



STATE RETIREMENT AGENCY
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MARYLAND
STATE RETIREMENT
and PENSION SYSTEM

410-625-5555 • 1-800-492-5909
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June 21, 2022

The Honorable Guy J. Guzzone
Chair, Budget & Taxation Committee
Miller Senate Office Building, 3 West
11 Bladen Street
Annapolis, MD 21401

The Honorable Benjamin S. Barnes
Chair, Appropriations Committee
House Office Building, Room 121
6 Bladen Street
Annapolis, MD 21401

The Honorable Sarah K. Elfreth
Senate Chair, Joint Committee on Pensions
103 James Senate Office Building
11 Bladen Street
Annapolis, MD 21401

The Honorable Brooke E. Lierman
House Chair, Joint Committee on Pensions
House Office Building, Room 410
6 Bladen Street
Annapolis, MD 21401

Re: Report required by State Personnel and Pensions Article § 21-122(f)(4) (MSAR #11742)

Dear Chairs Guzzone, Barnes, Elfreth, and Lierman:

On behalf of the Board of Trustees for the State Retirement and Pension System, I am submitting the investment returns for the State Retirement and Pension System for the quarter ending December 31, 2021. The returns are reported as follows:

1. investment performance by asset class, including performance relative to asset class benchmarks; and
2. investment performance of assets under the direction of each Investment Division employee.

The attached exhibits include:

- Exhibit A – Summary of Plan Performance by Asset Class
- Exhibit B – Expanded Performance Report by Manager and Asset Class
- Exhibit C – Investment Division Organizational Chart by Asset Class

Should you require additional information, please call me at (410) 625-5600.

Sincerely,

Martin Noven
Secretary to the Board of Trustees

cc: The Honorable William C. Ferguson IV
The Honorable Adrienne A. Jones
Victoria L. Gruber
Sara Albert
Board of Trustees



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL PLAN	70,628,503,790	100.0	1.39	3.65	14.93	5.27	14.93	14.73	11.30	9.24	8.42	07/01/86
TOTAL PLAN POLICY INDEX ^[1]			1.74	3.99	15.04	5.80	15.04	14.39	10.84	8.64		07/01/86
<i>Excess</i>			-0.35	-0.34	-0.11	-0.53	-0.11	0.34	0.46	0.61		
TOTAL GROWTH EQUITY	36,531,367,259	51.7	2.11	4.45	23.40	6.87	23.40	21.67	16.60	13.71	7.54	01/01/98
GROWTH EQUITY CUSTOM BENCHMARK ^[2]			2.76	5.12	24.47	7.28	24.47	20.12	15.41			01/01/98
<i>Excess</i>			-0.65	-0.67	-1.07	-0.42	-1.07	1.54	1.19			
TOTAL RATE SENSITIVE	12,372,888,337	17.5	-0.81	2.30	-1.30	2.89	-1.30	8.82	6.25	4.55	6.99	07/01/86
CUSTOM RATE SENSITIVE BENCHMARK ^[3]			-0.71	2.13	-1.42	2.78	-1.42	8.04	5.72	3.96		07/01/86
<i>Excess</i>			-0.10	0.18	0.12	0.11	0.12	0.78	0.54	0.59		
TOTAL CREDIT/DEBT STRATEGIES	6,395,808,116	9.1	1.07	1.33	6.95	2.61	6.95	7.65	6.23	6.72	8.47	03/01/09
MSRA CUSTOM CREDIT BENCHMARK ^[4]			1.48	0.22	2.77	0.46	2.77	7.20	5.60	5.12	7.35	03/01/09
<i>Excess</i>			-0.41	1.11	4.18	2.14	4.18	0.45	0.64	1.60	1.12	
TOTAL REAL ASSETS	8,380,466,894	11.9	1.26	6.18	19.57	7.53	19.57	7.22	6.38	3.40	4.61	02/01/06
CUSTOM REAL ASSETS BENCHMARK ^[5]			2.54	7.51	21.98	11.28	21.98	10.95	8.43	4.17	4.55	02/01/06
<i>Excess</i>			-1.28	-1.33	-2.41	-3.75	-2.41	-3.73	-2.05	-0.77	0.06	
TOTAL ABSOLUTE RETURN	5,526,446,071	7.8	2.36	1.38	6.08	1.38	6.08	5.39	3.98	3.43	3.61	04/01/08
CUSTOM ABSOLUTE RETURN BENCHMARK ^[6]			0.79	0.82	8.55	2.05	8.55	7.81	5.70	4.81	2.76	04/01/08
<i>Excess</i>			1.57	0.57	-2.46	-0.67	-2.46	-2.42	-1.72	-1.38	0.85	
TOTAL MULTI ASSET	694,353,753	1.0	2.48	4.20	12.17	4.08	12.17	13.73			9.81	07/01/18
TOTAL PLAN POLICY INDEX ^[1]			1.74	3.99	15.04	5.80	15.04	14.39			11.28	07/01/18
<i>Excess</i>			0.74	0.21	-2.87	-1.72	-2.87	-0.65			-1.47	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL CASH	727,173,360	1.0	0.05	0.04	0.52	0.03	0.52	3.07	4.78	3.54	3.54	07/01/08
FTSE 3 MONTH T-BILL			0.00	0.01	0.05	0.02	0.05	0.96	1.11	0.60	0.52	07/01/08
<i>Excess</i>			<i>0.05</i>	<i>0.03</i>	<i>0.48</i>	<i>0.01</i>	<i>0.48</i>	<i>2.12</i>	<i>3.67</i>	<i>2.94</i>	<i>3.02</i>	

