

# Austin Fire Fighters Relief and Retirement Fund February 28, 2022

**Investment Meeting** 





Agenda

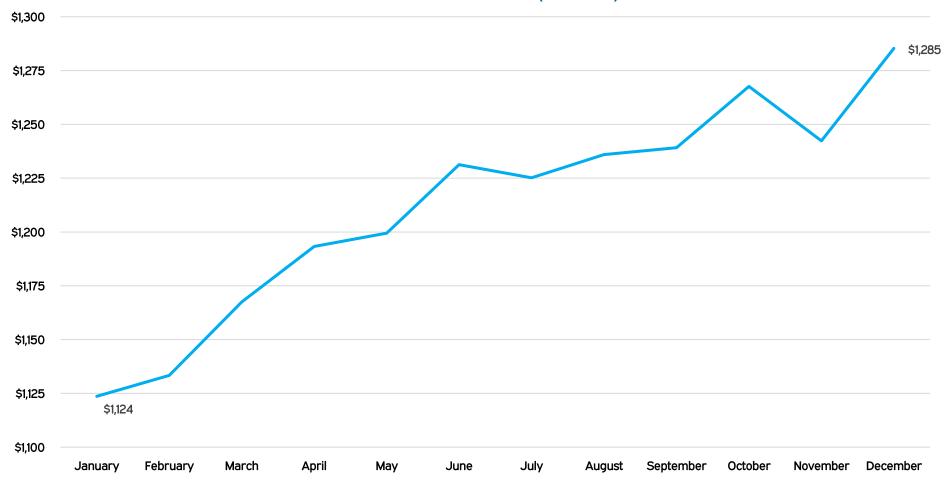
## Agenda

- 1. 2021 Markets Review
- 2. Executive Summary
- 3. 4Q21 Investment Report
- 4. 4Q21 Asset Transfers Review
- 5. 2022 Asset Study: 2022 Projections vs. 2021 Projections
- 6. Investment Policy Statement Review
- 7. Memos Since Last Meeting
- 8. Roadmap
- 9. Appendix
  - Disclaimer, Glossary and Notes

## **2021 Markets Review**

2021 Markets Review

## Austin Fire Market Value (\$ million)





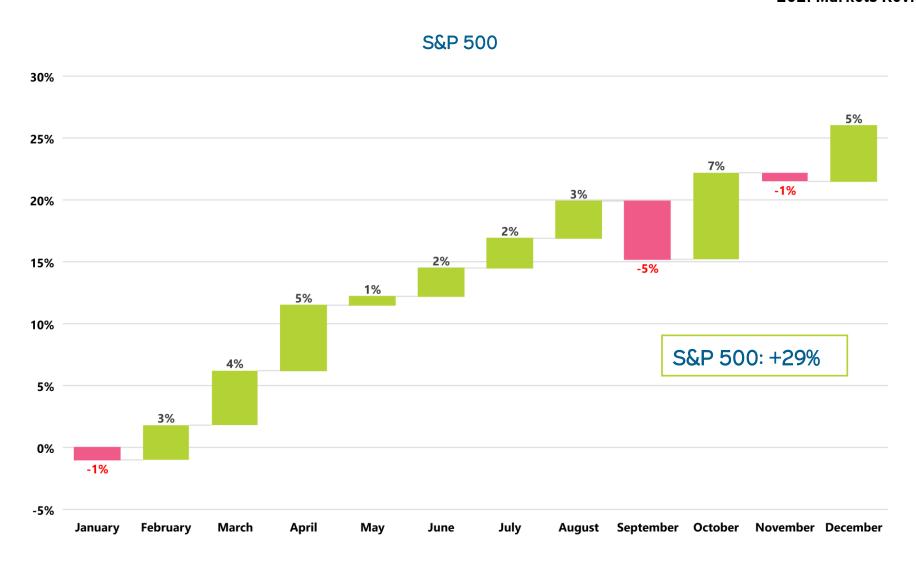
2021 Markets Review

## 2021 Key Events

Month	Event
1-January	January 6 riot on the U.S. Capital, Joe Biden sworn in as U.S. President. GameStop "meme" stock frenzy
2 - February	OPEC+ supply restraints drive oil prices up
3 -March	\$1.9 trillion virus relief spending bill signed, extending stimulus payments and unemployment benefits
4 -April	Most Americans over 18 years old become eligible for vaccines
5 - May	CPI starts breaking records (0.9% month-over-month, and 3.0% year over year). CDC lifts mask mandate
6 - June	Delta variant emerges in U.K.
7 - July	Chinese stocks tumble from govt. clampdown on select industries. U.S. bonds rise as Delta variant spreads
8 -August	Taliban takes over Afghanistan. U.S. withdraws troops. U.S. jobs reports shows strongest gain in nearly a year
9 -September	Chinese real estate debt crises (Evergrande) spooks global equity markets. Gridlock in Washington (upcoming debt ceiling and infrastructure bill disagreements)
10 - October	Fed Reserve minutes signal start of tapering of monthly bond purchases. Energy prices up on supply chain issues.
11 - November	Omicron variant emerges. U.S. House of Reps passes toned-down \$555 billion bipartisan infrastructure bill.
12 - December	Fed doubles the pace of tapering and new dot plot shows median projection of three rate hikes in 2022. U.S. CPI hits 6.8%.

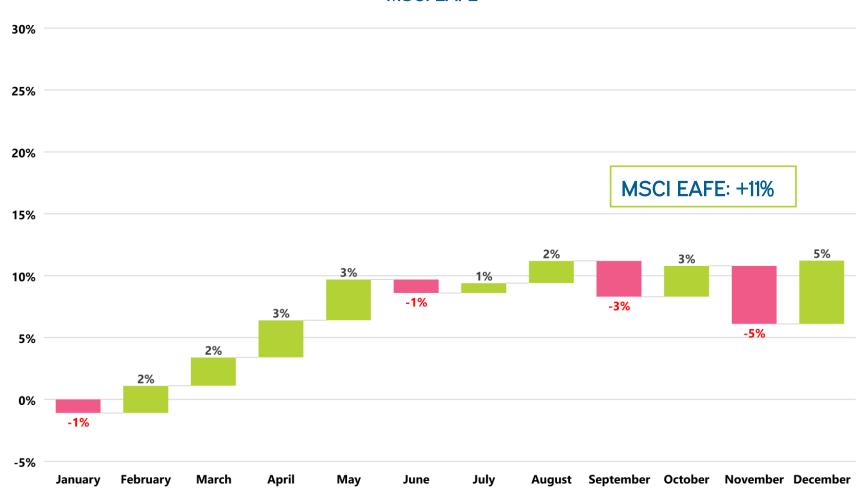
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#### 2021 Markets Review



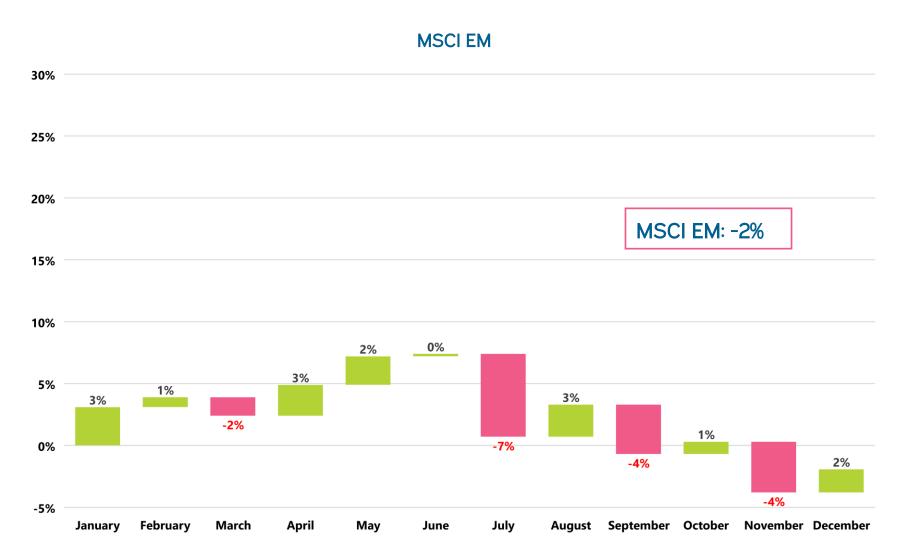
#### 2021 Markets Review

### **MSCI EAFE**



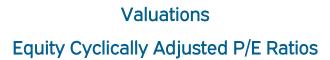


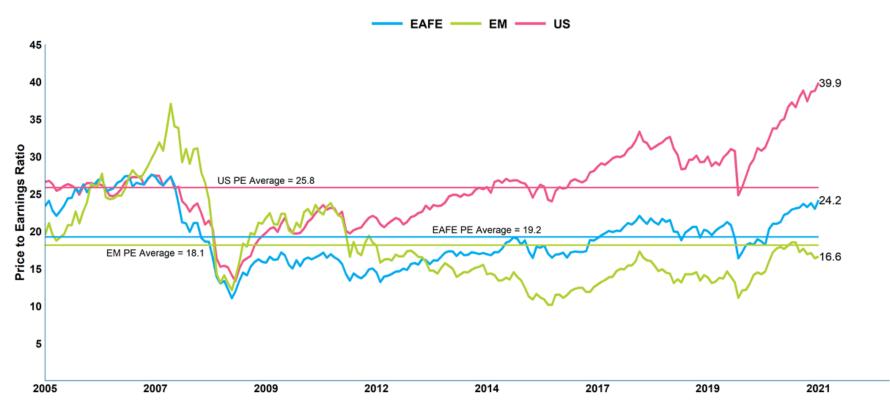
#### 2021 Markets Review





2021 Markets Review

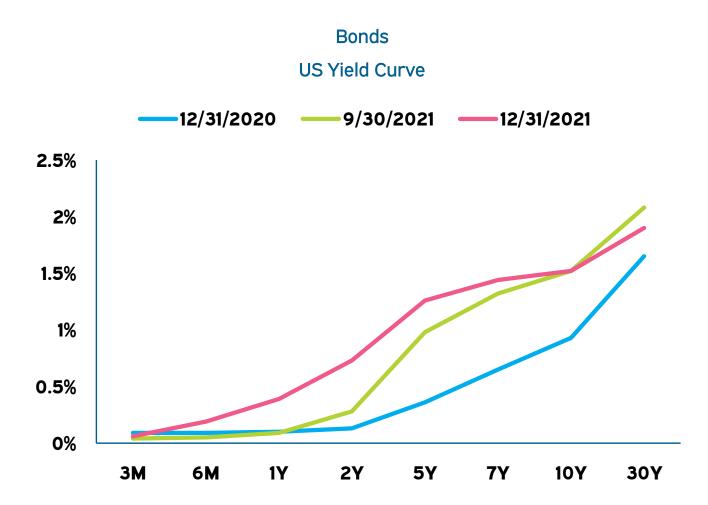




 Particularly in the US, valuations have seen a steep rise and remain well above long-term averages (near +2 standard deviations). Valuations in international markets have also been on an upward trend but are less extended compared to the US.



2021 Markets Review



• During the first half of 2021, the yield curve steepened on higher growth and inflation expectations but flattened in the third quarter with yields rising in the middle of the curve while the long-end fell.

## **Executive Summary**



**Executive Summary** 

## Fiscal Year 2021 Executive Summary

Category	Results	Notes
Total Fund Performance	Positive	+17.5% ( \$195 mm investment gain)
Performance vs. Benchmarks	Positive	+17.5 vs. 14.4% (static) and 14.9% (dynamic)
Performance vs. Peers	Outperformed	+17.5% vs. 14.2% median (10 <sup>™</sup> percentile)
Asset Allocation Attribution Effects	Additive	Overweight private equity was additive
Active Public Managers vs. Benchmarks	Outperformed	7 of 13 active managers beat respective benchmarks (after fees)
Active Public Managers vs. Peer Groups	Mixed	6 of 12² active managers beat peer group median (after fees)
Compliance with Targets	In Compliance	All exposure within policy ranges

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<sup>&</sup>lt;sup>1</sup> InvMetrics Public DB >\$1 bb net.

 $<sup>^2</sup>$  Excludes Aberdeen EMD. No appropriate peer group for Aberdeen blended currency emerging market debt. Peer groups only exist for local currency or USD strategies.



**Executive Summary** 

## **4Q 21 Executive Summary**

Category	Results	Notes
Total Fund Performance	Positive	+3.2% ( \$40 mm investment gain)
Performance vs. Benchmarks	Mixed	+3.2% vs. 3.2% (static) and 2.9% (dynamic)
Performance vs. Peers	Underperformed	+3.2% vs. 4.0% median (79 <sup>th</sup> percentile)
Asset Allocation Attribution Effects	Additive	Overweight private equity was additive
Active Public Managers vs. Benchmarks	Outperformed	8 of 13 active managers beat respective benchmarks (after fees)
Active Public Managers vs. Peer Groups	Outperformed	7 of 12² active managers beat peer group median (after fees)
Compliance with Targets	In Compliance	All exposure within policy ranges

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<sup>&</sup>lt;sup>1</sup> InvMetrics Public DB >\$1 bb net.

 $<sup>^2</sup>$  Excludes Aberdeen EMD. No appropriate peer group for Aberdeen blended currency emerging market debt. Peer groups only exist for local currency or USD strategies.

**Executive Summary** 

## **Peer Rankings**

• The Fund ranks in the top quartile of \$1 billion+ plans over nearly all time periods.

4Q21	(S&P 500 was +11.0%)	
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		(50)	Was (11.070)									
As of 12/31/21	4Q 21	1 YR	3 YR	5 YR	10 YR							
Peer Ranking	79	10	24	12	20							
3Q21 (S&P 500 was +0.6%)												
As of 9/30/21	3Q 21	1 YR	3 YR	5 YR	10 YR							
Peer Ranking	5	6	5	11	19							
	20	221 (S&P 500	was +8.5%)									
As of 6/30/21	2Q 21	1 YR	3 YR	5 YR	10 YR							
Peer Ranking	17	20	14	12	27							
	1G	21 (S&P 500	was +6.2%)									
As of 3/31/21	1Q 21	1 YR	3 YR	5 YR	10 YR							
Peer Ranking	28	66	35	25	41							
	40	20 (S&P 500	was +12.1%)									
As of 12/31/20	4Q 20	1 YR	3 YR	5 YR	10 YR							
Peer Ranking	35	20	20	22	34							
-												
	30	20 (S&P 500	was +8.9%)									
As of 9/30/20	3Q 20	1 YR	3 YR	5 YR	10 YR							
Peer Ranking	22	44	34	25	41							



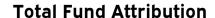
**Executive Summary** 

## Peer Rankings (continued)

2Q20 - - (S&P 500 was +20.5%)

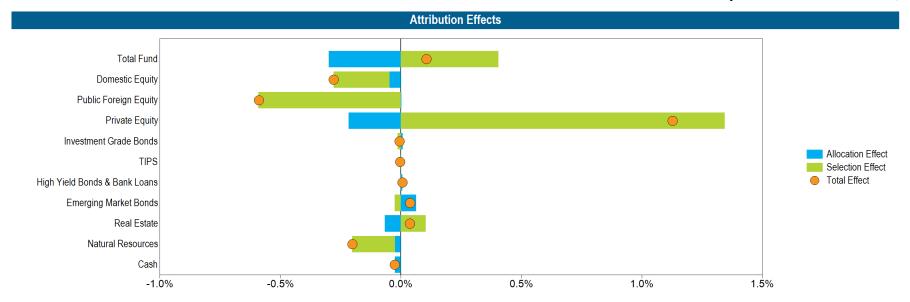
		(33.1.333	-7		
As of 6/30/20	2Q 20	1 YR	3 YR	5 YR	10 YR
Peer Ranking	99	62	54	38	54
	1Q2	20 (S&P 500	was -19.6%)		
As of 3/31/20	1Q 20	1 YR	3 YR	5 YR	10 YR
Peer Ranking	5	8	8	8	25
	4Q	19 (S&P 50	0 was +9.1%)		
As of 12/31/19	4Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking	71	73	19	19	45
	3Q	19 (S&P 50	0 was +1. <b>7</b> %)		
As of 9/30/19	3Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking	7	13	24	21	46
•					
	201	9 (S&P 500	0 was +4.3%)		
As of 6/30/19	2Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking	84	51	30	25	62

# Attribution Summary as of December 31, 2021



# **MEKETA**

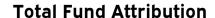
### Summary | As of December 31, 2021



	Attribution Summary											
3 Months Ending December 31, 2021												
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects					
Domestic Equity	20.0%	8.0%	9.3%	-1.2%	-0.2%	0.0%	-0.3%					
Public Foreign Equity	22.0%	-1.0%	1.8%	-2.8%	-0.6%	0.0%	-0.6%					
Private Equity	15.0%	6.1%	-0.6%	6.7%	1.3%	-0.2%	1.1%					
Investment Grade Bonds	13.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%					
TIPS	5.0%	2.3%	2.4%	0.0%	0.0%	0.0%	0.0%					
High Yield Bonds & Bank Loans	5.0%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%					
Emerging Market Bonds	7.0%	-1.6%	-1.2%	-0.5%	0.0%	0.1%	0.0%					
Real Estate	10.0%	7.5%	6.2%	1.3%	0.1%	-0.1%	0.0%					
Natural Resources	3.0%	1.6%	8.1%	-6.5%	-0.2%	0.0%	-0.2%					
Cash	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%					
Total	100.0%	3.3%	3.2%	0.1%	0.4%	-0.3%	0.1%					

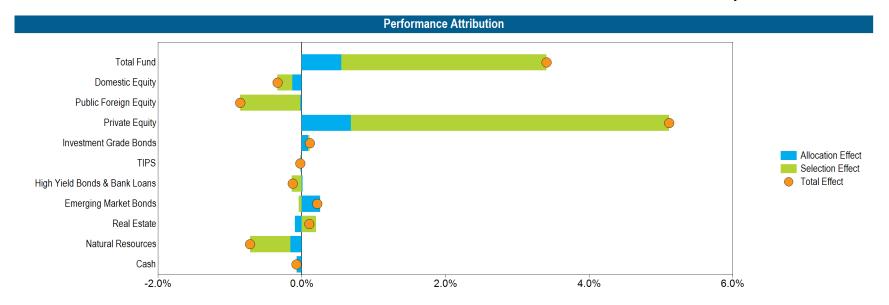
The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

