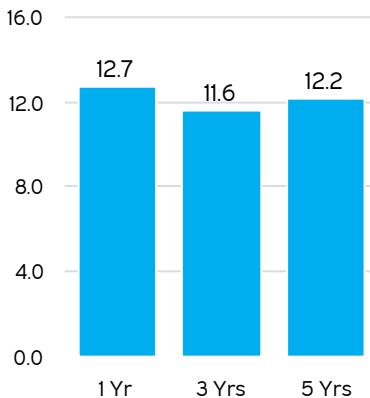


	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Total Fund	-1.8	0.2	7.4	5.7	4.9	4.9	6.3	7.7	10/01/1990
Total Fund Policy Benchmark	-1.9	0.6	8.4	7.0	5.7	5.5	6.4	7.8	

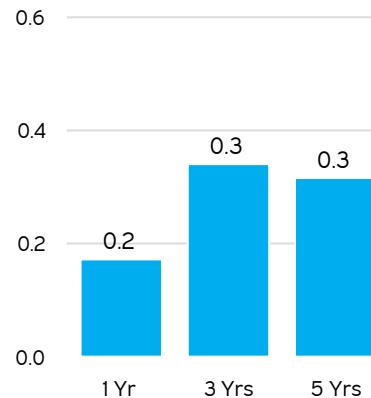
#### Summary of Cash Flows

	Last Month	Year-To-Date	One Year
<b>Total Fund</b>			
Beginning Market Value	1,309,703,594	1,204,372,398	1,262,702,249
Net Cash Flow	-7,604,248	-19,299,556	-29,856,673
Net Investment Change	-24,175,351	92,851,153	45,078,418
Ending Market Value	1,277,923,995	1,277,923,995	1,277,923,995