ENDNOTES

- [1] Since 07/01/2008: Calculated monthly using transitional weights and asset class benchmarks. Prior to 07/01/2008: MSRA TOTAL PLAN STATIC POLICY.
- [2] Benchmark is a dynamic blend of the Public Equity Benchmark and the State Street Private Equity Index based off of sub-asset class weights used in the policy benchmark.
- [3] Since 10/01/2017: 53% Barclays Long-Term Government, 13% Barclays Securitized, 13% Barclays Corporate, 21% Barclays U.S. TIPS
From 07/01/2016 to 09/30/2017: 48% Barclays Long-Term Government, 14% Barclays Securitized, 14% Barclays Corporate, 24% Barclays U.S. TIPS
From 11/01/2015 to 06/30/2016: 50% Barclays Long-Term Government, 15% Barclays Securitized, 15% Barclays Corporate, 20% Barclays U.S. TIPS
From 07/01/2013 to 10/31/2015: 80% BC Aggregate Intermediate, 20% BC Global Aggregate 1-10 Year Hedged
From 07/01/2010 to 06/30/2013: 80% BC Aggregate, 20% BC Global Bond Aggregate Hedged
From 01/01/2010 to 06/30/2010: 80% BC Aggregate, 20% BC Global Bond Aggregate Unhedged
From 07/01/2009 to 12/31/2009: Benchmark is dynamically calculated using Beginning Market Value weights of the underlying portfolios and their benchmarks
Prior to 07/01/2009: Benchmark is BC US Universal.
Formerly named "Custom Fixed Income Benchmark" prior to 11/01/2015.
- [4] Since 10/01/2017: 78% US Credit Benchmark, 22% non-U.S Credit Benchmark.
From 01/01/2016 to 09/30/2017: 67% US Credit Benchmark, 33% non-U.S Credit Benchmark.
From 11/01/2015 to 12/31/2015: 75% US Credit Benchmark, 25% non-U.S Credit Benchmark.
From 07/01/2013 to 10/31/2015: 50% BC High Yield / 20% BC Credit / 20% JP Morgan GBI EM Global Diversified/ 10% S&P/LSTA Leveraged Loan Index
From 01/01/2010 to 06/30/2013: 50% BC Credit / 50% BC High Yield
Prior to 01/01/2010: 75% BC Credit / 25% BC High Yield
- [5] Since 10/01/2017: Benchmark is dynamically calculated using the beginning market values of the Real Estate and Natural Resource/Infrastructure sub-asset classes and their corresponding benchmarks.
From 11/01/2015 to 09/30/2017: Benchmark is dynamically calculated using the beginning market values of the Real Estate, Commodities and Natural Resource/Infrastructure sub-asset classes and their corresponding benchmarks.
From 12/01/2012 to 10/31/2015: 30% - DJ UBS Commodities Index (Total Return), 10% - CPI + 5%; 8% Max , 60% - 50% BC US TIPS Index/50% BC World Inflat-Linked Bond Index
From 07/01/2011 to 11/30/2012: 30% - DJ UBS Commodities Index (Total Return), 10% - CPI + 5%; 8% Max , 60% - 65% BC US TIPS Index/35% BC Global Inflation Linked (USD Hedged) Index
From 07/01/2009 to 06/30/2011: 20% - DJ UBS Commodities Index (Total Return), 20% - CPI + 5%; 8% Max , 60% - 65% BC US TIPS Index/35% BC Global Inflation Linked (USD Hedged) Index
07/01/2008 to 06/30/2009: Benchmark is dynamically calculated using Beginning Market Value weights of the underlying portfolios and their benchmarks Prior to 07/01/2008: 100% Barclays US TIPS Index
Prior to 07/01/2008: 100% Barclays US TIPS Index
Formerly named "Custom Real Return Benchmark" prior to 11/01/2015.
- [6] Since 11/01/2015: HFRI Fund of Funds Conservative + 100 bps.
From 07/01/2014 to 10/31/2015: HFRI FOF: Conservative Index.
From 07/01/2008 to 06/30/2014 benchmark was HFRI Fund of Funds index.
Prior to 07/01/2008 benchmark was the Citigroup 3-Month T-bill + 500 bps.