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# **MEKETA**

### Summary | As of December 31, 2021



Attribution Summary												
1 Year Ending December 31, 2021												
	Policy Weight	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects					
Domestic Equity	20.0%	24.6%	25.7%	-1.0%	-0.2%	-0.1%	-0.3%					
Public Foreign Equity	22.0%	4.1%	7.8%	-3.7%	-0.8%	0.0%	-0.9%					
Private Equity	15.0%	56.5%	29.9%	26.5%	4.4%	0.7%	5.1%					
Investment Grade Bonds	13.0%	-1.4%	-1.5%	0.2%	0.0%	0.1%	0.1%					
TIPS	5.0%	5.9%	6.0%	-0.1%	0.0%	0.0%	0.0%					
High Yield Bonds & Bank Loans	5.0%	2.5%	5.0%	-2.5%	-0.1%	0.0%	-0.1%					
Emerging Market Bonds	7.0%	-4.0%	-3.3%	-0.7%	0.0%	0.3%	0.2%					
Real Estate	10.0%	20.2%	17.7%	2.5%	0.2%	-0.1%	0.1%					
Natural Resources	3.0%	15.9%	39.9%	-24.1%	-0.6%	-0.2%	-0.7%					
Cash	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%					
Total	100.0%	17.6%	14.2%	3.4%	2.9%	0.6%	3.4%					

The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

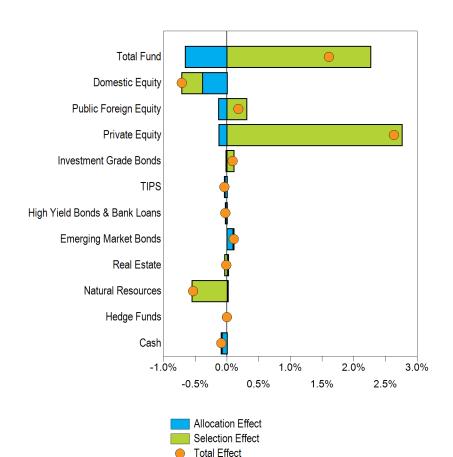
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### **Total Fund Attribution**

### Summary | As of December 31, 2021

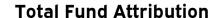




		Attribution	Summary			
		s Ending D	ecember 3	l, 2021		
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Domestic Equity	23.4%	25.8%	-2.4%	-0.3%	-0.4%	-0.7%
Public Foreign Equity	14.4%	13.2%	1.3%	0.3%	-0.1%	0.2%
Private Equity	29.8%	14.8%	15.0%	2.8%	-0.1%	2.6%
Investment Grade Bonds	5.5%	4.8%	0.7%	0.1%	0.0%	0.1%
TIPS	8.4%	8.4%	-0.1%	0.0%	0.0%	0.0%
High Yield Bonds & Bank Loans	6.9%	7.0%	-0.1%	0.0%	0.0%	0.0%
Emerging Market Bonds	5.1%	5.1%	0.0%	0.0%	0.1%	0.1%
Real Estate	8.1%	8.4%	-0.3%	0.0%	0.0%	0.0%
Natural Resources	-3.3%	10.1%	-13.4%	-0.5%	0.0%	-0.5%
Hedge Funds					0.0%	
Cash	0.0%	0.8%	-0.8%	0.0%	-0.1%	-0.1%
Total	15.4%	13.8%	1.6%	2.3%	-0.7%	1.6%
Total	15.4%	13.8%	1.6%	2.3%	-0.7%	1.69

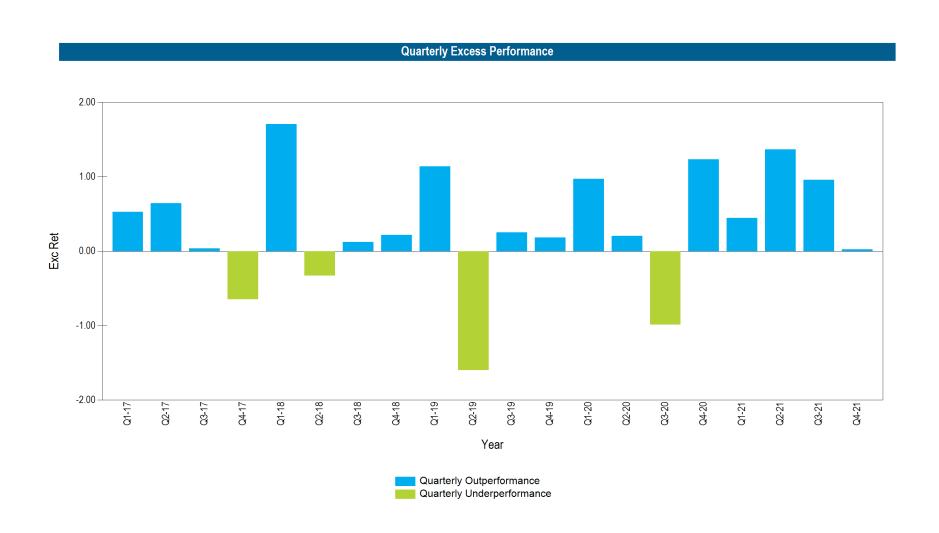
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### Summary | As of December 31, 2021



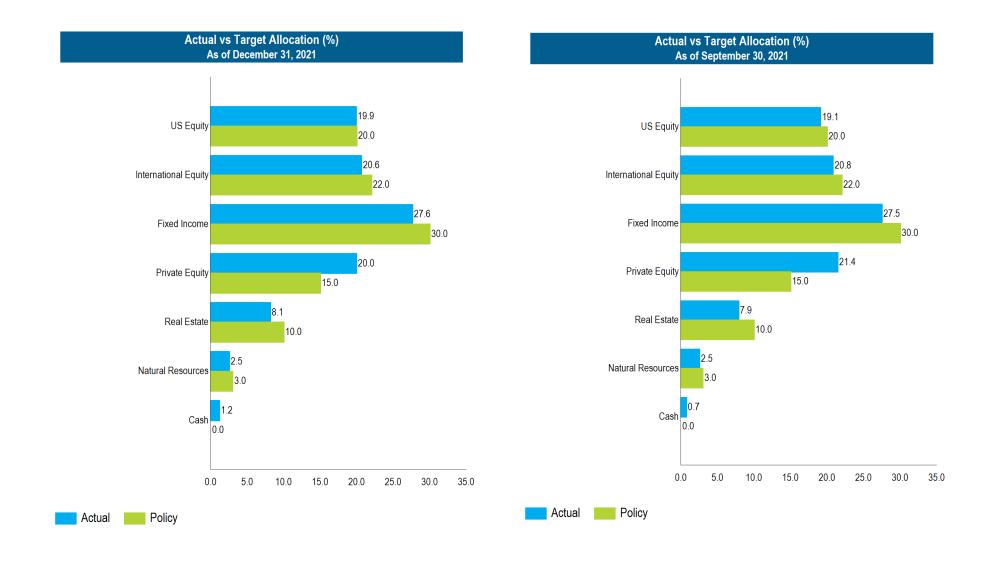
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## **4Q21 Investment Report**

## **Fund Summary**



### Fund Summary | As of December 31, 2021



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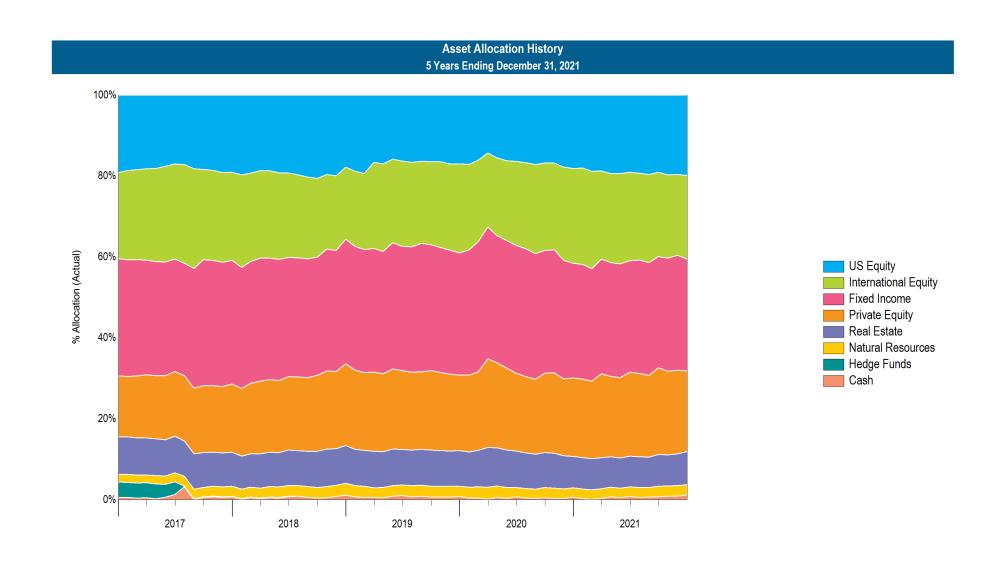
### Fund Summary | As of December 31, 2021

Allocation vs. Targets and Policy											
	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?						
US Equity	\$255,952,421	20%	20%	13% - 27%	Yes						
International Equity	\$265,256,816	21%	22%	15% - 29%	Yes						
Fixed Income	\$355,210,844	28%	30%	20% - 40%	Yes						
Private Equity	\$256,558,761	20%	15%	5% - 25%	Yes						
Real Estate	\$104,678,664	8%	10%	0% - 20%	Yes						
Natural Resources	\$32,500,388	3%	3%	0% - 5%	Yes						
Cash	\$15,171,431	1%	0%	0% - 5%	Yes						
Total	\$1,285,329,325	100%	100%								

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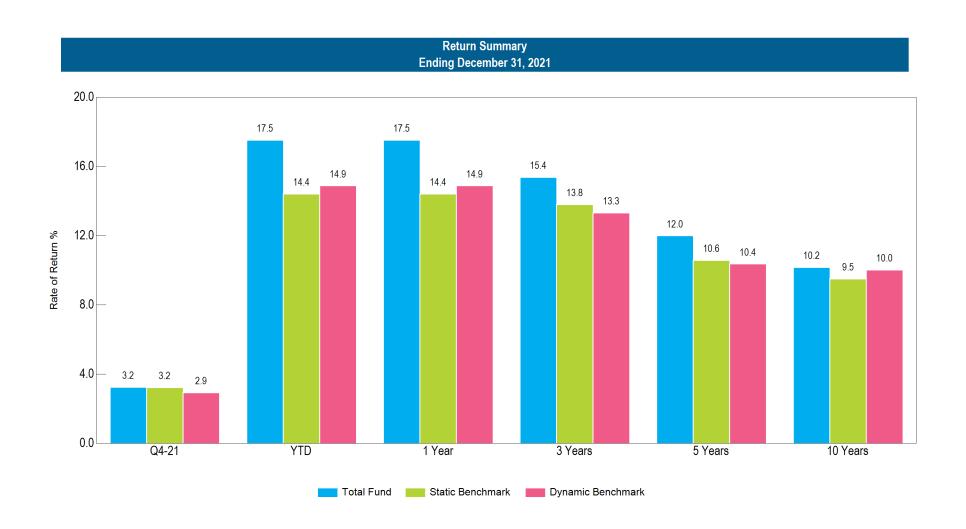


Fund Summary | As of December 31, 2021



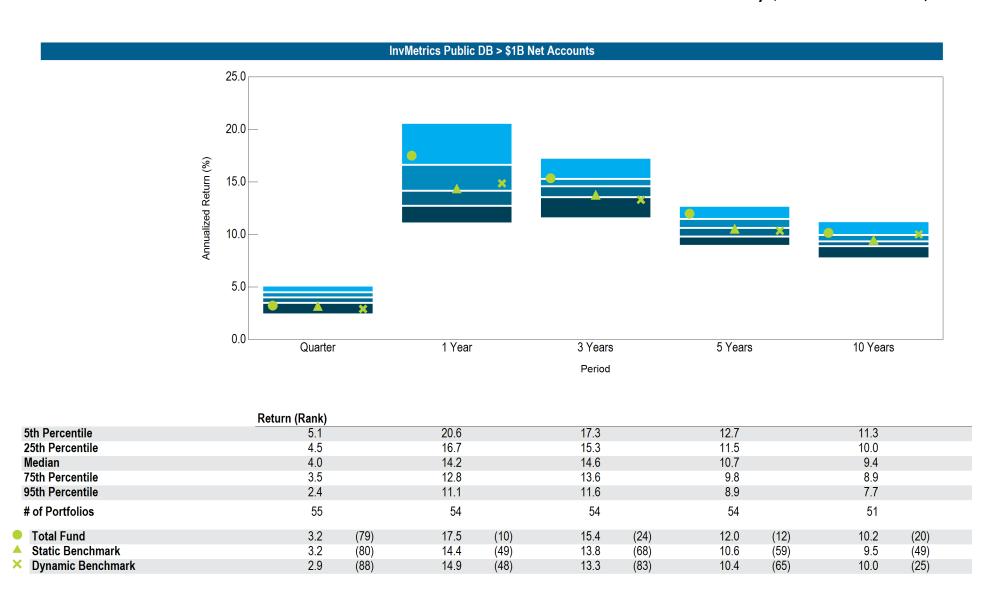


Fund Summary | As of December 31, 2021



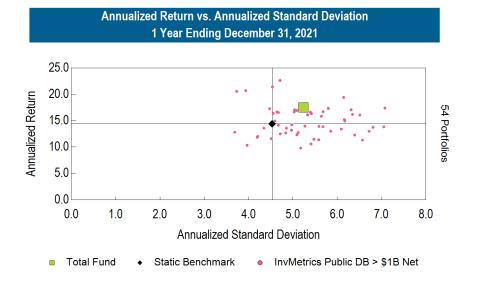


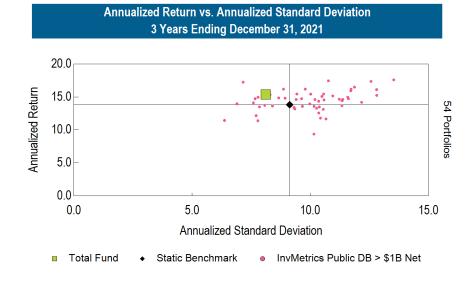
### Fund Summary | As of December 31, 2021

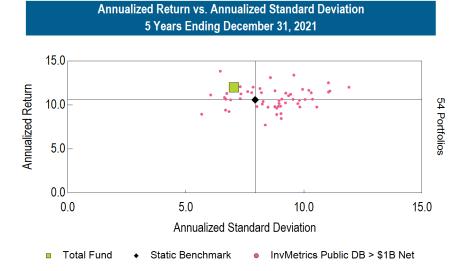


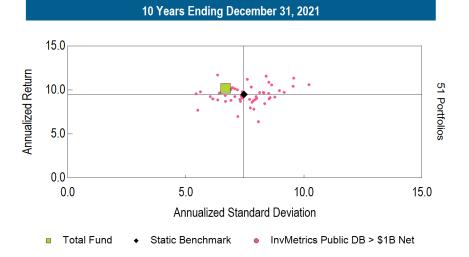


### Fund Summary | As of December 31, 2021









Annualized Return vs. Annualized Standard Deviation

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### Fund Summary | As of December 31, 2021

Asset Class Performance Summary (Net of Fees)										
	Market Value (\$)	% of Portfolio	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date	
Total Fund	1,285,329,325	100.0	3.2	17.5	15.4	12.0	10.2	7.7	Mar-97	
Static Benchmark			3.2	14.4	13.8	10.6	9.5		Mar-97	
Dynamic Benchmark			2.9	14.9	13.3	10.4	10.0		Mar-97	
Domestic Equity	255,952,421	19.9	8.0	24.6	23.4	16.1	14.6	9.3	Mar-97	
Russell 3000			9.3	25.7	25.8	18.0	16.3	9.9	Mar-97	
International Equity	265,256,816	20.6	-1.0	4.1	14.4	11.1	8.6	6.4	Mar-97	
Spliced International Equity Benchmark			1.8	7.8	13.2	9.6	7.3	<i>5.9</i>	Mar-97	
Private Equity	256,558,761	20.0	6.1	56.5	29.8	24.4	17.9	19.1	May-10	
Private Equity Benchmark			-0.6	29.9	14.8	14.9	16.5	16.3	May-10	
Fixed Income	355,210,844	27.6	0.1	0.0	6.2	4.4	3.5	5.0	Mar-97	
Bloomberg US Aggregate TR			0.0	-1.5	4.8	3.6	2.9	5.0	Mar-97	
Real Estate	104,678,664	8.1	7.5	20.2	8.1	8.1	9.1	4.1	Dec-07	
NCREIF Property Index			6.2	17.7	8.4	7.8	9.3	6.6	Dec-07	
Natural Resources	32,500,388	2.5	1.6	15.9	-3.3	1.3		1.7	Feb-13	
S&P North American Natural Resources TR			8.1	39.9	10.1	1.3	1.3	0.7	Feb-13	
Cash	15,171,431	1.2								

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### Fund Summary | As of December 31, 2021

Trailing Net Performance												
	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date		
Total Fund	1,285,329,325	100.0		3.2	17.5	15.4	12.0	10.2	7.7	Mar-97		
Static Benchmark				3.2	14.4	13.8	10.6	9.5		Mar-97		
Dynamic Benchmark				<i>2.9</i>	14.9	13.3	10.4	10.0		Mar-97		
InvMetrics Public DB > \$1B Net Median				4.0	14.2	14.6	10.7	9.4	7.5	Mar-97		
InvMetrics Public DB > \$1B Net Rank				79	10	24	12	20	37	Mar-97		
Domestic Equity	255,952,421	19.9	19.9	8.0	24.6	23.4	16.1	14.6	9.3	Mar-97		
Russell 3000				9.3	25.7	25.8	18.0	16.3	9.9	<i>Mar-97</i>		
eV All US Equity Net Median				7.4	<i>25.3</i>	22.6	14.9	14.4	10.8	Mar-97		
eV All US Equity Net Rank				43	53	46	44	47	88	Mar-97		
Westwood Capital Large Cap Value	31,768,443	2.5	12.4	9.2	23.8	17.8	13.2	13.2	9.4	Oct-01		
Russell 1000 Value				7.8	<i>25.2</i>	17.6	11.2	13.0	8.6	Oct-01		
eV US Large Cap Value Equity Net Median				8.1	26.8	18.4	12.1	13.1	9.1	Oct-01		
eV US Large Cap Value Equity Net Rank				29	73	57	33	45	43	Oct-01		
Westfield Small/Mid Cap Growth	76,787,068	6.0	30.0	2.9	16.2	28.2	20.6	16.2	14.2	Nov-02		
Russell 2500 Growth				0.2	5.0	25.1	17.7	15.7	13.0	Nov-02		
eV US Small-Mid Cap Growth Equity Net Median				2.6	12.8	27.8	20.6	16.0	12.8	Nov-02		
eV US Small-Mid Cap Growth Equity Net Rank				45	40	47	50	45	21	Nov-02		

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### Fund Summary | As of December 31, 2021