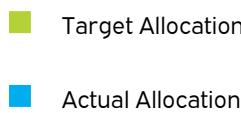
#### Annualized Standard Deviation

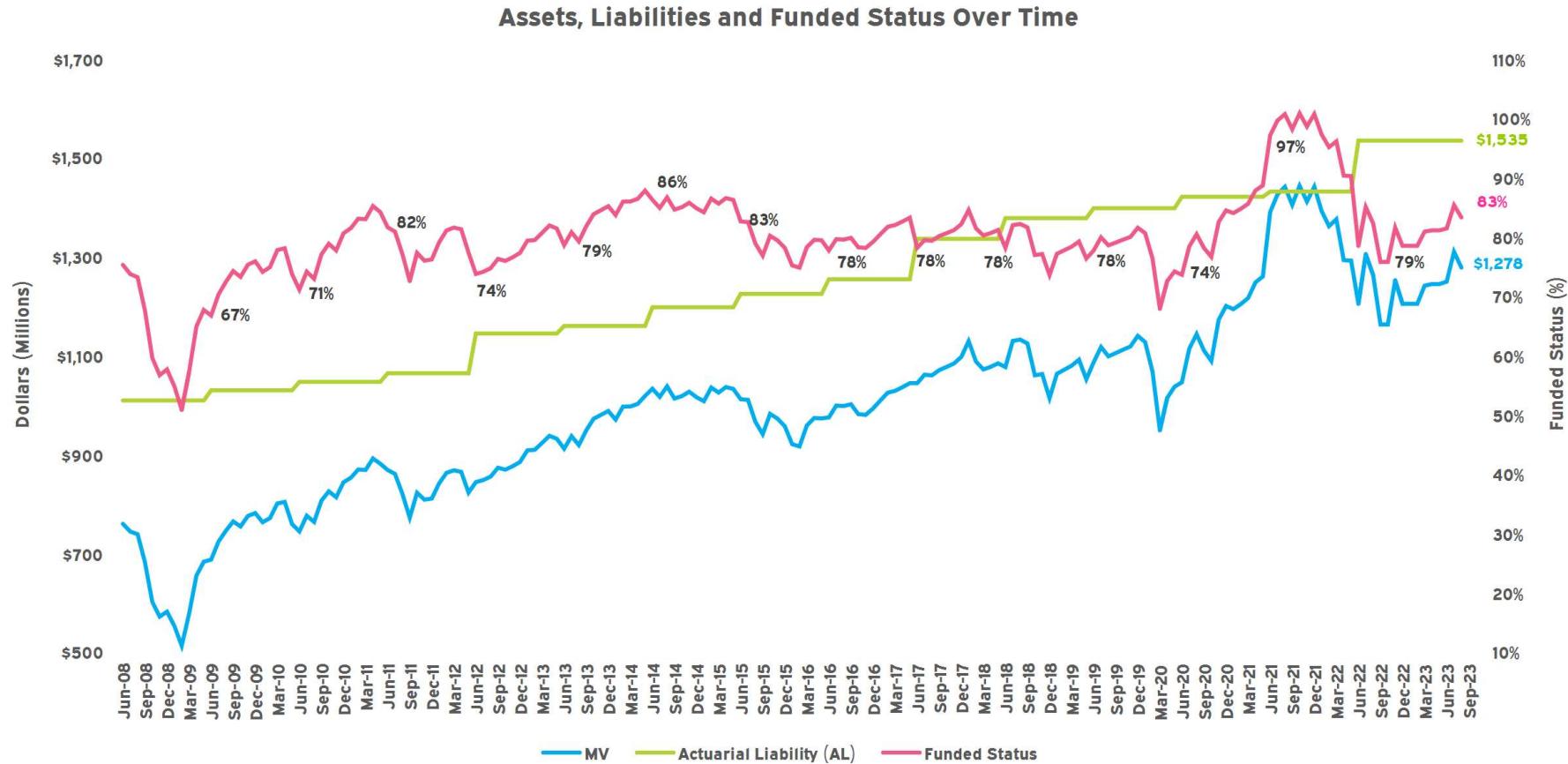


#### Sharpe Ratio



### Performance Update | As of August 31, 2023

Actual vs. Target Allocation		Allocation vs. Targets and Policy				
		Current Balance	Current Allocation (%)	Policy (%)	Policy Range (%)	Within IPS Range?
Growth Assets	Target Allocation		52.6%			
	Actual Allocation	\$672,615,369	52.6	57.0	47.0 - 67.0	Yes
		Global Equity	52.6	52.0	42.0 - 62.0	Yes
Credit	Target Allocation		4.0%			
	Actual Allocation	\$0	0.0	5.0	0.0 - 10.0	Yes
		Private Equity				
Inflation Hedges	Target Allocation		19.7%			
	Actual Allocation	\$65,128,143	5.1	4.0	0.0 - 9.0	Yes
		High Yield & Bank Loans	5.1	4.0	0.0 - 9.0	Yes
Risk Mitigation	Target Allocation		22.6%			
	Actual Allocation	\$251,427,467	19.7	21.0	14.0 - 28.0	Yes
		Real Estate	7.0	8.0	3.0 - 13.0	Yes
	Target Allocation		18.0%			
	Actual Allocation	\$89,486,464	3.2	5.0	0.0 - 10.0	Yes
		Natural Resources & Infrastructure	2.8	3.0	0.0 - 6.0	Yes
	Target Allocation		22.6%			
	Actual Allocation	\$35,933,446	6.7	5.0	0.0 - 10.0	Yes
		Short-Term TIPS	0.0	0.0	0.0 - 5.0	Yes
	Target Allocation		19.7%			
	Actual Allocation	\$7,262				
		MLPs				
	Target Allocation		18.0%			
	Actual Allocation	\$288,753,016	22.6	18.0	11.0 - 25.0	Yes
		Risk Mitigation				
	Target Allocation		22.6%			
	Actual Allocation	\$220,290,393	17.2	14.0	7.0 - 21.0	Yes
		Investment Grade Fixed Income	5.0	4.0	0.0 - 9.0	Yes
	Target Allocation		18.0%			
	Actual Allocation	\$63,708,691	0.4	0.0	0.0 - 3.0	Yes
		Hedge Funds				
	Target Allocation		22.6%			
	Actual Allocation	\$4,753,932				
		Cash				
	Target Allocation		18.0%			
	Actual Allocation	\$1,277,923,995	100.0	100.0		
		Total				
		0.0%	50.0%	100.0%		



As of June 30, 2022, Total Plan Actuarial Liability (AL) is \$1.535 billion and the Actuarial Value of assets (AVA) is \$1.292 billion for an Actuarial funded ratio (AVA/AL) of 84%. Using the Market Value of Assets (MVA), the Market Funded Ratio (MV/AL) was approximately 85% in July 2023 and 83% in August 2023.