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EXHIBIT B



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
GROWTH EQUITY												
U.S. EQUITY												
MD US LARGE CAP EQUITY	3,446,371,980	4.9	4.05	9.78	26.41	10.01	26.41				33.59	10/01/20
RUSSELL 1000 (DAILY)			4.05	9.78	26.45	10.01	26.45				33.64	10/01/20
<i>Excess</i>			0.00	0.00	-0.05	0.01	-0.05				-0.05	
MD US SMALL CAP EQUITY	430,728,037	0.6	4.51	5.69							5.69	10/01/21
S&P SMALLCAP 600			4.53	5.64							5.64	10/01/21
<i>Excess</i>			-0.02	0.05							0.05	
TOTAL US EQUITY PASSIVE	3,877,100,021	5.5	4.10	9.30	26.26	9.15	26.26	24.82	17.43		15.81	11/01/15
D.E. SHAW ALL CAP CORE ENHANCED	919,945,714	1.3	4.14	10.06	25.28	9.71	25.28	26.16	18.46		15.87	04/01/13
D.E. Shaw All Cap Custom Benchmark ^[1]			4.05	9.78	26.45	10.01	26.45	26.21	18.43		15.64	04/01/13
<i>Excess</i>			0.09	0.29	-1.17	-0.30	-1.17	-0.05	0.04		0.23	
T. ROWE PRICE ENHANCED	1,881,480,464	2.7	4.75	10.41	27.45	11.46	27.45	27.59	19.83	17.27	11.57	05/01/06
S&P 500			4.48	11.03	28.71	11.67	28.71	26.07	18.47	16.55	10.83	05/01/06
<i>Excess</i>			0.26	-0.62	-1.25	-0.21	-1.25	1.52	1.35	0.72	0.74	
DURABLE CAPITAL PARTNERS	861,101,846	1.2	0.62	1.86	14.08	-0.29	14.08				36.91	01/01/20
Russell 2000 Growth			0.44	0.01	2.83	-5.64	2.83				17.66	01/01/20
<i>Excess</i>			0.17	1.85	11.24	5.35	11.24				19.25	
MW AMERICAS TOPS LONG ONLY FUND	600,000,000	0.8										12/01/21