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Vaughan Nelson Small Cap Value	67,460,465	5.2	26.4	10.3	31.0	21.5	10.5		12.1	Jan-16
Russell 2000 Value				4.4	28.3	18.0	9.1	12.0	12.6	Jan-16
eV US Small Cap Value Equity Net Median				6.3	29.0	19.1	9.6	12.3	12.3	Jan-16
eV US Small Cap Value Equity Net Rank				5	42	23	37		51	Jan-16
SSgA S&P 500	79,936,445	6.2	31.2	11.0	28.6	26.0	18.4	16.5	10.5	Feb-04
S&P 500				11.0	<i>28.7</i>	26.1	18.5	16.6	10.6	Feb-04
eV US Large Cap Equity Net Median				8.9	26.1	23.5	16.3	14.8	10.4	Feb-04
eV US Large Cap Equity Net Rank				19	28	36	35	28	47	Feb-04
International Equity	265,256,816	20.6	20.6	-1.0	4.1	14.4	11.1	8.6	6.4	Mar-97
Spliced International Equity Benchmark				1.8	7.8	13.2	9.6	7.3	5.9	Mar-97
Baillie Gifford International Growth Fund	39,265,842	3.1	14.8	-4.6	-9.4	26.6	19.5	13.1	13.4	May-09
MSCI ACWI ex USA				1.8	7.8	13.2	9.6	7.3	8.2	May-09
MSCI EAFE				<i>2.</i> 7	11.3	13.5	9.5	8.0	8.4	May-09
eV ACWI ex-US All Cap Core Eq Net Median				3.0	10.0	16.9	12.1	9.2	9.8	May-09
eV ACWI ex-US All Cap Core Eq Net Rank				99	99	1	1	2	2	May-09
Sanderson International Value	53,113,986	4.1	20.0	1.3	7.4	9.5	6.3		5.4	Feb-13
MSCI EAFE Value				1.2	10.9	7.8	<i>5.3</i>	5.8	3.9	Feb-13
MSCI EAFE				2.7	11.3	13.5	9.5	8.0	6.5	Feb-13
eV EAFE All Cap Value Net Median				2.4	11.4	10.4	6.9	6.8	5.7	Feb-13
eV EAFE All Cap Value Net Rank				78	86	72	79		58	Feb-13

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### Fund Summary | As of December 31, 2021

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Highclere International Small Cap	55,065,077	4.3	20.8	-2.2	8.3	13.8	9.4	10.2	9.1	Dec-09
MSCI EAFE Small Cap				0.1	10.1	15.6	11.0	10.8	9.2	Dec-09
S&P EPAC Under USD2 Billion NR USD				-1.8	8.1	13.2	8.8	9.0	7.6	Dec-09
eV EAFE Small Cap Equity Net Median				0.5	12.7	15.6	11.2	11.4	10.4	Dec-09
eV EAFE Small Cap Equity Net Rank				87	77	70	80	76	64	Dec-09
SSgA MSCI EAFE Fund	43,061,040	3.4	16.2	2.7	11.4	13.9	9.8		6.8	Feb-13
MSCI EAFE				2.7	11.3	13.5	9.5	8.0	6.5	Feb-13
eV EAFE Core Equity Net Median				2.4	12.5	14.6	10.2	9.0	7.3	Feb-13
eV EAFE Core Equity Net Rank				45	57	62	56		62	Feb-13
DFA Emerging Markets Value	36,056,126	2.8	13.6	0.4	12.4	8.2	8.3	4.6	3.3	Dec-09
MSCI Emerging Markets Value NR USD				-0.4	4.0	7.1	7.0	3.3	<i>2.9</i>	Dec-09
MSCI Emerging Markets				-1.3	-2.5	10.9	9.9	5.5	4.6	Dec-09
eV Emg Mkts All Cap Value Equity Net Median				-0.1	3.1	10.6	9.2	5.5	4.9	Dec-09
eV Emg Mkts All Cap Value Equity Net Rank				26	16	84	67	71	90	Dec-09
TT Emerging Markets Equity	38,694,744	3.0	14.6	-3.0	-1.0				9.7	Apr-19
MSCI Emerging Markets				-1.3	-2.5	10.9	9.9	5.5	8.2	Apr-19
eV Emg Mkts Equity Net Median				-0.9	0.4	12.7	10.2	6.1	9.6	Apr-19
eV Emg Mkts Equity Net Rank				78	58				50	Apr-19

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### Fund Summary | As of December 31, 2021

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Private Equity	256,558,761	20.0	20.0	6.1	56.5	29.8	24.4	17.9	19.1	May-10
Private Equity Benchmark				-0.6	29.9	14.8	14.9	16.5	16.3	May-10
LGT Crown Global Opportunities VI	35,941,143	2.8	14.0							
Constitution Capital Partners	14,145,454	1.1	5.5							
Greenspring Global Partners VI	20,905,844	1.6	8.1							
Aberdeen Flag Private Equity VI	18,027,427	1.4	7.0							
Cross Creek Capital Partners II - B	19,151,871	1.5	7.5							
Partners Group Emerging Markets 2015	12,061,445	0.9	4.7							
Cross Creek Capital Partners III	17,167,484	1.3	6.7							
LGT Crown Asia II	10,211,965	0.8	4.0							
57 Stars Global Opportunity 3	11,134,192	0.9	4.3							
HarbourVest Co-Investment Fund IV	10,464,242	0.8	4.1							
Aberdeen Flag Private Equity V	9,274,313	0.7	3.6							
Greenspring Global Partners V	11,658,930	0.9	4.5							
HarbourVest 2013 Direct	6,883,757	0.5	2.7							
Dover Street X, L.P.	21,664,470	1.7	8.4							
Blue Bay Direct Lending	2,637,259	0.2	1.0							

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### Fund Summary | As of December 31, 2021

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Private Advisors Co-Investment Fund III	5,824,576	0.5	2.3							
LGT Crown Europe Small Buyouts III	5,535,157	0.4	2.2					- 1		
Deutsche Bank SOF III	4,115,942	0.3	1.6					- 1		
SVB Strategic Investors Fund IX, L.P.	13,582,579	1.1	5.3							
LGT Crown Global Secondaries III	3,965,280	0.3	1.5					- 1		
Private Equity Investors V	1,325,243	0.1	0.5							
Partners Group U.S. Distressed Private Equity 2009	679,102	0.1	0.3					- 1		
LGT Crown Global Secondaries II	201,087	0.0	0.1					- 1		
Fixed Income	355,210,844	27.6	27.6	0.1	0.0	6.2	4.4	3.5	5.0	Mar-97
Bloomberg US Aggregate TR				0.0	-1.5	4.8	3.6	2.9	5.0	Mar-97
SSgA Bond Fund	95,906,849	7.5	27.0	0.0	-1.6	4.8	3.5	2.8	3.9	Jan-04
Bloomberg US Aggregate TR				0.0	<i>-1.5</i>	4.8	3.6	2.9	4.0	Jan-04
eV US Core Fixed Inc Net Median				-0.1	-1.5	5.2	3.8	3.2	4.2	Jan-04
eV US Core Fixed Inc Net Rank				33	55	78	76	84	77	Jan-04

Private Advisors Co-Investment Fund III's market value is lagged.

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## Fund Summary | As of December 31, 2021

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Loomis Sayles Core Plus Fixed Income	60,684,499	4.7	17.1	-0.2	-1.1	6.4	4.8		4.3	Jul-15
Bloomberg US Aggregate TR				0.0	<i>-1.5</i>	4.8	3.6	2.9	3.3	Jul-15
eV US Core Plus Fixed Inc Net Median				0.0	-0.4	5.9	4.4	3.9	4.0	Jul-15
eV US Core Plus Fixed Inc Net Rank				85	80	35	19		27	Jul-15
Aberdeen Emerging Markets Bond Fund	78,002,609	6.1	22.0	-1.6	-4.0	5.1	4.0		3.6	Dec-14
JP Morgan EMBI Global Diversified				-0.4	-1.8	<i>5.9</i>	4.7	5.3	4.5	Dec-14
50% JPM EMBI GD, 25% JPM GBI EM GD, 25% CMBI Broad				-1.2	-3.3	5.1	4.4	4.4	3.8	Dec-14
SSGA TIPS	61,999,875	4.8	17.5	2.3	5.9	8.4	5.3		3.6	Aug-14
Bloomberg US TIPS TR				2.4	6.0	8.4	<i>5.3</i>	3.1	3.7	Aug-14
eV US TIPS / Inflation Fixed Inc Net Median				2.1	5.7	8.3	5.4	3.1	3.6	Aug-14
eV US TIPS / Inflation Fixed Inc Net Rank				21	36	49	60		45	Aug-14
Pyramis Tactical Bond Fund	38,465,272	3.0	10.8	0.6	1.2	7.8	5.6		5.1	Aug-13
Bloomberg US Aggregate TR				0.0	<i>-1.5</i>	4.8	3.6	2.9	3.2	Aug-13
eV US Core Plus Fixed Inc Net Median				0.0	-0.4	5.9	4.4	3.9	3.9	Aug-13
eV US Core Plus Fixed Inc Net Rank				5	8	2	3		2	Aug-13
Pacific Asset Management Bank Loans	20,151,741	1.6	5.7	0.9	5.2				4.2	Dec-19
Credit Suisse Leveraged Loans				0.7	5.4	5.4	4.3	4.8	4.7	Dec-19
Bank Loan MStar MF Median				0.6	4.6	4.8	<i>3.7</i>	4.2	3.8	Dec-19
Bank Loan MStar MF Rank				10	30				35	Dec-19

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### Fund Summary | As of December 31, 2021

	Market Value (\$)	% of Portfolio	% of Sector	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Real Estate	104,678,664	8.1	8.1	7.5	20.2	8.1	8.1	9.1	4.1	Dec-07
NCREIF Property Index				6.2	17.7	8.4	7.8	9.3	6.6	Dec-07
Clarion Partners Lion Properties Fund	82,581,223	6.4	78.9	7.6	22.4	9.7	9.2	10.5	6.7	Apr-05
NCREIF ODCE Equal Weighted (Net)				7.4	21.9	8.9	8.2	9.7	7.0	Apr-05
Portfolio Advisors Real Estate Fund V	8,266,564	0.6	7.9							
Partners Group Global RE 2011	1,241,182	0.1	1.2							
Metropolitan Real Estate Distressed II	1,371,897	0.1	1.3							
Partners Group Distressed RE 2009	116,356	0.0	0.1							
Partners Group Real Estate Secondary 2017	11,101,443	0.9	10.6							
Natural Resources	32,500,388	2.5	2.5	1.6	15.9	-3.3	1.3		1.7	Feb-13
S&P North American Natural Resources TR				8.1	39.9	10.1	1.3	1.3	0.7	Feb-13
Aether Real Assets III	11,457,453	0.9	35.3							
Aether Real Assets II	3,727,514	0.3	11.5							
Aether Real Assets IV	10,958,020	0.9	33.7							
Aether Real Assets V	6,357,401	0.5	19.6							
Cash	15,171,431	1.2	1.2							
Cash	15,171,431	1.2	100.0							

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#### Fund Summary | As of December 31, 2021

	Calendar \	ear Perí	ormance	9						
	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Total Fund	17.5	12.9	15.7	-2.0	17.0	7.1	1.3	4.8	16.1	13.3
Static Benchmark	14.4	11.3	15.8	<i>-3.6</i>	16.4	9.6	-0.1	<i>5.7</i>	15.1	12.6
Dynamic Benchmark	14.9	10.5	14.6	-3.1	16.1	8.4	0.4	5.4	21.2	14.2
Domestic Equity	24.6	16.5	29.4	-7.9	21.8	9.9	0.2	10.0	31.3	16.9
Russell 3000	25.7	20.9	31.0	-5.2	21.1	12.7	0.5	12.6	33.6	16.4
Westwood Capital Large Cap Value	23.8	3.9	27.3	-5.7	20.4	10.9	-0.1	11.9	29.6	16.0
Russell 1000 Value	25.2	2.8	26.5	-8.3	13.7	17.3	-3.8	13.5	32.5	17.5
Westfield Small/Mid Cap Growth	16.2	34.2	35.2	-7.6	31.0	3.4	-4.1	7.8	37.2	19.5
Russell 2500 Growth	5.0	40.5	32.7	<i>-7.5</i>	24.5	9.7	-0.2	7.1	40.6	16.1
Vaughan Nelson Small Cap Value	31.0	9.6	25.0	-14.1	6.8	20.7				
Russell 2000 Value	28.3	4.6	22.4	-12.9	7.8	31.7	-7. <b>5</b>	4.2	34.5	18.0
SSgA S&P 500	28.6	18.3	31.5	-4.4	21.8	12.0	1.4	13.7	32.3	15.9
S&P 500	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
International Equity	4.1	17.6	22.4	-15.9	34.0	5.0	-4.4	-4.4	19.7	18.1
Spliced International Equity Benchmark	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8
Baillie Gifford International Growth Fund	-9.4	63.0	37.3	-17.3	45.5	1.4	-2.9	-6.4	29.9	17.6
MSCI ACWI ex USA	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	<i>15.3</i>	16.8
MSCI EAFE	11.3	7.8	22.0	-13.8	<i>25.0</i>	1.0	-0.8	-4.9	22.8	17.3

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#### Fund Summary | As of December 31, 2021

	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012
Sanderson International Value	7.4	1.5	20.5	-18.2	26.1	2.5	-5.5	-2.3		
MSCI EAFE Value	10.9	-2.6	16.1	-14.8	21.4	5.0	-5.7	-5.4	23.0	17.7
MSCI EAFE	11.3	7.8	22.0	-13.8	<i>25.0</i>	1.0	-0.8	-4.9	22.8	17.3
Highclere International Small Cap	8.3	10.2	23.5	-18.8	30.9	10.3	6.5	-4.4	24.6	20.2
MSCI EAFE Small Cap	10.1	12.3	<i>25.0</i>	-17.9	33.0	2.2	9.6	-4.9	29.3	20.0
S&P EPAC Under USD2 Billion NR USD	8.1	13.7	18.0	-19.6	30.8	3.5	9.0	-4.3	23.6	16.8
SSgA MSCI EAFE Fund	11.4	8.2	22.4	-13.5	25.3	1.3	-0.6	-4.7		
MSCI EAFE	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
DFA Emerging Markets Value	12.4	2.7	9.6	-11.9	33.8	19.8	-18.8	-4.4	-4.4	18.7
MSCI Emerging Markets Value NR USD	4.0	<i>5.5</i>	12.0	-10.7	28.1	14.9	-18.6	-4.1	-5.1	15.9
MSCI Emerging Markets	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2	-2.6	18.2
TT Emerging Markets Equity	-1.0	19.8								
MSCI Emerging Markets	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2	-2.6	18.2
Private Equity	56.5	20.4	16.1	15.8	17.7	9.4	12.7	23.3	7.7	6.2
Private Equity Benchmark	29.9	12.6	3.4	5.4	25.4	15.3	4.4	17.1	36.3	19.4

LGT Crown Global Opportunities VI

**Constitution Capital Partners** 

Greenspring Global Partners VI

Aberdeen Flag Private Equity VI

Cross Creek Capital Partners II - B

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#### Fund Summary | As of December 31, 2021

2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	
(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	

Partners Group Emerging Markets 2015

Cross Creek Capital Partners III

LGT Crown Asia II

57 Stars Global Opportunity 3

HarbourVest Co-Investment Fund IV

Aberdeen Flag Private Equity V

Greenspring Global Partners V

HarbourVest 2013 Direct

Dover Street X, L.P.

Blue Bay Direct Lending

Private Advisors Co-Investment Fund III

LGT Crown Europe Small Buyouts III

Deutsche Bank SOF III

SVB Strategic Investors Fund IX, L.P.

LGT Crown Global Secondaries III

Private Equity Investors V

Partners Group U.S. Distressed Private Equity 2009

LGT Crown Global Secondaries II

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## Fund Summary | As of December 31, 2021

	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Fixed Income	0.0	8.3	10.5	-2.0	5.6	6.9	-2.1	3.1	-2.4	8.3
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
SSgA Bond Fund	-1.6	7.5	8.7	0.0	3.5	2.6	0.5	5.9	-2.2	4.2
Bloomberg US Aggregate TR	<i>-1.5</i>	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
Loomis Sayles Core Plus Fixed Income	-1.1	11.3	9.4	-0.4	5.4	6.9				
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
Aberdeen Emerging Markets Bond Fund	-4.0	5.0	15.1	-7.5	13.0	13.3	-2.7			
JP Morgan EMBI Global Diversified	-1.8	<i>5.3</i>	15.0	-4.3	10.3	10.2	1.2	7.4	<i>-5.3</i>	17.4
50% JPM EMBI GD, 25% JPM GBI EM GD, 25% CMBI Broad	<i>-3.3</i>	<i>5.2</i>	14.2	-3.9	10.9	10.4	-1.3	3.1	-5.2	16.8
SSGA TIPS	5.9	10.9	8.3	-1.3	3.0	4.6	-1.5			
Bloomberg US TIPS TR	6.0	11.0	8.4	-1.3	3.0	4.7	-1.4	3.6	-8.6	7.0
Pyramis Tactical Bond Fund	1.2	9.3	13.2	-0.9	5.9	10.4	-1.8	5.3		
Bloomberg US Aggregate TR	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
Pacific Asset Management Bank Loans	5.2	2.6								
Credit Suisse Leveraged Loans	5.4	2.8	8.2	1.1	4.2	9.9	-0.4	2.1	6.2	9.4

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#### Fund Summary | As of December 31, 2021

	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012
Real Estate	20.2	-0.6	5.6	8.6	7.5	7.8	13.1	10.5	10.5	9.4
NCREIF Property Index	17.7	1.6	6.4	6.7	7.0	8.0	13.3	11.8	11.0	10.5
Clarion Partners Lion Properties Fund	22.4	1.4	6.3	9.2	8.0	9.3	15.7	12.3	11.8	9.9
NCREIF ODCE Equal Weighted (Net)	21.9	0.8	5.2	7.3	6.9	8.3	14.2	11.4	12.4	9.9
Portfolio Advisors Real Estate Fund V										
Partners Group Global RE 2011										
Metropolitan Real Estate Distressed II										
Partners Group Distressed RE 2009										
Partners Group Real Estate Secondary 2017										
Natural Resources	15.9	-9.9	-13.4	2.1	15.7	8.6	-6.3	6.7		
S&P North American Natural Resources TR	39.9	-19.0	17.6	-21.1	1.2	30.9	-24.3	-9.8	16.5	2.2
Aether Real Assets III										
Aether Real Assets II										
Aether Real Assets IV										
Aether Real Assets V										
Cash										
Cash										

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## Fund Summary | As of December 31, 2021

Statistics Summary							
	5 Years End	ling December 31, 20	)21				
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Sharpe Ratio	Tracking Error		
Total Fund	12.0%	7.0%	0.5	1.6	3.1%		
Static Benchmark	10.6%	7.9%		1.2	0.0%		
Domestic Equity	16.1%	16.8%	-0.5	0.9	3.5%		
Russell 3000	18.0%	16.0%		1.1	0.0%		
Westwood Capital Large Cap Value	13.2%	15.0%	0.6	0.8	3.4%		
Russell 1000 Value	11.2%	16.5%		0.6	0.0%		
Westfield Small/Mid Cap Growth	20.6%	19.8%	0.5	1.0	5.5%		
Russell 2500 Growth	17.7%	19.7%		0.8	0.0%		
Vaughan Nelson Small Cap Value	10.5%	19.2%	0.2	0.5	6.4%		
Russell 2000 Value	9.1%	21.7%		0.4	0.0%		
SSgA S&P 500	18.4%	15.4%	-1.4	1.1	0.0%		
S&P 500	18.5%	15.4%		1.1	0.0%		
International Equity	11.1%	16.2%	0.5	0.6	3.0%		
Spliced International Equity Benchmark	9.6%	14.8%		0.6	0.0%		
Baillie Gifford International Growth Fund	19.5%	19.0%	0.9	1.0	10.6%		
MSCI ACWI ex USA	9.6%	14.8%		0.6	0.0%		
Sanderson International Value	6.3%	16.8%	0.3	0.3	3.5%		