	Asset Class Performance Summary											
	Market Value (\$)	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date	
<b>Total Fund</b>	<b>1,277,923,995</b>	<b>100.0</b>	<b>-1.8</b>	<b>0.2</b>	<b>7.4</b>	<b>5.7</b>	<b>4.9</b>	<b>4.9</b>	<b>6.3</b>	<b>7.7</b>	<b>Oct-90</b>	
Total Fund Policy Benchmark			-1.9	0.6	8.4	7.0	5.7	5.5	6.4	7.8		
Total Fund Actual Allocation Benchmark			-1.9	0.5	8.1	--	--	--	--	--		
Total Fund Public Benchmark			-2.3	0.5	10.8	8.9	3.3	5.1	6.2	7.9		
<b>Growth Assets</b>	<b>672,615,369</b>	<b>52.6</b>	<b>-2.6</b>	<b>0.6</b>	<b>13.4</b>	--	--	--	--	<b>9.1</b>	<b>Dec-22</b>	
Growth Assets Custom Benchmark			-2.7	0.8	14.8	--	--	--	--	9.9		
<b>Global Equity</b>	<b>672,615,369</b>	<b>52.6</b>	<b>-2.6</b>	<b>0.6</b>	<b>13.4</b>	<b>12.7</b>	<b>7.4</b>	<b>7.3</b>	<b>9.0</b>	<b>8.9</b>	<b>Oct-90</b>	
Global Equity Policy Benchmark			-2.9	0.8	14.2	13.3	7.3	7.0	8.7	9.2		
<b>Credit</b>	<b>65,128,143</b>	<b>5.1</b>	<b>1.2</b>	<b>2.6</b>	--	--	--	--	--	<b>4.6</b>	<b>May-23</b>	
Credit Custom Benchmark			0.7	2.1	8.0	--	--	--	--	3.5		
<b>High Yield &amp; Bank Loans</b>	<b>65,128,143</b>	<b>5.1</b>	<b>1.2</b>	<b>2.6</b>	--	--	--	--	--	<b>4.6</b>	<b>May-23</b>	
High Yield & Bank Loans Custom Benchmark			0.7	2.1	8.0	8.1	3.9	3.8	4.4	3.5		
<b>Inflation Hedges</b>	<b>251,427,467</b>	<b>19.7</b>	<b>-1.3</b>	<b>0.4</b>	<b>-2.7</b>	--	--	--	--	<b>-7.0</b>	<b>Dec-22</b>	
Inflation Hedges Custom Benchmark			-1.5	0.6	-1.7	--	--	--	--	-4.2		
<b>Real Estate</b>	<b>89,486,464</b>	<b>7.0</b>	<b>-0.9</b>	<b>-0.6</b>	<b>-6.6</b>	<b>-12.7</b>	<b>2.3</b>	<b>1.6</b>	<b>5.2</b>	<b>6.5</b>	<b>Apr-11</b>	
NCREIF ODCE (Net)			0.0	0.0	-6.2	-10.7	7.0	5.6	7.8	8.4		
<b>Natural Resources &amp; Infrastructure</b>	<b>40,892,763</b>	<b>3.2</b>	<b>-4.2</b>	<b>2.4</b>	--	--	--	--	--	<b>-1.4</b>	<b>Apr-23</b>	
S&P Global LargeMidcap Resources & Commodities NR USD			-4.2	2.4	-3.0	1.9	17.0	8.4	5.0	-1.5		
<b>Gold</b>	<b>35,933,446</b>	<b>2.8</b>	<b>-2.5</b>	<b>0.4</b>	--	--	--	--	--	<b>-5.0</b>	<b>Apr-23</b>	
60% Gold (Spot)/ 40% FTSE Gold Mines			-3.9	-1.3	3.8	16.6	--	--	--	-5.3		
<b>Short-Term TIPS</b>	<b>85,107,532</b>	<b>6.7</b>	<b>0.1</b>	<b>0.6</b>	--	--	--	--	--	<b>0.9</b>	<b>Mar-23</b>	
Blmbg. U.S. TIPS 0-5 Year			0.1	0.6	2.1	0.5	1.9	2.8	1.8	1.8		
<b>MLPs</b>	<b>7,262</b>	<b>0.0</b>										

See benchmark history page for benchmark detail.

## Performance Update | As of August 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Risk Mitigation</b>	<b>288,753,016</b>	<b>22.6</b>	<b>-1.0</b>	<b>-1.6</b>	<b>2.0</b>	--	--	--	--	<b>1.5</b>	<b>Dec-22</b>
<i>Risk Mitigation Custom Benchmark</i>			-0.6	-0.5	1.0	--	--	--	--	0.6	
<b>Investment Grade Fixed Income</b>	<b>220,290,393</b>	<b>17.2</b>	<b>-1.2</b>	<b>-1.7</b>	<b>1.2</b>	<b>-1.4</b>	<b>-4.4</b>	<b>0.5</b>	<b>1.6</b>	<b>5.1</b>	<b>Oct-90</b>
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	5.0	
<b>Intermediate-Term Bonds</b>	<b>171,555,580</b>	<b>13.4</b>	<b>-0.7</b>	<b>-0.7</b>	<b>2.1</b>	<b>-0.6</b>	<b>-4.1</b>	<b>0.6</b>	<b>1.7</b>	<b>5.1</b>	<b>Oct-90</b>
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	5.0	
<b>Long-Term Bonds</b>	<b>48,734,813</b>	<b>3.8</b>	<b>-2.8</b>	<b>-4.9</b>	--	--	--	--	--	<b>-2.7</b>	<b>Mar-23</b>
<i>Blmbg. U.S. Treasury: Long</i>			-2.8	-4.9	-1.4	-9.7	-13.5	-1.9	1.6	-2.7	
<b>Hedge Funds</b>	<b>63,708,691</b>	<b>5.0</b>	<b>-0.4</b>	<b>-1.1</b>	--	--	--	--	--	<b>2.4</b>	<b>Apr-23</b>
<i>HFRI Macro (Total) Index</i>			-0.5	0.2	-0.6	-0.7	6.3	5.0	3.2	1.9	
<b>Cash</b>	<b>4,753,932</b>	<b>0.4</b>									