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL U.S. EQUITY ACTIVE	4,262,528,023	6.0	3.38	8.15	23.55	7.90	23.55	26.81	18.77	16.55		06/01/94
ACTIVE US EQ BM ^[2]			3.49	8.19	21.90	7.25	21.90	24.38	17.15	15.86		06/01/94
<i>Excess</i>			<i>-0.11</i>	<i>-0.04</i>	<i>1.64</i>	<i>0.65</i>	<i>1.64</i>	<i>2.43</i>	<i>1.62</i>	<i>0.69</i>		
CAPITAL PROSPECTS US SMALL CAP (TM)	405,003,617	0.6	3.05	4.80	22.36	2.91	22.36	21.81			13.38	04/01/17
S&P 600 Small Cap USD NET			4.48	5.52	26.35	2.43	26.35	19.59			12.37	04/01/17
<i>Excess</i>			<i>-1.43</i>	<i>-0.73</i>	<i>-3.99</i>	<i>0.48</i>	<i>-3.99</i>	<i>2.22</i>			<i>1.01</i>	
US EQUITY TERRA MARIA	405,033,309	0.6	3.05	4.79	22.06	2.66	22.06	20.27	12.11	12.40	9.25	04/01/07
TERRA MARIA US EQUITY BENCHMARK ^[3]			2.85	2.88	14.94	-1.43	14.94	19.11	11.98	13.34	9.23	04/01/07
<i>Excess</i>			<i>0.19</i>	<i>1.91</i>	<i>7.12</i>	<i>4.09</i>	<i>7.12</i>	<i>1.16</i>	<i>0.12</i>	<i>-0.95</i>	<i>0.02</i>	
TOTAL US EQUITY TM + U.S. EQUITY ACTIVE	4,667,561,333	6.6	3.41	7.91	23.67	7.44	23.67	26.01	17.73	15.68	11.91	07/01/08
TM US EQ + ACTIVE US EQ BM ^[2]			3.43	7.71	21.26	6.29	21.26	23.71	16.35	15.51	12.04	07/01/08
<i>Excess</i>			<i>-0.03</i>	<i>0.19</i>	<i>2.41</i>	<i>1.15</i>	<i>2.41</i>	<i>2.30</i>	<i>1.38</i>	<i>0.17</i>	<i>-0.13</i>	
U.S. EQUITY EX OVERLAY	8,544,661,354	12.1	3.80	8.62	24.92	8.29	24.92	25.53	17.65	15.85	10.15	04/01/94
MSRA CUSTOM US EQUITY INDEX ^[4]			3.94	9.28	25.66	9.17	25.66	25.79	17.97	16.30		04/01/94
<i>Excess</i>			<i>-0.14</i>	<i>-0.66</i>	<i>-0.74</i>	<i>-0.88</i>	<i>-0.74</i>	<i>-0.26</i>	<i>-0.31</i>	<i>-0.45</i>		
US Equity Tactical	161,449,606	0.2										10/01/18
US Equity Structural	133,040,008	0.2										02/01/17
U.S. EQUITY OVERLAY	294,489,614	0.4										02/01/17