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#### Fund Summary | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Sharpe Ratio	Tracking Error
MSCI EAFE Value	5.3%	17.2%	-	0.2	0.0%
Highclere International Small Cap	9.4%	15.8%	-0.6	0.5	2.9%
MSCI EAFE Small Cap	11.0%	16.8%		0.6	0.0%
SSgA MSCI EAFE Fund	9.8%	14.8%	2.1	0.6	0.1%
MSCI EAFE	9.5%	14.8%		0.6	0.0%
DFA Emerging Markets Value	8.3%	18.5%	0.3	0.4	3.8%
MSCI Emerging Markets Value NR USD	7.0%	17.1%	-	0.3	0.0%
Private Equity	24.4%	10.8%	0.6	2.2	17.2%
Private Equity Benchmark	14.9%	15.0%	-	0.9	0.0%
Fixed Income	4.4%	4.2%	0.3	0.8	3.1%
Bloomberg US Aggregate TR	3.6%	3.1%	-	0.8	0.0%
SSgA Bond Fund	3.5%	3.1%	-0.5	0.8	O.1%
Bloomberg US Aggregate TR	3.6%	3.1%		0.8	0.0%
Loomis Sayles Core Plus Fixed Income	4.8%	3.4%	0.8	1.1	1.6%
Bloomberg US Aggregate TR	3.6%	3.1%		0.8	0.0%
Aberdeen Emerging Markets Bond Fund	4.0%	10.2%	-0.3	0.3	2.2%
JP Morgan EMBI Global Diversified	4.7%	8.8%		0.4	0.0%
SSGA TIPS	5.3%	3.5%	-1.1	1.2	0.1%
Bloomberg US TIPS TR	5.3%	3.5%		1.2	0.0%
Pyramis Tactical Bond Fund	5.6%	5.2%	0.5	0.9	4.4%
Bloomberg US Aggregate TR	3.6%	3.1%	-	0.8	0.0%

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#### Fund Summary | As of December 31, 2021

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Sharpe Ratio	Tracking Error
Real Estate	8.1%	5.1%	0.2	1.4	1.8%
NCREIF Property Index	7.8%	4.3%	<del></del>	1.5	0.0%
Clarion Partners Lion Properties Fund	9.2%	5.4%	1.1	1.5	1.0%
NCREIF ODCE Equal Weighted (Net)	8.2%	5.1%	<del></del>	1.4	0.0%
Natural Resources	1.3%	13.6%	0.0	0.0	31.2%
S&P North American Natural Resources TR	1.3%	27.5%	-	0.0	0.0%

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# **Fund Detail**

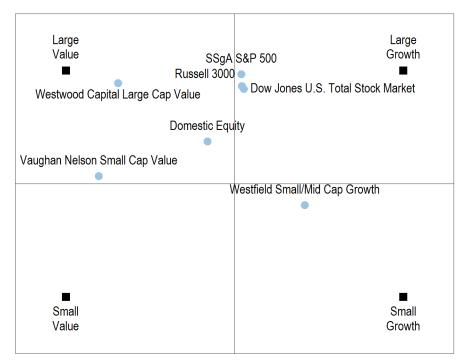
# **Domestic Equity**



#### Domestic Equity | As of December 31, 2021

Asset Allocation on December 31, 2021							
	Actual	Actual					
Westwood Capital Large Cap Value	\$31,768,443	12.4%					
Westfield Small/Mid Cap Growth	\$76,787,068	30.0%					
Vaughan Nelson Small Cap Value	\$67,460,465	26.4%					
SSgA S&P 500	\$79,936,445	31.2%					
Total	\$255,952,421	100.0%					



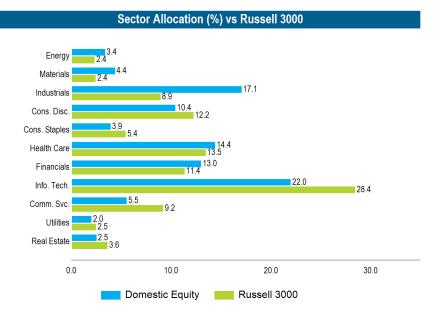


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#### Domestic Equity | As of December 31, 2021

Domestic Equity Characteristics									
	Portfolio	Index	Portfolio						
	Q4-21	Q4-21	Q3-21						
Market Value									
Market Value (\$M)	256.0		236.7						
Number Of Holdings	619	3065	618						
Characteristics									
Weighted Avg. Market Cap. (\$B)	250.5	568.6	205.9						
Median Market Cap (\$B)	27.5	2.8	25.6						
P/E Ratio	23.1	24.9	22.4						
Yield	1.1	1.3	1.1						
EPS Growth - 5 Yrs.	19.8	20.4	18.1						
Price to Book	3.9	4.5	3.7						



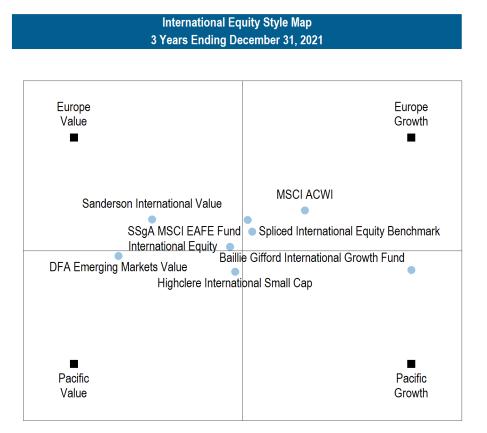
Top 10 Holdings	
MICROSOFT CORP	2.4%
APPLE INC	2.2%
LPL FINANCIAL HOLDINGS INC	1.3%
AMAZON.COM INC	1.1%
MKS INSTRUMENTS INC	1.1%
FMC CORP.	1.0%
ALPHABET INC	0.9%
INSIGHT ENTERPRISES INC	0.9%
AVANTOR INC	0.9%
SAIA INC	0.9%
Total	12.7%

# **International Equity**



#### International Equity | As of December 31, 2021

Asset Allocation on December 31, 2021								
	Actual	Actual						
Baillie Gifford International Growth Fund	\$39,265,842	14.8%						
Sanderson International Value	\$53,113,986	20.0%						
Highclere International Small Cap	\$55,065,077	20.8%						
SSgA MSCI EAFE Fund	\$43,061,040	16.2%						
DFA Emerging Markets Value	\$36,056,126	13.6%						
TT Emerging Markets Equity	\$38,694,744	14.6%						
Total	\$265,256,816	100.0%						

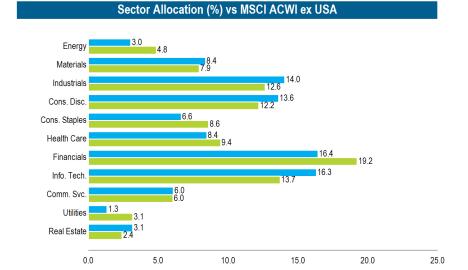


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#### International Equity | As of December 31, 2021

Tota	Total International Equity Characteristics								
	Portfolio	Index	Portfolio						
	Q4-21	Q4-21	Q3-21						
Market Value									
Market Value (\$M)	265.3		257.8						
Number Of Holdings	4323	2330	4302						
Characteristics									
Weighted Avg. Market Cap. (\$B)	74.0	98.9	73.9						
Median Market Cap (\$B)	1.3	10.3	1.3						
P/E Ratio	13.7	15.3	13.6						
Yield	2.3	2.6	2.5						
EPS Growth - 5 Yrs.	13.9	13.3	13.9						
Price to Book	2.6	2.7	2.6						



MSCI ACWI ex USA

International Equity

Top 10 Holdings	
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	1.8%
ASML HOLDING NV	1.5%
SAMSUNG ELECTRONICS CO LTD	1.2%
TENCENT HOLDINGS LTD	1.2%
ALIBABA GROUP HOLDING LTD	1.0%
PING AN INSURANCE GROUP	0.9%
FERRARI NV	0.8%
NESTLE SA, CHAM UND VEVEY	0.8%
ADYEN N.V	0.8%
MERCADOLIBRE INC	0.8%
Total	10.9%



#### International Equity | As of December 31, 2021

Total International Equity Region Allocation						
	vs MSCI ACWI ex USA					
Region	% of Total	% of Bench	% Diff			
North America ex U.S.	0.0%	7.6%	-7.6%			
United States	1.8%	0.0%	1.8%			
Europe Ex U.K.	30.9%	32.5%	-1.5%			
United Kingdom	10.0%	9.4%	0.6%			
Pacific Basin Ex Japan	7.5%	7.1%	0.4%			
Japan	16.8%	14.5%	2.3%			
Emerging Markets	30.8%	28.4%	2.5%			
Other	2.1%	0.6%	1.5%			
Total	100.0%	100.0%	0.0%			

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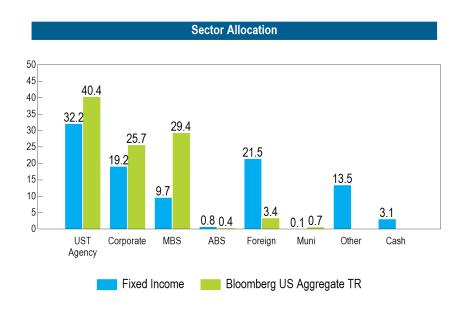
# **Fixed Income**

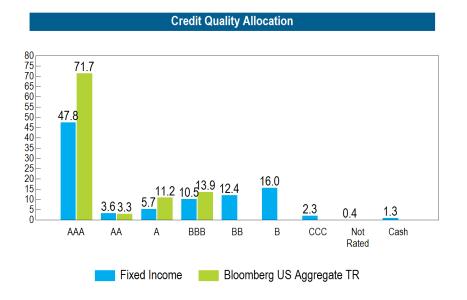


#### Fixed Income | As of December 31, 2021

Asset Allocation on December 31, 2021							
	Actual	Actual					
SSgA Bond Fund	\$95,906,849	27.0%					
Loomis Sayles Core Plus Fixed Income	\$60,684,499	17.1%					
Aberdeen Emerging Markets Bond Fund	\$78,002,609	22.0%					
SSGA TIPS	\$61,999,875	17.5%					
Pyramis Tactical Bond Fund	\$38,465,272	10.8%					
Pacific Asset Management Bank Loans	\$20,151,741	5.7%					
Total	\$355,210,844	100.0%					

Total Fixed Incom	Total Fixed Income Characteristics							
vs. Bloomberg U	S Aggregate	TR						
Portfolio Index Port								
	Q4-21	Q4-21	Q3-21					
Fixed Income Characteristics								
Yield to Maturity	3.2	1.7	2.9					
Average Duration	5.7	6.8	5.9					
Average Quality	Α	AA	Α					
Weighted Average Maturity	9.0	13.8	9.0					

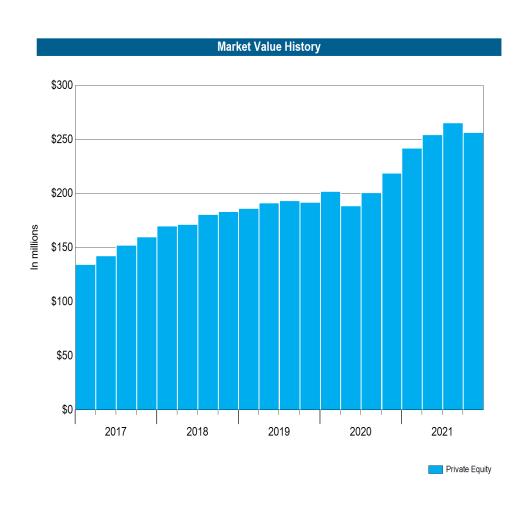


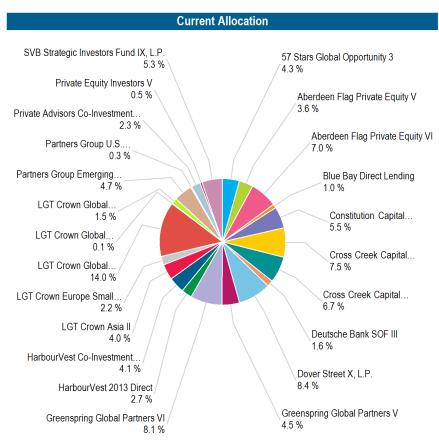


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#### Private Equity | As of December 31, 2021

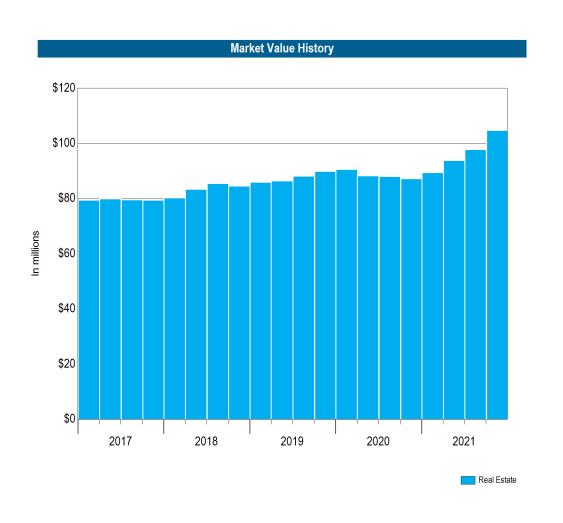


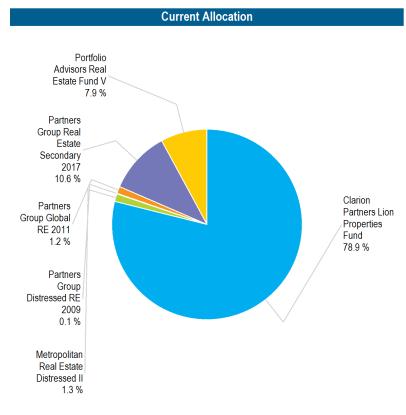


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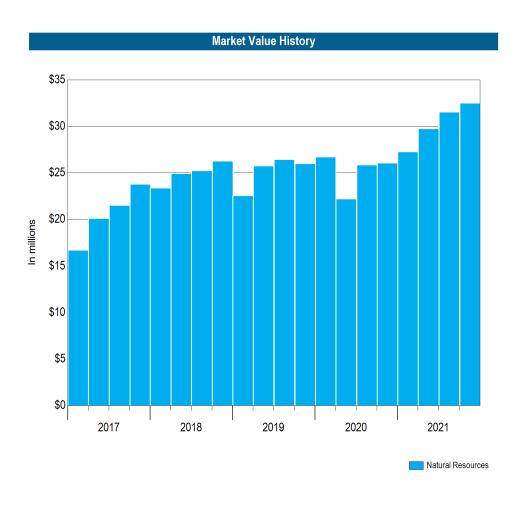
#### Real Estate | As of December 31, 2021

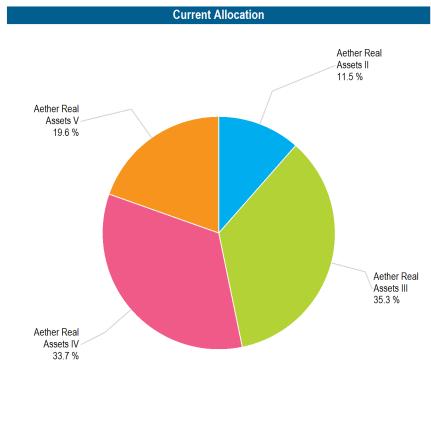






#### Natural Resources | As of December 31, 2021





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# **Private Equity Assets**



#### **Private Equity Assets**

Partnership	Focus	Туре	Vintage Year
Partners Group Distressed Private Equity 2009	Special Situations	Fund of Funds	2009
LGT Crown Global Secondaries II	Secondary Market	Fund of Funds	2009
Private Equity Investors V	Secondary Market	Fund of Funds	2009
Cross Creek Capital Partners II - B	Venture	Fund of Funds	2010
LGT Crown Asia II	Buyout	Fund of Funds	2011
Greenspring Global Partners V	Venture	Fund of Funds	2011
57 Stars Global Opportunity 3	Diversified	Fund of Funds	2011
LGT Crown Europe Small Buyouts III	Buyout	Fund of Funds	2012
LGT Crown Global Secondaries III	Secondary Market	Fund of Funds	2012
Private Advisors Co-Investment Fund III	Co-investments	Fund of Funds	2013
HarbourVest 2013 Direct	Co-investments	Fund of Funds	2013
Cross Creek Capital Partners III	Venture	Fund of Funds	2013
Flag Private Equity V	Buyout	Fund of Funds	2012
Greenspring Global Partners VI	Venture	Fund of Funds	2013
Constitution Capital Partners Ironsides III	Buyout	Fund of Funds	2014
Deutsche Bank Secondary Opportunities Fund III	Secondary Market	Fund of Funds	2014
Flag Private Equity VI	Buyout	Fund of Funds	2015
Blue Bay Direct Lending Fund II	Private Debt	Direct Fund	2015
Partners Group Emerging Markets 2015	Special Situations	Fund of Funds	2015
LGT Crown Global Opportunities VI	Diversified	Fund of Funds	2016
HarbourVest Co-Investment Fund IV	Co-investments	Fund of Funds	2017
SVB Strategic Investors Fund IX	Venture	Fund of Funds	2018
Dover Street X	Secondary Market	Fund of Funds	2020

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#### **Private Equity Assets**

Partnership	Committed (\$mm)	Called (\$mm)	Distributed (\$mm)	Fair Value (\$mm)	nIRR¹ (%)	Vintage Year	TVPI Multiple
Partners Group Distressed Private Equity 2009	7.0	6.2	8.5	0.7	10.9	2009	1.5
LGT Crown Global Secondaries II (A426)	3.0	2.5	4.9	0.2	17.8	2009	2.0
Private Equity Investors V	3.0	3.0	1.4	1.3	-1.4	2009	0.9
Cross Creek Capital Partners II – B	12.5	11.7	25.5	19.2	22.8	2010	3.8
LGT Crown Asia II <sup>2</sup>	10.0	9.2	9.1	10.2	13.3	2011	2.1
Greenspring Global Partners V	7.5	6.8	17.2	11.7	26.6	2011	4.3
57 Stars Global Opportunity 3	10.0	10.2	4.0	11.1	7.6	2011	1.5
LGT Crown Europe Small Buyouts III <sup>2</sup>	8.6	7.9	9.2	5.5	16.9	2012	1.9
LGT Crown Global Secondaries III <sup>2</sup>	10.0	7.5	8.6	4.0	14.4	2012	1.7
Private Advisors Co-Investment Fund III <sup>2</sup>	10.0	10.6	13.6	6.0	13.4	2013	1.8
HarbourVest 2013 Direct	10.0	9.7	14.3	6.9	19.7	2013	2.2
Cross Creek Capital Partners III	7.5	6.9	10.2	17.2	28.9	2013	4.0
Aberdeen Flag Private Equity V	10.0	10.0	11.2	9.3	18.5	2012	2.1
Greenspring Global Partners VI	7.5	6.8	8.1	20.9	30.3	2013	4.3
Constitution Capital Partners Ironsides III	15.0	17.2	21.8	14.1	26.63   20.74	2014	2.1
Deutsche Bank Secondary Opportunities Fund III	10.0	8.8	9.4	4.1	14.2	2014	1.5
Aberdeen Flag Private Equity VI	15.0	14.0	10.2	18.0	23.0	2015	2.0
Blue Bay Direct Lending Fund II	20.0	19.3	21.0	2.6	7.0	2015	1.2
Partners Group Emerging Markets 2015	10.0	8.8	2.9	12.1	13.1	2015	1.7
LGT Crown Global Opportunities VI <sup>2</sup>	40.0	31.5	14.7	35.9	16.2	2016	1.6
HarbourVest Co-Investment Fund IV	10.0	8.1	8.5	10.5	24.7	2017	2.3
SVB Strategic Investors Fund IX	10.0	7.6	0.0	13.6	52.5 <sup>5</sup>	2018	1.8
Dover Street X	40.0	15.1	3.0	21.7	93.9	2020	1.6
Total	286.6	239.4	237.3	256.6			2.1x

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 $<sup>^{1}</sup>$  All performance figures are reported directly from managers, net of fees, as of 9/30/21, unless otherwise noted.