	Trailing Net Performance												Inception (%)	Inception Date
	Market Value (\$)	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)					
<b>Total Fund</b>	<b>1,277,923,995</b>	<b>100.0</b>	<b>-1.8</b>	<b>0.2</b>	<b>7.4</b>	<b>5.7</b>	<b>4.9</b>	<b>4.9</b>	<b>6.3</b>				<b>7.7</b>	<b>Oct-90</b>
<i>Total Fund Policy Benchmark</i>			-1.9	0.6	8.4	7.0	5.7	5.5	6.4				7.8	
<i>Total Fund Actual Allocation Benchmark</i>			-1.9	0.5	8.1	--	--	--	--				--	
<i>Total Fund Public Benchmark</i>			-2.3	0.5	10.8	8.9	3.3	5.1	6.2				7.9	
<b>Growth Assets</b>	<b>672,615,369</b>	<b>52.6</b>	<b>-2.6</b>	<b>0.6</b>	<b>13.4</b>	--	--	--	--				<b>9.1</b>	<b>Dec-22</b>
<i>Growth Assets Custom Benchmark</i>			-2.7	0.8	14.8	--	--	--	--				9.9	
<b>Global Equity</b>	<b>672,615,369</b>	<b>52.6</b>	<b>-2.6</b>	<b>0.6</b>	<b>13.4</b>	<b>12.7</b>	<b>7.4</b>	<b>7.3</b>	<b>9.0</b>				<b>8.9</b>	<b>Oct-90</b>
<i>Global Equity Policy Benchmark</i>			-2.9	0.8	14.2	13.3	7.3	7.0	8.7				9.2	
SSgA MSCI ACWI IMI Index Fund	68,944,333	5.4	-2.8	0.9	14.5	13.7	7.7	7.5	--				9.7	May-16
<i>MSCI AC World IMI (Net)</i>			-2.9	0.8	14.2	13.3	7.3	7.0	8.4				9.3	
SSgA Russell 1000 Growth Index	29,819,124	2.3	-0.9	2.4	--	--	--	--	--				23.4	Mar-23
<i>Russell 1000 Growth Index</i>			-0.9	2.4	32.2	21.9	8.3	13.8	15.6				23.5	
SSgA Russell 1000 Value Index	14,241,411	1.1	-2.7	0.7	--	--	--	--	--				4.4	Mar-23
<i>Russell 1000 Value Index</i>			-2.7	0.7	5.9	8.6	11.6	7.1	9.1				4.3	
SSgA Russell 3000 Index	179,668,208	14.1	-1.9	1.6	--	--	--	--	--				13.1	Mar-23
<i>Russell 3000 Index</i>			-1.9	1.6	18.0	14.8	9.8	10.3	12.2				13.0	
SSgA MSCI EAFE	96,931,512	7.6	-3.8	-0.7	--	--	--	--	--				5.0	Mar-23
<i>MSCI EAFE (Net)</i>			-3.8	-0.7	10.9	17.9	6.1	4.1	4.9				4.7	
SSgA Emerging Markets Index	38,502,190	3.0	-6.2	-0.6	--	--	--	--	--				3.6	Mar-23
<i>MSCI Emerging Markets (Net)</i>			-6.2	-0.3	4.6	1.3	-1.4	1.0	3.0				3.6	
ABS China Direct	3,276,935	0.3	<b>-7.2</b>	<b>-0.4</b>	--	--	--	--	--				<b>-8.0</b>	Mar-23
<i>MSCI China (Net)</i>			-9.0	0.8	-4.7	-7.5	-14.3	-3.9	2.5				-4.8	