<sup>&</sup>lt;sup>2</sup> Performance and market value as of 6/30/2021

<sup>&</sup>lt;sup>3</sup> Constitution Capital Ironsides Partnership Fund III, as of 6/30/2021

<sup>&</sup>lt;sup>4</sup> Constitution Capital Ironsides Co-Investment Fund III, as of 6/30/2021

<sup>&</sup>lt;sup>5</sup> As of 6/30/2021

## **Real Estate Assets**



#### **Closed-Ends Funds**

Partnership	Focus	Type	Vintage Year	TVPI Multiple
Partners Group U.S. Distressed 2009	U.S. Distressed	Fund of Funds	2009	1.3
Metropolitan Real Estate Distressed II	Real Estate Debt	Fund of Funds	2009	1.3
Partners Group Global RE 2011	Global	Fund of Funds	2011	1.3
Portfolio Advisors Global Real Estate V	Global	Fund of Funds	2015	1.3
Partners Group RE Secondary 2017	Global	Fund of Funds	2017	1.2
				1.3x

Partnership	Committed (mm)	Called (mm)	Distributed (mm)	Fair Value (mm)	nIRR¹ (%)
Partners Group U.S. Distressed 2009	\$12.0	\$11.2	\$15.1	\$0.1	7.3
Metropolitan Real Estate Distressed II	\$12.0	\$11.3	\$13.6	\$1.4	8.5
Partners Group Global RE 2011	\$6.7	\$5.8	\$6.5	\$1.2	6.7
Portfolio Advisors Global Real Estate V	\$15.0	\$12.6	\$8.4	\$8.3	7.2
Partners Group RE Secondary 2017	\$15.0	\$8.7	\$0.0	\$11.1	11.7
Total	\$60.7	\$49.6	\$43.6	\$22.1	

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<sup>&</sup>lt;sup>1</sup> Performance figures are reported directly from manager, net of fees, as of 9/30/2021.

# **Natural Resources Assets**



#### **Natural Resources Assets**

Partnership	Vintage Year	Committed (mm)	Called (mm)	Distributed (mm)	Fair Value (mm)	Net IRR¹ %	TVPI Multiple
Aether Real Assets II	2012	\$7.5	\$7.7	\$4.0	\$3.7	-1.2	1.0
Aether Real Assets III	2013	\$15.0	\$15.0	\$3.5	\$11.5	-0.8	1.0
Aether Real Assets IV	2016	\$10.0	\$9.4	\$0.3	\$11.0	7.2	1.2
Aether Real Assets V	2018	\$10.0	\$4.7	\$0.2	\$6.4	25.0	1.4
Total		\$42.5	\$36.8	\$8.0	\$32.5		1.2x

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 $<sup>^{1}</sup>$  Performance figures are reported directly from manager, net of fees, as of 9/30/2021.

# **Portfolio Reviews**



#### Westwood Capital Large Cap Value | As of December 31, 2021

	Account Information
Account Name	Westwood Capital Large Cap Value
Account Structure	Separate Account
Investment Style	Active
Inception Date	10/01/01
Account Type	US Equity
Benchmark	Russell 1000 Value
Universe	eV US Large Cap Value Equity Net

Portfolio Performance Summary								
	QTD	YTD	1 Yr	3 Yrs	5 Yrs 1	0 Yrs	S.I.	S.I.
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Date
Westwood Capital Large Cap Value	9.2	23.8	23.8	17.8	13.2	13.2	9.4	Oct-01
Russell 1000 Value	7.8	25.2	25.2	17.6	11.2	13.0	8.6	Oct-01
eV US Large Cap Value Equity Net Median	8.1	26.8	26.8	18.4	12.1	13.1	9.1	Oct-01
eV US Large Cap Value Equity Net Rank	29	73	73	57	33	45	43	Oct-01

Top 10 Holdings	
CVS HEALTH CORP	3.5%
UNITEDHEALTH GROUP INC	3.4%
CISCO SYSTEMS INC	3.2%
MICROSOFT CORP	3.1%
SCHWAB (CHARLES) CORP	3.1%
WALMART INC	2.9%
EATON CORP PLC	2.8%
GOLDMAN SACHS GROUP INC (THE)	2.8%
CONOCOPHILLIPS	2.7%
MICROCHIP TECHNOLOGY INC	2.7%
Total	30.2%

Westwood Capit			
	Portfolio	Index	Portfolio
	Q4-21	Q4-21	Q3-21
Market Value			
Market Value (\$M)	31.8		29.1
Number Of Holdings	46	852	45
Characteristics			
Weighted Avg. Market Cap. (\$B)	265.1	167.3	228.9
Median Market Cap (\$B)	95.2	15.0	90.7
P/E Ratio	21.0	19.0	20.1
Yield	1.6	1.9	1.6
EPS Growth - 5 Yrs.	16.4	13.6	14.0
Price to Book	3.2	2.8	2.9
Sector Distribution			
Energy	8.3	4.5	8.5
Materials	2.1	3.9	0.0
Industrials	12.7	11.6	12.1
Consumer Discretionary	6.8	5.4	9.9
Consumer Staples	5.0	7.4	5.2
Health Care	15.5	18.2	16.0
Financials	21.5	20.9	20.0
Information Technology	12.5	10.3	12.5
Communication Services	6.3	7.4	7.4
Utilities	4.3	5.2	4.3
Real Estate	4.5	5.2	4.0

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#### Westfield Small/Mid Cap Growth | As of December 31, 2021

Account Information					
Account Name	Westfield Small/Mid Cap Growth				
Account Structure	Separate Account				
Investment Style	Active				
Inception Date	11/01/02				
Account Type	US Equity				
Benchmark	Russell 2500 Growth				
Universe	eV US Small-Mid Cap Growth Equity Net				

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
Westfield Small/Mid Cap Growth	2.9	16.2	16.2	28.2	20.6	16.2	14.2	Nov-02
Russell 2500 Growth	0.2	5.0	5.0	25.1	17.7	15.7	13.0	Nov-02
eV US Small-Mid Cap Growth Equity Net Median	2.6	12.8	12.8	27.8	20.6	16.0	12.8	Nov-02
eV US Small-Mid Cap Growth Equity Net Rank	45	40	40	47	50	45	21	Nov-02

Top 10 Holdings	
ATKORE INC	2.9%
DOUGLAS EMMETT INC	2.6%
AMERICAN FINANCIAL GROUP INC	2.6%
CATALENT INC	2.5%
ICON PLC	2.5%
ADVANCED DRAINAGE SYSTEMS INC	2.4%
HUBSPOT INC	2.4%
BIO-RAD LABORATORIES INC	2.3%
TREX CO INC	2.3%
FIVE BELOW INC	2.3%
Total	24.9%

Westfield Small	/Mid Cap Gr	owth Character	istics
	Portfolio	Index	Portfolio
	Q4-21	Q4-21	Q3-21
Market Value			
Market Value (\$M)	76.8		74.6
Number Of Holdings	61	1471	62
Characteristics			
Weighted Avg. Market Cap. (\$B)	13.1	8.4	12.3
Median Market Cap (\$B)	10.5	1.9	10.3
P/E Ratio	24.3	28.4	24.6
Yield	0.6	0.5	0.6
EPS Growth - 5 Yrs.	30.0	22.4	27.4
Price to Book	5.1	6.0	5.3
Sector Distribution			
Energy	1.5	2.0	1.3
Materials	4.5	3.2	3.8
Industrials	21.9	15.0	17.6
Consumer Discretionary	11.8	15.4	12.5
Consumer Staples	0.0	2.7	0.0
Health Care	20.3	22.4	25.9
Financials	8.2	5.7	7.3
Information Technology	22.6	28.2	24.5
Communication Services	2.8	2.2	2.6
Utilities	0.0	0.4	0.0

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#### Vaughan Nelson Small Cap Value | As of December 31, 2021

	Account Information
Account Name	Vaughan Nelson Small Cap Value
Account Structure	Separate Account
Investment Style	Active
Inception Date	1/01/16
Account Type	US Equity
Benchmark	Russell 2000 Value
Universe	eV US Small Cap Value Equity Net

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
Vaughan Nelson Small Cap Value	10.3	31.0	31.0	21.5	10.5		12.1	Jan-16
Russell 2000 Value	4.4	28.3	28.3	18.0	9.1	12.0	12.6	Jan-16
eV US Small Cap Value Equity Net Median	6.3	29.0	29.0	19.1	9.6	12.3	12.3	Jan-16
eV US Small Cap Value Equity Net Rank	5	42	42	23	37		51	Jan-16

Top 10 Holdings	
INSIGHT ENTERPRISES INC	3.5%
ELEMENT SOLUTIONS INC	3.5%
EXLSERVICE HOLDINGS INC	3.0%
SYNEOS HEALTH INC	2.9%
MOLINA HEALTHCARE INC.	2.8%
ASGN INC	2.6%
LPL FINANCIAL HOLDINGS INC	2.5%
PERFORMANCE FOOD GROUP CO	2.4%
CAPRI HOLDINGS LTD	2.4%
CHEMOURS CO (THE)	2.1%
Total	27.7%

Vaughan Nelso	n Small Cap	Value Characte	ristics
	Portfolio	Index	Portfolio
	Q4-21	Q4-21	Q3-21
Market Value			
Market Value (\$M)	67.5		61.0
Number Of Holdings	67	1449	66
Characteristics			
Weighted Avg. Market Cap. (\$B)	6.8	3.0	6.1
Median Market Cap (\$B)	4.8	1.1	4.6
P/E Ratio	19.7	14.2	17.8
Yield	1.0	1.7	1.0
EPS Growth - 5 Yrs.	17.8	14.3	16.6
Price to Book	2.7	1.8	2.6
Sector Distribution			
Energy	4.0	6.5	5.5
Materials	7.5	4.6	6.9
Industrials	24.6	15.2	23.9
Consumer Discretionary	8.1	8.0	8.4
Consumer Staples	5.6	3.0	5.0
Health Care	8.5	10.4	8.6
Financials	17.2	26.5	18.4
Information Technology	17.2	5.7	15.4
Communication Services	2.8	3.5	3.4
Utilities	2.7	5.0	2.8
Real Estate	0.0	11.7	0.0

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#### SSgA S&P 500 | As of December 31, 2021

	Account Information
Account Name	SSgA S&P 500
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	2/01/04
Account Type	US Equity
Benchmark	S&P 500
Universe	eV US Large Cap Equity Net

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
SSgA S&P 500	11.0	28.6	28.6	26.0	18.4	16.5	10.5	Feb-04
S&P 500	11.0	28.7	28.7	26.1	18.5	16.6	10.6	Feb-04
eV US Large Cap Equity Net Median	8.9	26.1	26.1	23.5	16.3	14.8	10.4	Feb-04
eV US Large Cap Equity Net Rank	19	28	28	36	35	28	47	Feb-04

Top 10 Holdings	
APPLE INC	6.9%
MICROSOFT CORP	6.3%
AMAZON.COM INC	3.6%
ALPHABET INC	2.2%
TESLA INC	2.1%
ALPHABET INC	2.0%
META PLATFORMS INC	2.0%
NVIDIA CORPORATION	1.8%
BERKSHIRE HATHAWAY INC	1.4%
UNITEDHEALTH GROUP INC	1.2%
Total	29.4%

SSgA	S&P 500 Char	acteristics	
	Portfolio	Index	Portfolio
	Q4-21	Q4-21	Q3-21
Market Value			
Market Value (\$M)	79.9		72.0
Number Of Holdings	506	504	505
Characteristics			
Weighted Avg. Market Cap. (\$B)	666.9	670.5	554.9
Median Market Cap (\$B)	34.5	34.6	30.7
P/E Ratio	26.2	26.2	25.5
Yield	1.3	1.3	1.4
EPS Growth - 5 Yrs.	19.9	19.8	18.5
Price to Book	4.9	4.9	4.5
Sector Distribution			
Energy	2.7	2.6	2.7
Materials	2.6	2.5	2.5
Industrials	7.8	7.7	8.0
Consumer Discretionary	12.5	13.1	12.4
Consumer Staples	5.9	6.3	5.8
Health Care	13.3	13.0	13.3
Financials	10.7	11.0	11.4
Information Technology	29.2	28.6	27.7
Communication Services	10.2	10.2	11.3
Utilities	2.5	2.4	2.4
Real Estate	2.7	2.7	2.6

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#### Baillie Gifford International Growth Fund | As of December 31, 2021

Account Information					
Account Name	<b>Baillie Gifford International Growth Fund</b>				
Account Structure	Mutual Fund				
Investment Style	Active				
Inception Date	5/01/09				
Account Type	Non-US Stock Developed				
Benchmark	MSCI ACWI ex USA				
Universe	eV ACWI ex-US All Cap Core Eq Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Baillie Gifford International Growth Fund	-4.6	-9.4	26.6	19.5	13.1	13.4	May-09
MSCI ACWI ex USA	1.8	7.8	13.2	9.6	7.3	8.2	May-09
MSCI EAFE	2.7	11.3	13.5	9.5	8.0	8.4	May-09
eV ACWI ex-US All Cap Core Eq Net Median	3.0	10.0	16.9	12.1	9.2	9.8	May-09
eV ACWI ex-US All Cap Core Eq Net Rank	99	99	1	1	2	2	May-09

Top 10 Holdings				
ASML HOLDING NV	7.6%			
FERRARI NV	5.3%			
MERCADOLIBRE INC	5.0%			
ADYEN N.V	4.9%			
TENCENT HOLDINGS LTD	4.7%			
KERING	4.6%			
MEITUAN DIANPING USD0.00001 A B CLASS ISIN KYG596691041	4.0%			
ZALANDO SE	3.5%			
SPOTIFY TECHNOLOGY S.A	3.4%			
GENMAB A/S	3.0%			
Total	46.1%			

Baillie Giffo	ord EAFE Fund C	haracteristics	
	Portfolio	Index	Portfolio
	Q4-21	Q4-21	Q3-21
Market Value			
Market Value (\$M)	39.3		41.1
Number Of Holdings	53	828	52
Characteristics			
Weighted Avg. Market Cap. (\$B)	129.4	85.5	125.6
Median Market Cap (\$B)	32.5	14.7	38.6
P/E Ratio	31.4	17.1	25.8
Yield	0.5	2.7	0.5
EPS Growth - 5 Yrs.	20.1	11.8	22.5
Price to Book	7.1	2.8	7.0
Sector Distribution			
Energy	0.0	3.4	0.0
Materials	2.4	7.2	2.8
Industrials	8.4	16.2	7.6
Consumer Discretionary	31.7	12.6	33.6
Consumer Staples	6.4	10.4	3.8
Health Care	12.5	12.9	13.5
Financials	7.5	17.0	7.3
Information Technology	21.2	9.7	20.7
Communication Services	8.8	4.4	9.1
Utilities	0.0	3.4	0.0
Real Estate	0.0	2.8	0.0

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# Austin Fire Fighters Relief and Retirement Fund Sanderson International Value | As of December 31, 2021

Account Information					
Account Name	Sanderson International Value				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	2/01/13				
Account Type	Non-US Stock Developed				
Benchmark	MSCI EAFE Value				
Universe	eV EAFE All Cap Value Net				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Sanderson International Value	1.3	7.4	9.5	6.3		5.4	Feb-13
MSCI EAFE Value	1.2	10.9	7.8	5.3	5.8	3.9	Feb-13
MSCI EAFE	2.7	11.3	13.5	9.5	8.0	6.5	Feb-13
eV EAFE All Cap Value Net Median	2.4	11.4	10.4	6.9	6.8	5.7	Feb-13
eV EAFE All Cap Value Net Rank	78	86	72	79		58	Feb-13

Top 10 Holdings	
SAMSUNG ELECTRONICS CO LTD	3.2%
DEUTSCHE POST AG	3.1%
CRH PLC	2.8%
UBS GROUP AG	2.7%
PING AN INSURANCE GROUP	2.7%
CASH - USD	2.5%
HOYA CORP	2.5%
COMPAGNIE DE SAINT GOBAIN SA	2.3%
NESTLE SA, CHAM UND VEVEY	2.3%
BRAMBLES LTD	2.2%
Total	26.5%

Sanderson int		le Characteristics Index	
	Portfolio		Portfolio
	Q4-21	Q4-21	Q3-21
Market Value			
Market Value (\$M)	53.1		52.4
Number Of Holdings	76	828	79
Characteristics			
Weighted Avg. Market Cap. (\$B)	64.6	85.5	65.7
Median Market Cap (\$B)	16.5	14.7	14.4
P/E Ratio	12.5	17.1	13.0
Yield	3.3	2.7	3.7
EPS Growth - 5 Yrs.	13.0	11.8	9.9
Price to Book	2.0	2.8	2.0
Sector Distribution			
Energy	1.0	3.4	1.0
Materials	8.4	7.2	8.2
Industrials	18.2	16.2	18.1
Consumer Discretionary	7.0	12.6	7.6
Consumer Staples	9.6	10.4	8.1
Health Care	10.6	12.9	12.3
Financials	25.0	17.0	26.4
Information Technology	8.2	9.7	7.4
Communication Services	7.7	4.4	6.9
Utilities	0.7	3.4	1.0
Real Estate	0.0	2.8	0.0

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#### Highclere International Small Cap | As of December 31, 2021