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ABS EM ex China Direct	12,130,424	0.9	-3.7	1.4	--	--	--	--	--	13.5	Mar-23
<i>MSCI EM ex China</i>			-4.9	-0.8	5.6	2.2	5.4	2.9	3.4	7.6	
Kopernik Global All-Cap	29,771,699	2.3	-0.2	3.6	--	--	--	--	--	3.2	Apr-23
<i>MSCI AC World Index (Net)</i>			-2.8	0.8	14.8	14.0	7.2	7.5	8.6	7.0	
First Eagle Global Equity	100,657,526	7.9	-2.6	-0.1	--	--	--	--	--	4.8	Apr-23
<i>MSCI AC World Index (Net)</i>			-2.8	0.8	14.8	14.0	7.2	7.5	8.6	7.0	
Artisan Global Opportunities	98,672,006	7.7	-1.8	-0.3	--	--	--	--	--	5.9	Apr-23
<i>MSCI AC World Index (Net)</i>			-2.8	0.8	14.8	14.0	7.2	7.5	8.6	7.0	
<b>Credit</b>	<b>65,128,143</b>	<b>5.1</b>	<b>1.2</b>	<b>2.6</b>	--	--	--	--	--	<b>4.6</b>	<b>May-23</b>
<i>Credit Custom Benchmark</i>			0.7	2.1	8.0	--	--	--	--	3.5	
<b>High Yield &amp; Bank Loans</b>	<b>65,128,143</b>	<b>5.1</b>	<b>1.2</b>	<b>2.6</b>	--	--	--	--	--	<b>4.6</b>	<b>May-23</b>
<i>High Yield &amp; Bank Loans Custom Benchmark</i>			0.7	2.1	8.0	8.1	3.9	3.8	4.4	3.5	
Sculptor Credit Opportunities Overseas Fund	25,712,931	2.0	1.0	1.4	--	--	--	--	--	3.7	May-23
<i>Blmbg. Global High Yield Index</i>			-0.5	1.4	6.7	9.4	-0.2	2.1	3.5	2.8	
Brigade High Income Fund	39,415,213	3.1	1.3	3.4	--	--	--	--	--	5.1	May-23
<i>60% Barclays U.S. Corporate High Yield &amp; 40% CS Lev Loans</i>			0.6	2.0	7.9	7.9	3.5	3.7	4.4	3.3	

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	Market Value (\$)	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Inflation Hedges</b>	<b>251,427,467</b>	<b>19.7</b>	<b>-1.3</b>	<b>0.4</b>	<b>-2.7</b>	--	--	--	--	<b>-7.0</b>	<b>Dec-22</b>
Inflation Hedges Custom Benchmark			-1.5	0.6	-1.7	--	--	--	--	-4.2	
<b>Real Estate</b>	<b>89,486,464</b>	<b>7.0</b>	<b>-0.9</b>	<b>-0.6</b>	<b>-6.6</b>	<b>-12.7</b>	<b>2.3</b>	<b>1.6</b>	<b>5.2</b>	<b>6.5</b>	<b>Apr-11</b>
NCREIF ODCE (Net)			0.0	0.0	-6.2	-10.7	7.0	5.6	7.8	8.4	
JP Morgan Asset Management Strategic Property Fund	50,809,901	4.0	-0.8	-0.9	-5.8	-11.8	5.9	4.6	6.9	8.2	Apr-11
NCREIF ODCE (Net)			0.0	0.0	-6.2	-10.7	7.0	5.6	7.8	8.4	
UBS Trumbull Property Fund	25,342,826	2.0	0.0	0.0	-10.6	-15.6	1.8	0.5	4.3	4.8	Dec-11
NCREIF ODCE (Net)			0.0	0.0	-6.2	-10.7	7.0	5.6	7.8	8.2	
SSgA US REIT	13,333,737	1.0	-3.2	-0.4	--	--	--	--	--	-0.2	Mar-23
Dow Jones U.S. Select REI			-3.2	-0.4	5.4	-3.2	7.6	2.5	6.4	-0.1	
<b>Natural Resources &amp; Infrastructure</b>	<b>40,892,763</b>	<b>3.2</b>	<b>-4.2</b>	<b>2.4</b>	--	--	--	--	--	<b>-1.4</b>	<b>Apr-23</b>
S&P Global LargeMidcap Resources & Commodities Ind			-4.2	2.4	-3.0	1.9	17.0	8.4	5.0	-1.5	
SSgA S&P Global LargeMidCap Natural Resources Index	40,892,763	3.2	-4.2	2.4	--	--	--	--	--	-1.4	Apr-23
S&P Global LargeMidcap Resources & Commodities Ind			-4.2	2.4	-3.0	1.9	17.0	8.4	5.0	-1.5	
<b>Gold</b>	<b>35,933,446</b>	<b>2.8</b>	<b>-2.5</b>	<b>0.4</b>	--	--	--	--	--	<b>-5.0</b>	<b>Apr-23</b>
60% Gold (Spot)/ 40% FTSE Gold Mines			-3.9	-1.3	3.8	16.6	--	--	--	-5.3	
First Eagle Institutional Gold Fund, LP	35,933,446	2.8	-2.5	0.4	--	--	--	--	--	-5.0	Apr-23
60% Gold (Spot)/ 40% FTSE Gold Mines			-3.9	-1.3	3.8	16.6	--	--	--	-5.3	
<b>Short-Term TIPS</b>	<b>85,107,532</b>	<b>6.7</b>	<b>0.1</b>	<b>0.6</b>	--	--	--	--	--	<b>0.9</b>	<b>Mar-23</b>
Blmbg. U.S. TIPS 0-5 Year			0.1	0.6	2.1	0.5	1.9	2.8	1.8	1.8	
Vanguard Short-Term TIPS Index	85,107,532	6.7	0.1	0.6	--	--	--	--	--	-0.1	Apr-23
Blmbg. U.S. TIPS 0-5 Year			0.1	0.6	2.1	0.5	1.9	2.8	1.8	-0.1	
<b>MLPs</b>	<b>7,262</b>	<b>0.0</b>									

## Performance Update | As of August 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Risk Mitigation</b>	<b>288,753,016</b>	<b>22.6</b>	<b>-1.0</b>	<b>-1.6</b>	<b>2.0</b>	--	--	--	--	<b>1.5</b>	<b>Dec-22</b>
<i>Risk Mitigation Custom Benchmark</i>			-0.6	-0.5	1.0	--	--	--	--	0.6	
<b>Investment Grade Fixed Income</b>	<b>220,290,393</b>	<b>17.2</b>	<b>-1.2</b>	<b>-1.7</b>	<b>1.2</b>	<b>-1.4</b>	<b>-4.4</b>	<b>0.5</b>	<b>1.6</b>	<b>5.1</b>	<b>Oct-90</b>
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	5.0	
<b>Intermediate-Term Bonds</b>	<b>171,555,580</b>	<b>13.4</b>	<b>-0.7</b>	<b>-0.7</b>	<b>2.1</b>	<b>-0.6</b>	<b>-4.1</b>	<b>0.6</b>	<b>1.7</b>	<b>5.1</b>	<b>Oct-90</b>
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	5.0	
PIMCO Total Return	27,825	0.0									
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	4.9	
SSgA US Aggregate Bond	70,646,512	5.5	-0.6	-0.7	1.6	-1.2	-4.4	0.5	1.5	2.5	Jan-09
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	2.5	
Wellington Core Bond	80,548,858	6.3	-0.6	<b>-0.6</b>	--	--	--	--	--	<b>-1.7</b>	May-23
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	-2.1	
Brandywine U.S. Fixed Income	20,332,384	1.6	<b>-1.1</b>	<b>-1.6</b>	--	--	--	--	--	<b>-2.4</b>	Jun-23
<i>Blmbg. U.S. Aggregate Index</i>			-0.6	-0.7	1.4	-1.2	-4.4	0.5	1.5	-1.1	
<b>Long-Term Bonds</b>	<b>48,734,813</b>	<b>3.8</b>	<b>-2.8</b>	<b>-4.9</b>	--	--	--	--	--	<b>-2.7</b>	<b>Mar-23</b>
<i>Blmbg. U.S. Treasury: Long</i>			-2.8	-4.9	-1.4	-9.7	-13.5	-1.9	1.6	-2.7	
SSgA Long US Treasury Index	48,734,813	3.8	-2.8	-4.9	--	--	--	--	--	-2.7	Mar-23
<i>Blmbg. U.S. Treasury: Long</i>			-2.8	-4.9	-1.4	-9.7	-13.5	-1.9	1.6	-2.7	

## Performance Update | As of August 31, 2023

	Market Value (\$)	% of Portfolio	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Hedge Funds</b>	<b>63,708,691</b>	<b>5.0</b>	<b>-0.4</b>	<b>-1.1</b>	--	--	--	--	--	<b>2.4</b>	<b>Apr-23</b>
HFRI Macro (Total) Index			-0.5	0.2	-0.6	-0.7	6.3	5.0	3.2	1.9	
36 South Kohinoor Series (Cayman) Fund	21,593,470	1.7	1.3	0.8	--	--	--	--	--	2.3	Apr-23
CBOE Eurekahedge Long Volatility Hedge Fund Index			1.7	1.0	-3.3	-5.0	-3.5	2.6	-1.0	-1.7	
BH-DG Systematic Trading Master Fund	17,365,045	1.4	-3.1	-5.2	--	--	--	--	--	4.0	Apr-23
Barclay CTA Index			-0.4	-0.2	0.3	-0.4	5.0	4.2	2.6	2.3	
Lombard Odier Bear Convexity	7,944,799	0.6	1.0	-0.5	--	--	--	--	--	-0.7	Apr-23
CBOE Eurekahedge Long Volatility Hedge Fund Index			1.7	1.0	-3.3	-5.0	-3.5	2.6	-1.0	-1.7	
Alpstone Global Macro Fund	16,805,377	1.3	-0.2	0.5	--	--	--	--	--	0.6	May-23
HFRI Macro (Total) Index			-0.5	0.2	-0.6	-0.7	6.3	5.0	3.2	1.0	
<b>Cash</b>	<b>4,753,932</b>	<b>0.4</b>									
Cash	4,753,932	0.4									