Account Information					
Account Name	Highclere International Small Cap				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	12/01/09				
Account Type	Non-US Stock Developed				
Benchmark	MSCI EAFE Small Cap				
Universe	eV EAFE Small Cap Equity Net				

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Highclere International Small Cap	-2.2	8.3	8.3	13.8	9.4	10.2	9.1	Dec-09
MSCI EAFE Small Cap	0.1	10.1	10.1	15.6	11.0	10.8	9.2	Dec-09
S&P EPAC Under USD2 Billion NR USD	-1.8	8.1	8.1	13.2	8.8	9.0	7.6	Dec-09
eV EAFE Small Cap Equity Net Median	0.5	12.7	12.7	15.6	11.2	11.4	10.4	Dec-09
eV EAFE Small Cap Equity Net Rank	87	77	77	70	80	76	64	Dec-09

Top 10 Holdings			
WATCHES OF SWITZERLAND GROUP PLC	1.3%		
AFREECATV CO LTD	1.2%		
QT GROUP OYJ	1.1%		
ULVAC INC	1.1%		
KNOW IT	1.1%		
G-7 HOLDINGS	1.0%		
ADVANCED WIRELESS SEMICONDUCTOR CO	1.0%		
EIKEN CHEMICAL	1.0%		
KOMICO LTD	0.9%		
SANWA HOLDINGS CORP	0.9%		
Total	10.6%		

Highclere International Small Cap Characteristics			
	Portfolio	Index	Portfolio
	Q4-21	Q4-21	Q3-21
Market Value			
Market Value (\$M)	55.1		56.3
Number Of Holdings	177	2371	177
Characteristics			
Weighted Avg. Market Cap. (\$B)	1.5	3.5	1.5
Median Market Cap (\$B)	1.0	1.5	1.0
P/E Ratio	16.8	16.0	17.7
Yield	2.0	2.3	1.9
EPS Growth - 5 Yrs.	9.5	9.1	7.6
Price to Book	2.6	2.4	2.4
Sector Distribution			
Energy	1.3	1.7	2.2
Materials	4.9	9.3	4.9
Industrials	22.1	23.4	22.1
Consumer Discretionary	15.2	12.6	15.1
Consumer Staples	6.2	5.4	5.9
Health Care	9.2	6.8	9.9
Financials	8.5	10.5	7.8
Information Technology	16.2	10.7	15.1
Communication Services	6.0	4.6	5.3
Utilities	0.7	3.0	0.6
Real Estate	8.7	12.1	8.9

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# Austin Fire Fighters Relief and Retirement Fund SSgA MSCI EAFE Fund | As of December 31, 2021

Account Information							
Account Name	SSgA MSCI EAFE Fund						
Account Structure	Commingled Fund						
Investment Style	Passive						
Inception Date	2/01/13						
Account Type	Non-US Stock Developed						
Benchmark	MSCI EAFE						
Universe	eV EAFE Core Equity Net						

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
SSgA MSCI EAFE Fund	2.7	11.4	11.4	13.9	9.8		6.8	Feb-13
MSCI EAFE	2.7	11.3	11.3	13.5	9.5	8.0	6.5	Feb-13
eV EAFE Core Equity Net Median	2.4	12.5	12.5	14.6	10.2	9.0	7.3	Feb-13
eV EAFE Core Equity Net Rank	45	57	57	62	56		62	Feb-13

Top 10 Holdings	
NESTLE SA, CHAM UND VEVEY	2.2%
ASML HOLDING NV	2.0%
ROCHE HOLDING AG	1.7%
LVMH MOET HENNESSY LOUIS VUITTON SE	1.3%
TOYOTA MOTOR CORP	1.1%
NOVO NORDISK 'B'	1.1%
NOVARTIS AG	1.1%
ASTRAZENECA PLC	1.0%
SONY GROUP CORPORATION	0.9%
SAP SE	0.8%
Total	13.3%

SSgA MSCI EAFE Fund Characteristics							
	Portfolio	Index	Portfolio				
	Q4-21	Q4-21	Q3-21				
Market Value							
Market Value (\$M)	43.1		32.2				
Number Of Holdings	846	828	848				
Characteristics							
Weighted Avg. Market Cap. (\$B)	85.7	85.5	80.0				
Median Market Cap (\$B)	14.6	14.7	14.1				
P/E Ratio	17.2	17.1	18.0				
Yield	2.7	2.7	2.7				
EPS Growth - 5 Yrs.	12.2	11.8	10.3				
Price to Book	2.9	2.8	2.8				
Sector Distribution							
Energy	3.2	3.4	3.5				
Materials	7.2	7.2	7.3				
Industrials	15.5	16.2	15.7				
Consumer Discretionary	11.9	12.6	12.6				
Consumer Staples	9.9	10.4	10.2				
Health Care	12.2	12.9	12.6				
Financials	16.3	17.0	17.2				
Information Technology	9.3	9.7	9.7				
Communication Services	4.2	4.4	4.7				
Utilities	3.3	3.4	3.3				
Real Estate	2.7	2.8	2.9				

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# Austin Fire Fighters Relief and Retirement Fund DFA Emerging Markets Value | As of December 31, 2021

Account Information						
Account Name	DFA Emerging Markets Value					
Account Structure	Mutual Fund					
Investment Style	Active					
Inception Date	12/01/09					
Account Type	Non-US Stock Emerging					
Benchmark	MSCI Emerging Markets Value NR USD					
Universe	eV Emg Mkts All Cap Value Equity Net					

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
DFA Emerging Markets Value	0.4	12.4	12.4	8.2	8.3	4.6	3.3	Dec-09
MSCI Emerging Markets Value NR USD	-0.4	4.0	4.0	7.1	7.0	3.3	2.9	Dec-09
MSCI Emerging Markets	-1.3	-2.5	-2.5	10.9	9.9	5.5	4.6	Dec-09
eV Emg Mkts All Cap Value Equity Net Median	-0.1	3.1	3.1	10.6	9.2	5.5	4.9	Dec-09
eV Emg Mkts All Cap Value Equity Net Rank	26	16	16	84	67	71	90	Dec-09

Top 10 Holdings					
RELIANCE INDUSTRIES LTD	2.9%				
CHINA CONSTRUCTION BANK CORP	2.3%				
SK HYNIX INC	1.5%				
PING AN INSURANCE GROUP	1.3%				
HON HAI PRECISION INDUSTRY CO LTD	1.2%				
ALIBABA GROUP HOLDING LTD	1.2%				
INDUSTRIAL & COMMERCIAL BANK OF CHINA LTD	1.1%				
BAIDU INC	1.0%				
VALE SA	1.0%				
KB FINANCIAL GROUP INC	0.9%				
Total	14.4%				

DFA Emerging Markets Value Characteristics								
	Portfolio	Index	Portfolio					
	Q4-21	Q4-21	Q3-21					
Market Value								
Market Value (\$M)	36.1		35.9					
Number Of Holdings	3238	906	3216					
Characteristics								
Weighted Avg. Market Cap. (\$B)	35.5	69.6	36.2					
Median Market Cap (\$B)	0.5	6.7	0.5					
P/E Ratio	7.7	9.0	8.2					
Yield	3.7	3.7	3.8					
EPS Growth - 5 Yrs.	14.4	12.4	14.6					
Price to Book	1.7	2.1	1.7					
Sector Distribution								
Energy	10.3	6.9	11.2					
Materials	14.7	11.1	15.0					
Industrials	9.0	5.6	9.0					
Consumer Discretionary	9.5	11.8	8.7					
Consumer Staples	3.0	4.7	2.9					
Health Care	2.6	2.5	2.6					
Financials	27.3	26.3	26.5					
Information Technology	13.4	18.8	12.3					
Communication Services	3.3	5.7	3.3					
Utilities	1.7	3.7	2.0					
Real Estate	5.0	2.8	5.5					

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# Austin Fire Fighters Relief and Retirement Fund TT Emerging Markets Equity | As of December 31, 2021

Account Information							
Account Name	TT Emerging Markets Equity						
Account Structure	Commingled Fund						
Investment Style	Active						
Inception Date	4/01/19						
Account Type	Non-US Stock Emerging						
Benchmark	MSCI Emerging Markets						
Universe	eV Emg Mkts Equity Net						

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
TT Emerging Markets Equity	-3.0	-1.0	-1.0				9.7	Apr-19
MSCI Emerging Markets	-1.3	-2.5	-2.5	10.9	9.9	5.5	8.2	Apr-19
eV Emg Mkts Equity Net Median	-0.9	0.4	0.4	12.7	10.2	6.1	9.6	Apr-19
eV Emg Mkts Equity Net Rank	78	58	58				50	Apr-19

Top 10 Holdings	
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	9.5%
SAMSUNG ELECTRONICS CO LTD	3.8%
SAMSUNG ELECTRONICS CO LTD	3.7%
ALIBABA GROUP HOLDING LTD	3.4%
TENCENT HOLDINGS LTD	3.4%
H D F C BANK LTD	2.8%
DELTA ELECTRONICS INC	2.6%
SK HYNIX INC	2.5%
CEMEX SAB DE CV	2.5%
ICICI BANK	2.4%
Total	36.6%

TT Emerging Markets Equity Characteristics							
	Portfolio	Index	Portfolio				
	Q4-21	Q4-21	Q3-21				
Market Value							
Market Value (\$M)	38.7		39.9				
Number Of Holdings	65	1413	66				
Characteristics							
Weighted Avg. Market Cap. (\$B)	166.2	139.7	166.9				
Median Market Cap (\$B)	18.2	7.2	8.0				
P/E Ratio	13.0	12.3	10.6				
Yield	1.7	2.4	2.7				
EPS Growth - 5 Yrs.	19.8	15.8	27.0				
Price to Book	2.8	2.8	3.0				
Sector Distribution							
Energy	4.2	5.6	0.0				
Materials	14.6	8.8	11.2				
Industrials	5.9	5.0	4.8				
Consumer Discretionary	7.7	13.5	24.0				
Consumer Staples	2.9	5.8	1.8				
Health Care	1.5	4.1	2.3				
Financials	14.8	19.2	10.5				
Information Technology	33.0	23.0	19.8				
Communication Services	5.6	10.5	8.6				
Utilities	1.7	2.4	0.9				
Real Estate	1.5	1.9	6.9				

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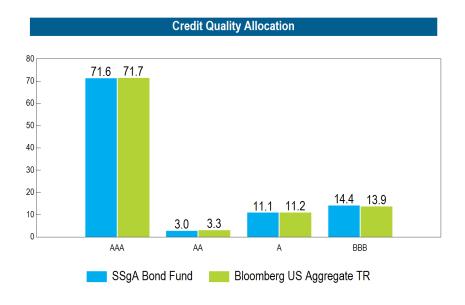


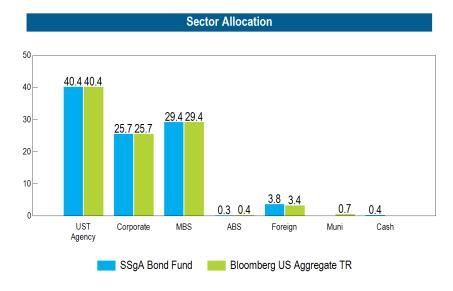
# Austin Fire Fighters Relief and Retirement Fund SSgA Bond Fund | As of December 31, 2021

	Account Information						
Account Name	SSgA Bond Fund						
Account Structure	Commingled Fund						
Investment Style	Passive						
Inception Date	1/01/04						
Account Type	US Fixed Income Investment Grade						
Benchmark	Bloomberg US Aggregate TR						
Universe	eV US Core Fixed Inc Net						

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 10 (%)	O Yrs (%)	S.I. (%)	S.I. Date
SSgA Bond Fund	0.0	-1.6	4.8	3.5	2.8	3.9	Jan-04
Bloomberg US Aggregate TR	0.0	-1.5	4.8	3.6	2.9	4.0	Jan-04
eV US Core Fixed Inc Net Median	-0.1	-1.5	<i>5.2</i>	3.8	3.2	4.2	Jan-04
eV US Core Fixed Inc Net Rank	33	55	78	76	84	77	Jan-04

SSgA Bond Fund Characteristics vs. Bloomberg US Aggregate TR									
Portfolio Index Portfolio									
	Q4-21	Q4-21	Q3-21						
Fixed Income Characteristics	Fixed Income Characteristics								
Yield to Maturity	1.8	1.7	1.6						
Average Duration	6.8	6.8	6.7						
Average Quality	AA	AA	AA						
Weighted Average Maturity	8.6	13.8	8.4						





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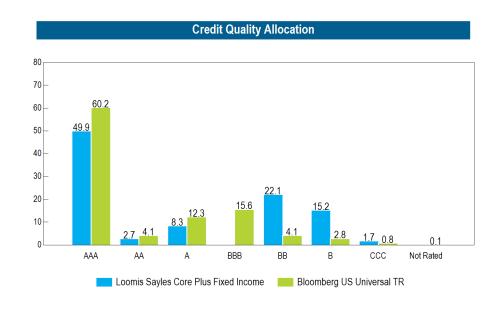


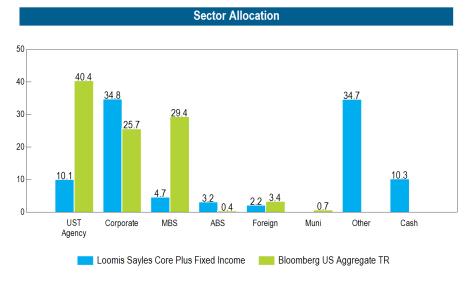
## Loomis Sayles Core Plus Fixed Income | As of December 31, 2021

	Account Information
Account Name	Loomis Sayles Core Plus Fixed Income
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	7/01/15
Account Type	US Fixed Income Investment Grade
Benchmark	Bloomberg US Aggregate TR
Universe	eV US Core Plus Fixed Inc Net

Portfolio Performance Summary							
	QTD	1 Yr	3 Yrs	5 Yrs 1	0 Yrs	S.I.	S.I.
	(%)	(%)	(%)	(%)	(%)	(%)	Date
Loomis Sayles Core Plus Fixed Income	-0.2	-1.1	6.4	4.8		4.3	Jul-15
Bloomberg US Aggregate TR	0.0	-1.5	4.8	3.6	2.9	3.3	Jul-15
eV US Core Plus Fixed Inc Net Median	0.0	-0.4	5.9	4.4	3.9	4.0	Jul-15
eV US Core Plus Fixed Inc Net Rank	85	80	35	19		27	Jul-15

Loomis Sayles Core Plus Fixed Income Characteristics vs. Bloomberg US Aggregate TR								
Portfolio Index Portfolio								
	Q4-21	Q4-21	Q3-21					
Fixed Income Characteristics								
Yield to Maturity	2.6	1.7	2.5					
Average Duration		6.8	5.6					
Average Quality	BBB	AA	BBB					
Weighted Average Maturity	7.8	13.8	7.4					





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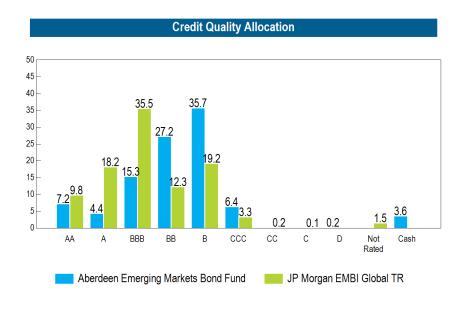


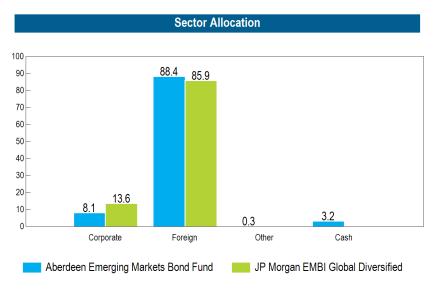
#### Aberdeen Emerging Markets Bond Fund | As of December 31, 2021

	Account Information						
Account Name	Aberdeen Emerging Markets Bond Fund						
Account Structure	Commingled Fund						
Investment Style	Active						
Inception Date	12/01/14						
Account Type	International Emerging Market Debt						
Benchmark	JP Morgan EMBI Global Diversified						
Universe							

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Aberdeen Emerging Markets Bond Fund	-1.6	-4.0	5.1	4.0		3.6	Dec-14
JP Morgan EMBI Global Diversified	-0.4	-1.8	5.9	4.7	5.3	4.5	Dec-14
50% JPM EMBI GD, 25% JPM GBI EM GD, 25% CMBI Broad	-1.2	-3.3	5.1	4.4	4.4	3.8	Dec-14

Aberdeen Emerging Markets Bond Fund Characteristics vs. JP Morgan EMBI Global TR									
Portfolio Index Portfolio									
	Q4-21	Q4-21	Q3-21						
Fixed Income Characteristics									
Yield to Maturity	6.8	4.4	6.1						
Average Duration	7.0	8.1	6.9						
Average Quality	ВВ	BBB	ВВ						
Weighted Average Maturity	12.1	13.0	11.9						





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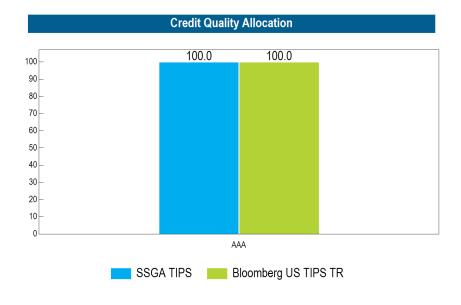


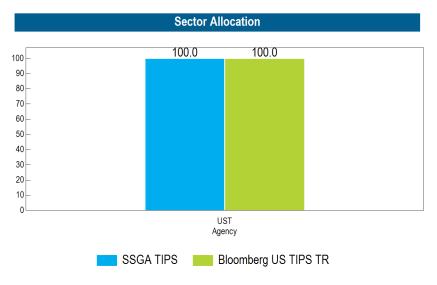
## SSGA TIPS | As of December 31, 2021

	Account Information
Account Name	SSGA TIPS
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	8/01/14
Account Type	US Inflation Protected Fixed
Benchmark	Bloomberg US TIPS TR
Universe	eV US TIPS / Inflation Fixed Inc Net

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
SSGA TIPS	2.3	5.9	5.9	8.4	5.3		3.6	Aug-14
Bloomberg US TIPS TR	2.4	6.0	6.0	8.4	5.3	3.1	3.7	Aug-14
eV US TIPS / Inflation Fixed Inc Net Median	2.1	5.7	5.7	8.3	5.4	3.1	3.6	Aug-14
eV US TIPS / Inflation Fixed Inc Net Rank	21	36	36	49	60		45	Aug-14

SSGA TIPS Characteristics									
vs. Bloomberg US TIPS TR									
	Portfolio	Index	Portfolio						
	Q4-21	Q4-21	Q3-21						
Fixed Income Characteristics									
Yield to Maturity	1.3	1.2	1.2						
Average Duration	4.4	7.5	5.5						
Average Quality	AAA	AAA	AAA						
Weighted Average Maturity	8.0	8.0	8.2						