**Annual Investment Expense Analysis  
As of August 31, 2023**

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
<b>Total Fund</b>		<b>\$1,277,923,995</b>	<b>\$3,835,693</b>	<b>0.30</b>
<b>Growth Assets</b>		<b>\$672,615,369</b>	<b>\$1,596,233</b>	<b>0.24</b>
<b>Global Equity</b>		<b>\$672,615,369</b>	<b>\$1,596,233</b>	<b>0.24</b>
SSgA MSCI ACWI IMI Index Fund	0.05 % of Assets	\$68,944,333	\$31,025	0.05
SSgA Russell 1000 Growth Index	0.02 % of Assets	\$29,819,124	\$5,964	0.02
SSgA Russell 1000 Value Index	0.02 % of Assets	\$14,241,411	\$2,848	0.02
SSgA Russell 3000 Index	0.02 % of Assets	\$179,668,208	\$35,934	0.02
SSgA MSCI EAFE	0.04 % of Assets	\$96,931,512	\$38,773	0.04
SSgA Emerging Markets Index	0.08 % of Assets	\$38,502,190	\$30,802	0.08
ABS China Direct	0.65 % of Assets	\$3,276,935	\$21,300	0.65
ABS EM ex China Direct	0.50 % of Assets	\$12,130,424	\$60,652	0.50
Kopernik Global All-Cap	0.75 % of Assets	\$29,771,699	\$223,288	0.75
First Eagle Global Equity	0.55 % of Assets	\$100,657,526	\$553,616	0.55
Artisan Global Opportunities	0.60 % of Assets	\$98,672,006	\$592,032	0.60
<b>Credit</b>		<b>\$65,128,143</b>	<b>\$462,088</b>	<b>0.71</b>
<b>High Yield &amp; Bank Loans</b>		<b>\$65,128,143</b>	<b>\$462,088</b>	<b>0.71</b>
Sculptor Credit Opportunities Overseas Fund	Performance Based 1.00 and 20.00	\$25,712,931	\$257,129	1.00
Brigade High Income Fund	0.52 % of Assets	\$39,415,213	\$204,959	0.52
<b>Inflation Hedges</b>		<b>\$251,427,467</b>	<b>\$929,069</b>	<b>0.37</b>
<b>Real Estate</b>		<b>\$89,486,464</b>	<b>\$692,380</b>	<b>0.77</b>
JP Morgan Asset Management Strategic Property Fund	0.91 % of Assets	\$50,809,901	\$462,370	0.91

**Performance Update | As of August 31, 2023**

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
UBS Trumbull Property Fund	0.96 % of First \$10 M 0.83 % of Next \$15 M 0.81 % of Next \$25 M 0.79 % of Next \$50 M 0.67 % of Next \$150 M 0.60 % of Next \$150 M 0.56 % of Next \$200 M 0.52 % Thereafter	\$25,342,826	\$222,010	0.88
SSgA US REIT	0.06 % of Assets	\$13,333,737	\$8,000	0.06
<b>Natural Resources &amp; Infrastructure</b>		<b>\$40,892,763</b>	<b>\$40,893</b>	<b>0.10</b>
SSgA S&P Global LargeMidCap Natural Resources Index	0.10 % of Assets	\$40,892,763	\$40,893	0.10
<b>Gold</b>		<b>\$35,933,446</b>	<b>\$161,701</b>	<b>0.45</b>
First Eagle Institutional Gold Fund, LP	0.45 % of Assets	\$35,933,446	\$161,701	0.45
<b>Short-Term TIPS</b>		<b>\$85,107,532</b>	<b>\$34,043</b>	<b>0.04</b>
Vanguard Short-Term TIPS Index	0.04 % of Assets	\$85,107,532	\$34,043	0.04
<b>Risk Mitigation</b>		<b>\$288,753,016</b>	<b>\$848,302</b>	<b>0.29</b>
<b>Investment Grade Fixed Income</b>		<b>\$220,290,393</b>	<b>\$184,414</b>	<b>0.08</b>
<b>Intermediate-Term Bonds</b>		<b>\$171,555,580</b>	<b>\$169,794</b>	<b>0.10</b>
SSgA US Aggregate Bond	0.02 % of Assets	\$70,646,512	\$14,129	0.02
Wellington Core Bond	0.12 % of Assets	\$80,548,858	\$96,659	0.12
Brandywine U.S. Fixed Income	0.29 % of Assets	\$20,332,384	\$58,964	0.29

**Performance Update | As of August 31, 2023**

	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
<b>Long-Term Bonds</b>		<b>\$48,734,813</b>	<b>\$14,620</b>	<b>0.03</b>
SSgA Long US Treasury Index	0.03 % of Assets	\$48,734,813	\$14,620	0.03
<b>Hedge Funds</b>		<b>\$63,708,691</b>	<b>\$663,888</b>	<b>1.04</b>
36 South Kohinoor Series (Cayman) Fund	Performance Based 1.00 and 20.00	\$21,593,470	\$215,935	1.00
BH-DG Systematic Trading Master Fund	0.93 % of Assets	\$17,365,045	\$161,495	0.93
Lombard Odier Bear Convexity	Performance Based 0.75 and 27.50	\$7,944,799	\$59,586	0.75
Alpstone Global Macro Fund	Performance Based 1.35 and 20.00	\$16,805,377	\$226,873	1.35
<b>Cash</b>		<b>\$4,753,932</b>	-	-
Cash		\$4,753,932	-	-

		<b>Benchmark History</b>	<b>Benchmark</b>
<b>From Date</b>	<b>To Date</b>		
Total Fund			
12/01/2022	Present	14.0% Blmbg. U.S. Aggregate Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 4.0% HFRI Macro (Total) Index, 8.0% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 52.0% MSCI AC World IMI (Net), 5.0% Blmbg. U.S. TIPS 0-5 Year, 5.0% S&P Global LargeMidcap Resources & Commodities Ind, 2.0% Credit Suisse Leveraged Loan Index, 3.0% 60% Gold (Spot)/ 40% FTSE Gold Mines, 5.0% MSCI ACWI + 3% 1Q Lag	
05/01/2016	12/01/2022	30.0% Blmbg. U.S. Aggregate Index, 7.5% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 7.5% Alerian MLP Index, 55.0% MSCI AC World IMI (Net)	
03/01/2016	05/01/2016	33.0% Russell 3000 Index, 30.0% Blmbg. U.S. Aggregate Index, 7.5% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 22.0% MSCI AC World ex USA (Net), 7.5% Alerian MLP Index	
02/01/2013	03/01/2016	33.0% Russell 3000 Index, 35.0% Blmbg. U.S. Aggregate Index, 5.0% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 22.0% MSCI AC World ex USA (Net), 5.0% Alerian MLP Index	
03/01/2011	02/01/2013	36.0% Russell 3000 Index, 35.0% Blmbg. U.S. Aggregate Index, 5.0% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 24.0% MSCI AC World ex USA (Net)	
09/01/2009	03/01/2011	36.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 24.0% MSCI AC World ex USA (Net)	
06/01/2009	09/01/2009	42.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 18.0% MSCI AC World ex USA (Net)	
06/01/2006	06/01/2009	42.0% Russell 3000 Index, 40.0% Blmbg. U.S. Aggregate Index, 18.0% MSCI EAFE (Net)	
07/01/2003	06/01/2006	60.0% S&P 500 Index, 40.0% Blmbg. U.S. Aggregate Index	
10/01/2002	07/01/2003	55.0% S&P 500 Index, 45.0% Blmbg. U.S. Aggregate Index	
10/01/1990	10/01/2002	50.0% S&P 500 Index, 50.0% Blmbg. U.S. Aggregate Index	

Total Fund Public benchmark consists of 74% MSCI ACWI IMI / 26% Bloomberg US Aggregate. Historical Varies.

Total Fund Actual Allocation Benchmark reflects the asset classes set forth in the Fund's investment policy statement, weighted for the Fund's actual investments and performance of the indexes referenced above.

		Benchmark History	Benchmark
From Date	To Date		
<b>Growth Assets</b>			
12/01/2022	Present	91.0% MSCI AC World IMI (Net), 9.0% MSCI ACWI + 3% 1Q Lag	
<b>Global Equity</b>			
05/01/2016	Present	100.0% MSCI AC World IMI (Net)	
09/01/2009	05/01/2016	60.0% Russell 3000 Index, 40.0% MSCI AC World ex USA (Net)	
06/01/2009	09/01/2009	70.0% Russell 3000 Index, 30.0% MSCI AC World ex USA (Net)	
01/01/2006	06/01/2009	70.0% Russell 3000 Index, 30.0% MSCI EAFE (Net)	
10/01/1990	01/01/2006	100.0% S&P 500 Index	
<b>Inflation Hedges</b>			
12/01/2022	Present	38.0% NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net), 24.0% Blmbg. U.S. TIPS 1-5 Year Index, 24.0% S&P Global LargeMidcap Resources & Commodities Ind, 14.0% 60% Gold (Spot)/ 40% FTSE Gold Mines	
<b>Risk Mitigation</b>			
12/01/2022	Present	78.0% Blmbg. U.S. Aggregate Index, 22.0% HFRI Macro (Total) Index	

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