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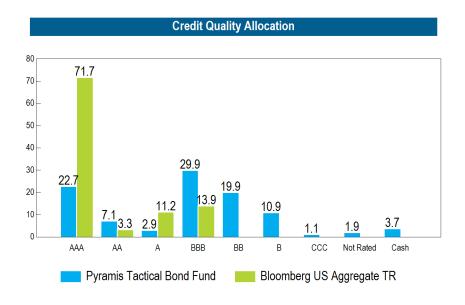


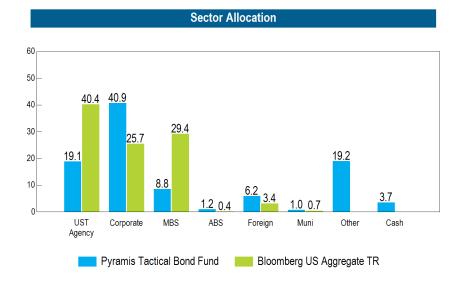
# Austin Fire Fighters Relief and Retirement Fund Pyramis Tactical Bond Fund | As of December 31, 2021

Account Information						
Account Name	Pyramis Tactical Bond Fund					
Account Structure	Commingled Fund					
Investment Style	Active					
Inception Date	8/01/13					
Account Type	US Fixed Income High Yield					
Benchmark	Bloomberg US Aggregate TR					
Universe	eV US Core Plus Fixed Inc Net					

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Pyramis Tactical Bond Fund	0.6	1.2	1.2	7.8	5.6		5.1	Aug-13
Bloomberg US Aggregate TR	0.0	-1.5	-1.5	4.8	3.6	2.9	3.2	Aug-13
eV US Core Plus Fixed Inc Net Median	0.0	-0.4	-0.4	5.9	4.4	3.9	3.9	Aug-13
eV US Core Plus Fixed Inc Net Rank	5	8	8	2	3		2	Aug-13

Pyramis Tactical Bond Fund Characteristics vs. Bloomberg US Aggregate TR					
Portfolio Index Portfolio					
	Q4-21	Q4-21	Q3-21		
Fixed Income Characteristics					
Yield to Maturity	3.1	1.7	3.0		
Average Duration	5.3	6.8	6.5		
Average Quality	BBB	AA	BBB		
Weighted Average Maturity	10.0	13.8	11.6		





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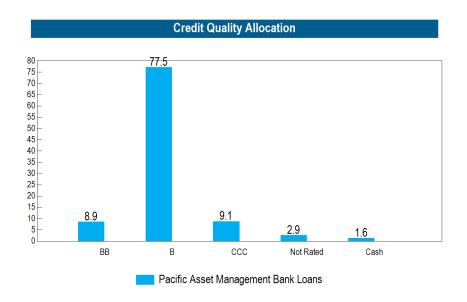


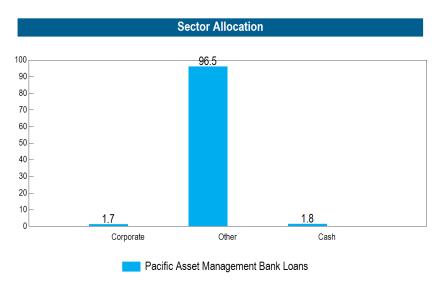
## Pacific Asset Management Bank Loans | As of December 31, 2021

Account Information					
Account Name	Pacific Asset Management Bank Loans				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	12/01/19				
Account Type	US Fixed Income				
Benchmark	Credit Suisse Leveraged Loans				
Universe	Bank Loan MStar MF				

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs 1 (%)	0 Yrs (%)	S.I. (%)	S.I. Date
Pacific Asset Management Bank Loans	0.9	5.2	5.2				4.2	Dec-19
Credit Suisse Leveraged Loans	0.7	5.4	5.4	5.4	4.3	4.8	4.7	Dec-19
Bank Loan MStar MF Median	0.6	4.6	4.6	4.8	<i>3.7</i>	4.2	3.8	Dec-19
Bank Loan MStar MF Rank	10	30	30				35	Dec-19

Pacific Asset Management Bank Loans Characteristics					
	Portfolio	Portfolio			
	Q4-21	Q3-21			
Fixed Income Characteristics					
Yield to Maturity	4.5	4.4			
Average Duration	0.3	0.3			
Average Quality	В	В			
Weighted Average Maturity	4.8	4.8			





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## Clarion Partners Lion Properties Fund | As of December 31, 2021

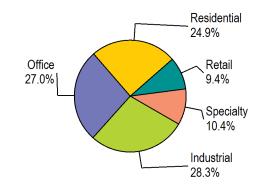
Account Information					
Account Name	Clarion Partners Lion Properties Fund				
Account Structure	Commingled Fund				
Investment Style	Active				
Inception Date	4/01/05				
Account Type	Real Estate				
Benchmark	NCREIF ODCE Equal Weighted (Net)				
Universe					

Allocation as of December 31, 2021	
South 15.4% North 2.6% East 32.1%	

**Geographic Diversification** 

Portfolio Performance Summary								
	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Clarion Partners Lion Properties Fund	7.6	22.4	22.4	9.7	9.2	10.5	6.7	Apr-05
NCREIF ODCE Equal Weighted (Net)	7.4	21.9	21.9	8.9	8.2	9.7	7.0	Apr-05





Clarion Partners Lion Properties Fund characteristics are as of September 30, 2021.

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## Fee Summary | As of December 31, 2021

	Investment Expense Ar	nalysis		
	As Of December 31, 2	021		
Name	Market Value	% of Portfolio	Estimated Fee	Estimated Fee Value
Westwood Capital Large Cap Value	\$31,768,443	3.6%	0.50%	\$158,842
Westfield Small/Mid Cap Growth	\$76,787,068	8.8%	0.39%	\$299,470
Vaughan Nelson Small Cap Value	\$67,460,465	7.7%	0.88%	\$593,453
SSgA S&P 500	\$79,936,445	9.1%	0.01%	\$10,494
Baillie Gifford International Growth Fund	\$39,265,842	4.5%	0.61%	\$239,522
Sanderson International Value	\$53,113,986	6.1%	0.78%	\$414,627
Highclere International Small Cap	\$55,065,077	6.3%	1.11%	\$610,618
SSgA MSCI EAFE Fund	\$43,061,040	4.9%	0.06%	\$25,837
DFA Emerging Markets Value	\$36,056,126	4.1%	0.41%	\$147,830
TT Emerging Markets Equity	\$38,694,744	4.4%	0.80%	\$309,558
SSgA Bond Fund	\$95,906,849	10.9%	0.03%	\$28,772
Loomis Sayles Core Plus Fixed Income	\$60,684,499	6.9%	0.28%	\$171,711
Aberdeen Emerging Markets Bond Fund	\$78,002,609	8.9%	0.45%	\$351,012
SSGA TIPS	\$61,999,875	7.1%	0.03%	\$18,600
Pyramis Tactical Bond Fund	\$38,465,272	4.4%	0.34%	\$130,782
Pacific Asset Management Bank Loans	\$20,151,741	2.3%	0.41%	\$82,622
Total	\$876,420,081	100.0%	0.41%	\$3,593,749

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## **4Q21 Asset Transfers Review**



**Asset Transfers Review** 

## Completed Asset Transfers in 4Q21

Target Portfolio	Action	Source	Amount	Date
Aberdeen EMD	Rebalance	Cash	\$20 mm	October 2021
Sanderson International Value	Rebalance	Cash	\$10 mm	December 2021

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**Asset Study Comparison: 2022 vs. 2021 Projections** 



Asset Study Comparison: 2022 vs. 2021 Projections

#### **Asset Allocation Review Introduction**

- The purpose of this review is to ensure Austin Fire Fighters' asset allocation targets are still appropriate moving forward.
- The backbone of the analysis is based on a modeling technique called Mean Variance Optimization (MVO).
- MVO analysis seeks to predict what the long term expected return will be based on a selected asset mix.
- MVO is a very useful tool, but it is imperfect. Qualitative analysis must be applied when evaluating the forecasts.
- In the first quarter of each year, Meketa Investment Group typically prepares its capital market assumptions which serve as the backbone of the MVO analysis.
- The capital market assumptions seek to predict individual asset class returns and volatility over the next twenty year period.
- They do not predict returns or volatility in any given single year.

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Asset Study Comparison: 2022 vs. 2021 Projections

## **Building our forecasts**

- Each return assumption is based on the most important factors that drive returns for that asset class.
- The common components are income, growth and valuation.

Asset Class Category	Major Factors
Equities	Dividend Yield, GDP Growth, Valuation
Bonds	Yield to Worst, Default Rate, Recovery Rate
Real Estate	Cap Rate, Income Yield, Growth

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Asset Study Comparison: 2022 vs. 2021 Projections

## **Current Asset Allocation Policy**

	Target (%)	Ranges (%)
Public US Equity	20	13-27
Public International Equity	22	15-29
Private Equity <sup>1</sup>	15	5-25
Investment Grade Bonds	13	10-20
TIPS	5	0-10
High Yield/Bank Loans	5	0-10
Emerging Market Debt	7	0-10
Core Real Estate	5	0-10
Value Add Real Estate	5	0-10
Natural Resources	3	0-10
Total	100	

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<sup>&</sup>lt;sup>1</sup> Fund of funds.



Asset Study Comparison: 2022 vs. 2021 Projections

## **Annual Asset Study**

• The following table illustrates the changes in expected return for each sub asset class that the Trust is invested in.

## Expected Return<sup>1</sup> Assumptions

	2021 Study Return Assumptions (%)	2022 Study Return Assumptions (%)	Return Difference (%)	Notes
Public U.S. Equity	6.8	6.8	0.0	Higher prices, offset by higher earnings growth
Public International Equity	7.6	8.0	+0.4	Lower prices, but lower earnings growth
Private Equity Fund of Funds	8.0	8.6	+0.6	Higher earnings growth expected
Investment Grade Bonds	1.8	2.4	+0.6	Higher yields
TIPS	1.8	2.4	+0.6	Higher inflation exp. and higher real yields
High Yield/Bank Loans	4.1	4.2	+0.1	Higher yields partly offset by tighter spreads
Emerging Market Debt	3.8	4.4	+0.6	Higher yields
Core Real Estate	5.5	6.1	+0.6	Higher income expectations
Value-Add Real Estate	7.7	8.1	+0.4	Higher prices but higher income expectations
Private Natural Resources	8.3	8.5	+0.2	Higher expected income
Austin Fire's 20 Year Expected Return	6.75%	6.87%	+0.12%	

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<sup>&</sup>lt;sup>1</sup> Twenty-year annualized return assumptions.



Asset Study Comparison: 2022 vs. 2021 Projections

## **Expected Risk Assumptions**

- There have been minimal changes in our expected standard deviation assumptions.
- Our expectations are based on historical 15-year averages, with subjective adjustments.

## Expected Risk Assumptions<sup>1</sup>

	2021 Study Risk Assumptions (%)	2022 Study Risk Assumptions (%)	Risk Difference (%)
Public Domestic Equity	18.0	18.0	-
Public International Equity	22.0	22.0	-
Private Equity Fund of Funds	24.0	24.0	-
Investment Grade Bonds	4.0	4.0	-
TIPS	7.0	7.0	-
High Yield/Bank Loans	10.0	11.0	+1.0
Emerging Market Debt	12.5	12.5	-
Core Real Estate	12.0	12.0	-
Value-Add Real Estate	20.0	20.0	-
Private Natural Resources	23.0	24.0	+1.0
Austin Fire's 20 Year Exp. Stand. Dev	13.6%	13.6%	

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<sup>&</sup>lt;sup>1</sup> Twenty-year annualized standard deviation assumptions.



Asset Study Comparison: 2022 vs. 2021 Projections

### Summary

- Return expectations for nearly all assets increased, because:
  - Higher yields in fixed income result in higher forward looking return expectations.
  - Lower valuations for international public equities more than offset the lower earnings growth expectations and result in higher forward looking return expectations.
- Risk expectations remained the same for all asset classes except bank loans.

## 2021 vs. 2022 Asset Study<sup>1</sup> Comparison

	Expectations based on 2021 Asset Study (%)	Expectations based on 2022 Asset Study (%)	Difference (%)
Expected Return	6.75%	6.87%	+0.12%
Expected Standard Deviation	13.6%	13.6%	0.0

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<sup>&</sup>lt;sup>1</sup> Twenty-year annualized assumptions.



## **Thoughts**

Asset Study Comparison: 2022 Projections vs. 2021 Projections

## "Traditional" Asset Mixes (For Context)

	60/40 (%)	70/30 (%)	80/20 (%)	90/10 (%)
Global Equity	60	70	80	90
Investment Grade Bonds	40	30	20	10
20 YR Expected Return	5.6%	6.0%	6.4%	6.8%
20 YR Standard Deviation	11.0%	12.7%	14.5%	16.2%

• Return expectations make it increasingly more difficult for Trustees to adopt an asset allocation policy that models to a long-term return above 7.0%.

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<sup>&</sup>lt;sup>1</sup> Based on 2022 Asset Study, global equity consists of 50% U.S. equity, 35% developed international equity, and 15% emerging market equity.

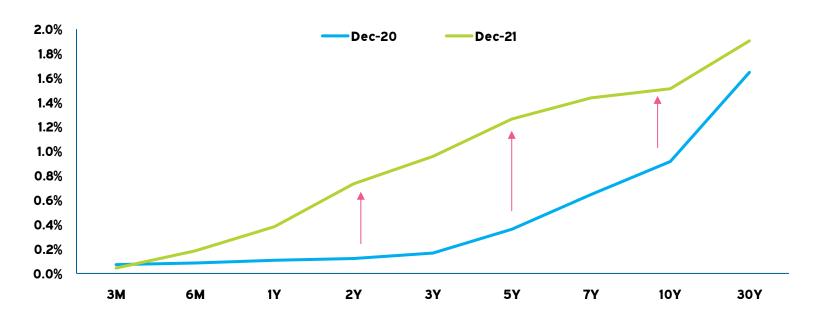


#### Asset Study Comparison: 2022 Projections vs. 2021 Projections

### **Rising Interest Rates**

- The US Treasury yield curve steepened during 2021, as concerns about inflation battled with the demand for safe-haven assets (e.g., Treasuries) and Federal Reserve polices designed to maintain low rates (e.g., the quantitative easing program).
- The increase in rates manifested itself at the middle and longer end of the curve.

#### US Yield Curve

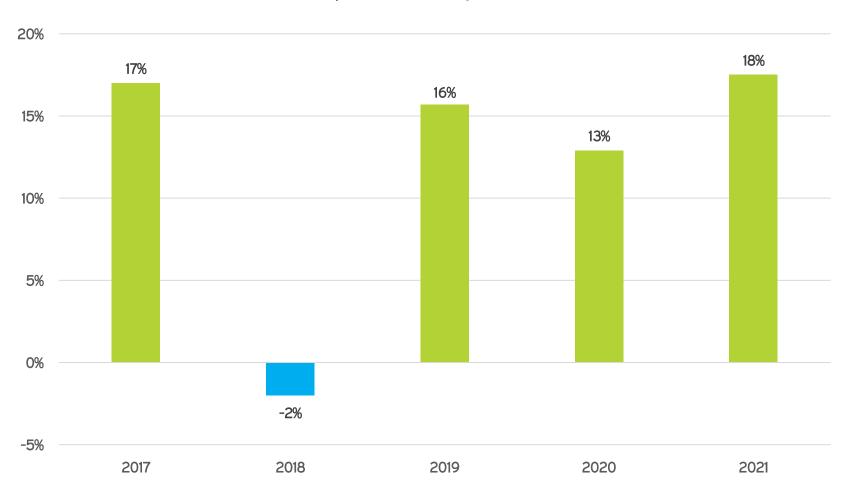


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<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of December 31, 2021.

## Asset Study Comparison: 2022 Projections vs. 2021 Projections

## Keep Recent History in Mind



• The plan has experienced strong returns (in excess of actuarial target) in four of the last five calendar years.



Asset Study Comparison: 2022 Projections vs. 2021 Projections

## What Can/Should You Do?

- Keep the long term in mind.
- Recognize the goal is a long-term return over your actuarial target (not every single year).
- Trust the long term asset allocation.
- Rebalance
- Increase risk assets when expectations are higher.

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#### Asset Study Comparison: 2022 Projections vs. 2021 Projections

## Other Mixes (Conversation Starter)

	Defensive (%)	Target (%)	Merge NR into PE (%)	12/31/21 (%)	Aggressive (%)
Public US Equity	18	20	20	20	23
Public International Equity	20	22	22	21	23
Private Equity	15	15	18	20	18
Investment Grade Bonds	15	13	13	12	10
TIPS	6	5	5	5	4
High Yield/Bank Loans	5	5	5	5	4
Emerging Market Debt	6	7	7	6	6
Core Real Estate	7	5	5	6	5
Value Add Real Estate	5	5	5	2	5
Natural Resources	3	3	0	3	2
20 Year Expected Return	6.7%	6.9%	6.9%	7.0%	7.1%
20 Year Expected Standard Deviation	13.0%	13.6%	13.8%	14.1%	14.6%
Sharpe Ratio	0.39	0.38	0.37	0.37	0.37

• Repositioning the portfolio more defensively or more aggressively does not meaningfully alter long-term expectations.

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<sup>&</sup>lt;sup>1</sup> Fund of funds.

**Red-lined Draft Investment Policy Statement** 

Revised June 2021 February 2022

**Statement of Investment Policies and Objectives** 

for

**Austin Fire Fighters Relief and Retirement Fund** 

## Table of Contents

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## Statement of Investment Policies and Objectives forAustin Fire Fighters Relief and Retirement Fund

Original Adoption Date: 12/10/2002

Revised: 12/12/2006 Revised: 6/29/2009 Revised: 10/25/2010 Revised: 8/24/2012 Revised: 9/16/2014 Revised: 2/11/2016 Revised: 2/26/2018 Revised: 6/28/2021 Revised: 2/28/2022

#### I. STATEMENT OF POLICY

#### **Purpose**

This document is the official policy governing the investment practices of the Austin Fire Fighters Relief and Retirement Fund (the "Fund"). These policies and objectives (the "Policy") have been adopted by the Board of Trustees of the Fund (the "Board"), which has the fiduciary duty of overseeing Fund investments. The Policy is not to be deviated from by any responsible party without the prior written permission of the Board. All previous Fund investment policies and objectives are superseded by this document. Any revisions to this document will be promptly supplied to the appropriate parties in written format.

#### **Investment Goals**

The purpose of the Fund is to accumulate the financial reserves necessary to provide for the retirement pension benefits and other benefits set forth in the Fund's governing statute (e.g., COLAs) for eligible members of the Fund and their beneficiaries. A primary investment goal of the Fund is to emphasize consistency of growth in a manner that protects the Fund from excessive volatility in market value from year to year, while achieving its performance objective over a long-term horizon.

The Board, with consultation, advice, and assistance from the investment consultant, will use the Fund's asset allocation as the primary tool to achieve this goal. As this is a long-term projection and investments are subject to short-term volatility, the main investment review focus of the Board will be to emphasize total return of the Fund over a long-term time horizon. Each manager selected by the Board is expected to maintain a consistent philosophy and style, perform well versus others utilizing the same style, add incremental value after costs, and provide investment management in compliance with this document and the manager's contract with the Fund or other operating documents.

#### II. INVESTMENT OBJECTIVES

The primary objective of the Fund is to provide sufficient return and liquidity to pay the benefit obligations of the Fund on a timely and regular basis. The Fund is a permanent one and there is currently no expectation of need for significant liquidity from the Fund's portfolio. The Fund shall be considered a total return fund, with appropriate recognition given to both current income and capital appreciation. The Board accepts the risks associated with investing in public and private capital markets (market risks), but will minimize wherever possible those risks for which the Fund is unlikely to be compensated (non-market or diversifiable risks). The risk and return investment objectives of the Fund are set forth below and should strive to be achieved in a manner consistent with the goals stated in Section I above.

#### A. Risk Objectives

- To accept the minimum level of risk required to achieve the Fund's return objective as stated immediately below.
- To minimize the likelihood of experiencing a loss over any full market cycle.
- To use diversification to minimize exposure to company and industry-specific risks in the aggregate investment portfolio.

#### **B.** Return Objective

• To manage the Fund's assets so as to achieve a high likelihood of attaining a 7.3% nominal return over long-term time horizon.

#### C. Performance Objective

To manage the Fund's assets so as to achieve a high likelihood of outperforming
the total return of an index composed of a mix of asset class benchmarks over a
market cycle. The benchmarks used for each asset class, as well as the mix of such
benchmarks to determine the Fund's composite index, will be determined by the
Board and set forth in its Operating Procedures.

#### **III. INVESTMENT CONSTRAINTS**

#### A. Legal and Regulatory

The Board intends that the assets of the Fund at all times are invested in accordance with applicable federal and Texas law and regulations, including its governing statute, its governing instruments, and applicable fiduciary standards. The Board will retain legal counsel when appropriate to review contracts and provide advice with respect to applicable statutes and regulations.

#### **B.** Time Horizon

The Fund will be managed on a going-concern basis. The assets of the Fund will be invested with a long-term horizon (twenty years or more), consistent with the participant demographics and the purpose of the Fund.

#### C. Liquidity

The Board intends to maintain sufficient liquidity to meet at least three years of anticipated beneficiary payments. To this end, the Board intends to invest no more than 40% of the Fund's assets in illiquid vehicles. Illiquid vehicles are defined as those vehicles that do not allow withdrawals to occur on at least a quarterly basis.

#### **D.** Over-Concentration

The securities representing equity of any one company shall not exceed 6% of the market value of the Fund. Fixed income securities of any one corporation shall be limited to 6%, at market, of the Fund.

#### IV. ALLOCATION OF INVESTMENT RESPONSIBILITIES

#### A. Board of Trustees

The Board has the fiduciary responsibility for managing the investment process. In fulfilling this responsibility, the Board will establish and maintain investment policies and objectives. Within this framework, the Board will select, contract with, monitor, and evaluate the investment consultant, investment managers, bank custodian, and other parties to ensure that actual results meet objectives.

#### B. Fund Staff

The Staff of the Fund is responsible for oversight and management of the day-to-day operations of the Fund. This includes, but is not limited to, oversight of Fund policies and procedures, working closely with the investment consultant and investment managers, executing and reconciling all private market cash flows for the Fund, oversight of budget, oversight of manager fee payment and reconciliation, Board meeting preparation and coordination. Staff is responsible for direct communication with Fund participants related to all retirement calculations.

#### C. Investment Consultant

The investment consultant's duty is to render competent, professional advice and assistance and to work with the Board with respect to the investment process. This includes meeting at least quarterly with the Board to provide perspective as to the Fund's goals, and quarterly analysis of the Fund's investments.structure and the investment management team as well as the progress being made in fulfilling each. The consultant will advise, consult, and work with the Board to develop and maintain a properly diversified portfolio.

The investment consultant will perform its duties and obligations to the Board in conformance with generally accepted industry standards and its contract with the Fund.

Fund allocation and performance will be regularly reviewed and recommendations will be made as appropriate. The consultant will assist the Board in investment manager selection, when needed, and will promptly inform the Board and discuss the impact of material changes taking place within any current manager's organization and/or investment process. Within this process, the investment consultant assumes fiduciary responsibility for advice given regarding the management of the investment process.

#### **D.** Investment Managers

The investment managers for separately managed accounts will construct and manage investment portfolios consistent with the investment philosophy and disciplines they were hired to implement and which are specified in this document and in their respective investment management agreement (IMA) they execute with the Fund. Investment managers will select specific securities, buy and sell such securities, and manage the investment portfolio within their guidelines. The Board also believes that investment decisions are best made when not restricted by excessive procedure. Therefore, full discretion is delegated to the investment managers to carry out the investment of the respective portfolios within stated guidelines.

The Board may also invest in pooled investment vehicles or private market investment vehicles. The governing instruments of these vehicles should specify the applicable investment philosophy and disciplines and provide the investment guidelines for the investment.

#### E. Custodian Bank

The custodian bank will hold all cash and securities, and will regularly value, list and summarize these holdings for the Board's review. In addition, a bank or trust depository arrangement will be utilized to accept and hold cash prior to allocating it to the investment manager, and to invest such cash in liquid, interest-bearing instruments.

#### V. FIDUCIARY CONDUCT

An investment fiduciary includes, but is not limited to, a person who exercises discretionary authority or control in the investment of the assets of the Fund or who renders, for a fee, advice for the Fund. The term investment fiduciary includes, but is not limited to the members of the Board, the Fund Administrator, the investment consultant, and investment managers. An investment fiduciary shall discharge his or her duties in accordance with the fiduciary standards set forth in Section 802.203 of the Texas Government Code and other applicable law.

#### VI. AVAILABLE ASSET CLASSES AND INVESTMENT GUIDELINES

In consultation with the investment consultant and after proper consideration of the Board's investment objectives and asset allocation plan as discussed herein, the Board will determine the asset classes available for investment of Fund assets. The list of asset classes available for investment will be set forth in the Fund's Operating Procedures and updated as necessary. The specific degrees of diversification within each asset class will also be addressed in the Fund's Operating Procedures or each manager's investment guidelines, as applicable.

The investment guidelines for available asset classes, if applicable, are reflected in the Fund's Operating Procedures. In addition, specific investment guidelines for investment managers of separately managed accounts will be incorporated in the agreement with the Fund. Within their investment guidelines, each investment manager will also be furnished with a list of asset types and investment strategies that are forbidden. Investment guidelines

for pooled investment vehicles or private market investment vehicles will be set forth in the governing instruments of such vehicles.

#### VII. ASSET ALLOCATION

The Fund's achievement of its risk and return objectives is a function, in large part, of the Fund's asset allocation. The Board recognizes that the allocation of monies to various asset classes will be the major determinant of the Fund's return and risk experience over time. Therefore, the Board will allocate investments across available asset classes that, based on historical and expected returns and risks, provide the highest likelihood of meeting the Fund's investment objectives.

In determining the appropriate asset allocation, the expected return and risk behavior of each asset class and the likely interaction of various asset classes in a portfolio are to be considered. These "market assumptions" are to be determined and considered by the Board when establishing the asset allocation of the Fund. The Board, with the assistance of the investment consultant, will determine the applicable market assumptions, including the expected return, volatility, and correlations for each asset class, which will be set forth in the Fund's Operating Procedures.

#### A. Long-Term Allocation Ranges

Based on its determination of the appropriate risk posture for the Fund and its long-term return expectations, the Board and investment consultant have established the following asset mix guidelines for the Fund:

Asset Class	Fund Guidelines
Equity Investments	30-55%
Fixed Income Investments	20-40%
Alternatives	10-40%

Unneeded cash reserves can be a drag on the Fund's performance and the overall level of cash held by the Fund shall typically remain under 5% unless extraordinary circumstances warrant otherwise.

#### **B.** Long-Term Allocation Targets

Based on the investment objectives and constraints of the Fund, and on the expected behavior of the available asset classes, the Board will specify a long-term target allocation for each available asset class. These targets will be expressed as a percentage of the Fund's overall market value. These targets will be selected in conjunction with the appropriate ranges listed above to accommodate permissible variation resulting from market forces. The Fund's target allocations are listed in the Operating Procedures. The Board will review its asset allocation targets and ranges at least annually or sooner if warranted by a material event in either the liability structure of the plan or the capital markets.

The long-term target allocations are intended as strategic goals, not short-term imperatives. Thus, it is permissible for the overall Fund's asset allocation to deviate from the long-term target, as would likely occur during manager transitions, asset class restructurings, and other temporary changes in the Fund. Deviations from targets that occur due to capital market changes are discussed below.

#### C. Rebalancing

In general, cash flows to and from the Fund will be allocated in such a manner as to move each asset class toward its target allocation.

The Board recognizes that, periodically, market forces may move the Fund's allocations outside the target ranges. The Board also recognizes that failing to rebalance the allocations would unintentionally change the Fund's structure and risk posture. Consequently, the Board has established a process to rebalance the allocations periodically.

On at least an annual basis, if any strategic allocation is outside the specified target range, assets will be shifted to return the strategy to the target range. The specific plan for rebalancing will identify those assets that can be shifted at the lowest possible risk and cost, if the rebalancing cannot be accomplished solely by allocating contributions and withdrawals.

#### VIII. EVALUATION AND REVIEW

As a function of its fiduciary responsibilities to monitor the investment decisions it makes on behalf of the Fund, the Board will regularly review the investments of the Fund. This review and evaluation of investments will be conducted in accordance with the following:

- On a quarterly basis, the Board, through the report of the investment consultant, will review the overall investment performance of the Fund and individual investment managers. This report will include a review of performance generally and in relation to the composite and asset class benchmarks established by the Board.
- The investment consultant will continually monitor the investment managers and other investments of the Fund to ensure that managers or such investments performed in accordance with applicable investment guidelines and the expected philosophy, methodology and style. The investment consultant will report to the Board on a quarterly basis any material deviation from the applicable guidelines or any other structural, organizational, philosophical, or other material change that warrants the Board's attention.
- At least annually, the Board will review the asset allocation of the Fund to determine
  if it remains appropriate in order to achieve the investment objectives of the Fund. This
  review will include an evaluation of market assumptions utilized in establishing the
  asset allocation to determine if any changes to these assumptions are warranted, as well
  as if any other asset classes should be made available for investment.
- At least annually, the Board will formally review this Policy to determine whether it continues to be appropriate in light of the Board's investment goals and objectives and changes in the capital markets and/or the Fund's condition or circumstances.

#### IX. SECURITIES LENDING

The Board may select an agent to lend the financial securities of the Fund, but has no obligation to do so. The securities lending program shall in no way inhibit the trading activities of the investment managers of the Fund.

#### X. TRADING

In accordance with the legal and fiduciary obligations imposed on investment managers by either their agreements with the Fund or applicable federal or Texas law, all trades executed by managers must be for the exclusive benefit of the Fund's participants and beneficiaries. Managers are expected to seek best execution on all trades.

#### XI. VOTING OF PROXIES

The Board has delegated the responsibility of voting all proxies to the investment managers. The Board expects that managers will execute all proxies in a timely fashion. Also, the Board expects the managers to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions.

#### XII. INVESTMENT COSTS

The Board intends to monitor and control investment costs at every level of the Fund through the following:

- Professional fees will be negotiated whenever possible.
- Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover.
- The Fund may enter into performance-based fees with specific managers.
- If possible, assets will be transferred in-kind during manager transitions and Fund restructurings to eliminate unnecessary turnover expenses.
- Managers are instructed to seek best execution. will be instructed to appropriately minimize brokerage and execution costs.

## **Memos Since Last Meeting**



#### **MEMORANDUM**

TO: Trustees, Austin Fire Fighters Relief and Retirement Fund FROM: Leandro A. Festino, Aaron C. Lally, Meketa Investment Group

DATE: November 18, 2021

**RE:** Sanderson Leadership Change

#### **OVERVIEW**

Austin Fire Fighters Relief and Retirement Fund (the "Fund") is invested in Sanderson's International Value Fund. As of September 30, 2021 the Fund had \$52.4 mm invested in the strategy (approximately 4% of the total Fund). Since inception the strategy has generated a net return of 5.4%, relative to a return of 3.9% for the MSCI EAFE Value benchmark. Sanderson recently announced the expected retirement of Tim Sanderson, the firm's founder, CIO and CEO.

#### **SUMMARY & CONCLUSIONS**

Mr. Tim Sanderson's retirement has been planned for several years. Successors have been identified and trained within the organization. We are comfortable maintaining the strategy. We do not have any concerns with this planned transition at this time.

#### **TRANSITION DETAILS**

Mr. Sanderson will be stepping down from his responsibilities as CIO/CEO and will assume a new role as non-Executive Chairman, providing guidance to the investment team. Christian Paaskesen, who has been at the firm for nearly 16 years, will assume the CIO role, after serving as the Deputy CIO since September 2020. Paul Carter, who has been Deputy CEO since April 2021, will step into the CEO position, assuming oversight for operations and all non-investment related functions.

As the new CIO, Mr. Paaskesen will assume veto power. Mr. Sanderson had veto power, but rarely used it. The investment team strives for consensus on all investment decisions. Mr. Sanderson's main role as CIO was to guide team conversations, but he noticed that the generational differences of the team created a bit of a disconnect. The firm believes that Mr. Paaskesen can bridge those differences and provide inter-generational leadership.

The firm has been transitioning from a founder to partner ownership structure for the last 5 years. The firm is 50.1% owned and controlled by current employees. Mr. Sanderson will keep his current ownership stake of 28%. The sale of any material part of ownership will require consent from the working partners. Silchester Partners, who owns 49.9% of Sanderson Asset Management and acts as a passive investor, has supported the succession plan.

Please feel free to give us a call with any questions.

LAF/ACL/nd



#### **MEMORANDUM**

TO: Trustees, Austin Fire Fighters Relief and Retirement Fund FROM: Leandro A. Festino, Aaron C. Lally, Meketa Investment Group

**DATE:** February 7, 2022 **RE:** Aberdeen EMD

#### **OVERVIEW**

In January 2022 Meketa held a Zoom meeting with Aberdeen to review 4Q 21 and 2021 performance of the Aberdeen Emerging Market Debt Plus strategy. The strategy provides Austin Fire with a mix of corporate and sovereign debt exposure in emerging countries, denominated in both US dollars and local currency. As of December 31, 2021 Austin Fire Fighters' Relief and Retirement Fund had \$78 mm invested in the strategy (approximately 6% of the total Fund). Since inception the strategy has generated a net return of 3.6%, relative to a return of 3.8% for the customized blended currency benchmark.

#### **OPINION**

Aberdeen (rebranded as abrdn) remains a high conviction strategy for clients seeking belended emerging market debt exposure. The experienced team, thoughtful, risk-conscious process, and long history in emerging market debt management make it a compelling option. Performance in recent years has been challenging due partly to the more volatile Frontier Market exposure.

#### **POSITIVE CONTRIBUTORS IN 2021:**

- Underweight sovereign bonds in Colombia, Panama and Peru
- Overweight sovereign bonds in Georgia, Benin, Rwanda and Iraq
- Overweight PEMEX bonds in Mexico
- Exposure to corporate bonds in Colombia
- Exposure to local currency bonds in Uruguay, India and S. Africa
- Zero-weight in Lebanon and Sri Lanka

#### **DETRACTORS IN 2021:**

- Overweight USD sovereign bonds in Argentina, El Salvador, Belarus, Ukraine, Egypt and Ghana
- Underweight USD sovereign bonds in Costa Rica, Zambia and Oman
- Overweight long duration assets in Egypt and Ukraine
- Exposure to EUR sovereign bonds in Romania
- Exposure to corporate bonds in China (did not own Evergrande had 1% in property)



- Exposure to local currency bonds in Brazil, Mexico and Russia
- Exposure to Brazilian real, Russian rouble, Turkish Lira and S. African rand

#### PERFORMANCE TRENDS

- The strategy has underperformed the last two calendar years which has pulled down longer term trailing returns (i.e. end point bias exists). The strategy has historically outperformed in up markets but underperformed in down markets.
- Upside market capture is consistently strong and ranks 30-35th percentile in all trailing periods observed.
- Downside capture has been challenging in recent years ranking 3rd quartile in trailing one, three-, and five-year periods but 2nd quartile over a ten-year trailing period.
- Sharpe ratio ranks near median in trailing one-, three-, and five-year periods but ranks much higher over the ten-year period.

#### STRATEGY AUM

 Overall EMD strategy assets grew from \$18 billion at the end of 2020 to \$23 billion at the end of 2021.

#### **INVESTMENT TEAM**

The team remains stable and experienced with no major departures at senior levels in the last five years. We spoke with PM Edwin Gutierrez (26 years experience) who is Head of EMD Sovereign out of London. He leads 12 sovereign debt analysts specializing in regions around the world. There are six in London with Mr. Gutierrez, three in Singapore, and one in each of Hong Kong, Bangkok, and Shanghai. The EMD corporate team is led by Siddharth Dahiya (16 years' experience) who is also in London. He leads 20 EMD corporate industry specialist analysts in eight offices around the world. They all work for Brett Diment (30 years' experience) in London who is Head of Global EMD. There are five dedicated EMD traders across London and Singapore. There are two quant analysts and two economists. The team has access to a the broader EM equity team of analysts as well.

#### **VEHICLE AND FEES**

Austin Fire is invested in the Emerging Markets Debt Plus commingled fund which benefits from a Meketa negotiated fee. The fee of 0.45% on assets ranks in the 15th percentile for lowest management fee for similar sized mandates.

Please feel free to give us a call with any questions.

LAF/ ACL/nd



## AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND PRELIMINARY ROAD MAP'

#### February 2022 Investment Committee Meeting

- 1. 4Q21 performance review
- 2. 4Q21 asset transfers
- 3. Annual asset study review
- 4. Annual Investment Policy Statement review
- 5. Memos from the quarter

#### May 2022 Investment Committee Meeting

Operating procedures review

#### August 2022 Investment Committee Meeting

- 1. 2021 fee review
- 2. Private equity peer benchmark review

#### November 2022 Investment Committee Meeting

1. Annual private equity pacing review

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<sup>&</sup>lt;sup>1</sup> Dates and actions subject to change based on client needs and capital market conditions

## **Appendix**

Disclaimer, Glossary, and Notes



Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT FOR THE SOLE BENEFIT OF AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND.

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM", "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

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#### Disclaimer, Glossary, and Notes

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate+Beta\*(market return-Risk Free Rate)].

**Market Capitalization**: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

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#### Disclaimer, Glossary, and Notes

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

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#### Disclaimer, Glossary, and Notes

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a guarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

The Russell Indices, TM, SM are trademarks/service marks of the Frank Russell Company.

Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

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