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
U.S. EQUITY	8,839,150,968	12.5	3.75	8.58	23.96	8.58	23.96	24.84	17.26	15.66	10.08	04/01/94
MSRA CUSTOM US EQUITY INDEX ^[4]			3.94	9.28	25.66	9.17	25.66	25.79	17.97	16.30		04/01/94
<i>Excess</i>			<i>-0.19</i>	<i>-0.70</i>	<i>-1.70</i>	<i>-0.59</i>	<i>-1.70</i>	<i>-0.95</i>	<i>-0.70</i>	<i>-0.65</i>		
INTERNATIONAL DEVELOPED MARKETS												
SSGA INTERNATIONAL FUND	857,438	0.0										05/01/03
INTERNATIONAL DEVELOPED EQUITY PASSIVE	857,438	0.0										11/01/15
ARTISAN PARTNERS, L.P.	630,639,708	0.9	6.07	2.97	9.06	3.08	9.06	15.01	12.45	9.66	8.81	11/01/03
ARTISAN CUSTOM BENCHMARK ^[5]			5.08	3.14	12.62	2.46	12.62	14.07	9.63	7.94	7.43	11/01/03
<i>Excess</i>			<i>0.99</i>	<i>-0.17</i>	<i>-3.56</i>	<i>0.61</i>	<i>-3.56</i>	<i>0.94</i>	<i>2.82</i>	<i>1.72</i>	<i>1.38</i>	
AQR ENHANCED ACWI EX-US	401,679,406	0.6	4.97	2.72	10.56	-0.02	10.56	11.92	7.57		4.35	12/01/13
AQR Enhanced Custom Benchmark ^[6]			5.08	3.14	12.62	2.46	12.62	14.07	9.63		5.25	12/01/13
<i>Excess</i>			<i>-0.11</i>	<i>-0.42</i>	<i>-2.07</i>	<i>-2.48</i>	<i>-2.07</i>	<i>-2.14</i>	<i>-2.06</i>		<i>-0.90</i>	
BROWN CAPITAL MANAGEMENT INT'L	809,667,513	1.1	3.56	1.21	8.21	2.57	8.21	18.41	12.82	11.54	12.25	12/01/08
Brown Capital Management International Custom Benchmark ^[7]			4.95	2.71	12.40	2.26	12.40	14.38	9.83	7.44	8.79	12/01/08
<i>Excess</i>			<i>-1.39</i>	<i>-1.51</i>	<i>-4.19</i>	<i>0.32</i>	<i>-4.19</i>	<i>4.03</i>	<i>2.99</i>	<i>4.10</i>	<i>3.46</i>	
DFA INTERNATIONAL CORE EQUITY	644,356,431	0.9	4.86	1.90	13.57	1.58	13.57	14.38	9.70		7.09	05/01/13
MSCI WORLD EX US (NET)			5.08	3.14	12.62	2.46	12.62	14.07	9.63		6.09	05/01/13
<i>Excess</i>			<i>-0.21</i>	<i>-1.24</i>	<i>0.95</i>	<i>-0.89</i>	<i>0.95</i>	<i>0.31</i>	<i>0.07</i>		<i>1.00</i>	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
RHUMBLINE SCI BETA INTL EX-US	966,395,740	1.4	5.65	2.56	14.50	1.67	14.50	11.74			7.67	03/01/17
SciBeta Developed ex USA Value Div MS			5.77	2.72	15.02	1.89	15.02	12.18			8.16	03/01/17
<i>Excess</i>			-0.12	-0.17	-0.52	-0.22	-0.52	-0.45			-0.49	
INTERNATIONAL DEVELOPED EQUITY ACTIVE ^[8]	3,452,738,799	4.9	4.93	2.16	10.97	1.88	10.97	14.41	10.30	7.82		01/01/95
CUSTOM INTL DEV EQ ACTIVE BENCHMARK ^[9]			5.22	2.93	13.13	2.26	13.13	13.68	9.50	7.32		01/01/95
<i>Excess</i>			-0.29	-0.77	-2.16	-0.38	-2.16	0.73	0.79	0.50		
ATTUCKS INTL DEVELOPED (TM)	677,661,090	1.0	5.04	1.54	10.85	-0.25	10.85	15.24	10.06	9.87	11.70	12/01/08
MSCI WORLD EX US NET (DAILY)			5.08	3.14	12.62	2.46	12.62	14.07	9.63	7.84	8.37	12/01/08
<i>Excess</i>			-0.04	-1.61	-1.78	-2.72	-1.78	1.18	0.43	2.03	3.34	
XPONANCE INTL SMALL CAP (TM)	375,850,533	0.5	4.39	-0.58	11.54	1.07	11.54	15.91			9.56	04/01/17
MSCI WORLD EX US SMALL CAP (NET)			4.24	0.39	11.14	1.11	11.14	16.27			9.93	04/01/17
<i>Excess</i>			0.15	-0.97	0.40	-0.05	0.40	-0.37			-0.37	
LEADING EDGE INTL DEVELOPED (TM)	571,691,971	0.8	4.72	2.31	8.15	0.89	8.15	16.60	10.39	8.97	10.96	12/01/08
MSCI WORLD EX US NET (DAILY)			5.08	3.14	12.62	2.46	12.62	14.07	9.63	7.84	8.37	12/01/08
<i>Excess</i>			-0.36	-0.83	-4.48	-1.58	-4.48	2.53	0.76	1.13	2.59	
INTL DEVELOPED EQUITY TERRA MARIA ^[8]	1,625,271,746	2.3	4.77	1.31	10.04	0.54	10.04	15.91	10.97	8.43	4.51	11/01/07
TERRA MARIA INTL DEVELOPED EQ BM ^[10]			4.95	2.15	11.65	1.97	11.65	14.36	10.01	7.54	3.17	11/01/07
<i>Excess</i>			-0.18	-0.84	-1.62	-1.43	-1.62	1.55	0.96	0.89	1.34	
INTL DEVELOPED EQUITY ACTIVE AND TM ^[8]	5,078,010,545	7.2	4.89	1.88	10.66	1.44	10.66	14.86	10.50	8.01	4.37	07/01/08
TM INTL DEV EQ + ACTIVE INTL DEV EQ BM ^[9]			5.13	2.66	12.63	2.14	12.63	13.87	9.66	7.39	4.03	07/01/08
<i>Excess</i>			-0.24	-0.79	-1.97	-0.71	-1.97	0.99	0.84	0.62	0.34	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
INTL EQUITY TRANSITION ACCOUNT	20,842	0.0										11/01/04
TOTAL INTL DEV EQUITY EX RECORD CURRENCY ^[8]	5,078,888,826	7.2	4.89	1.88	10.66	1.44	10.66	14.87	10.32	7.71		01/01/95
MSRA CUSTOM INTERNATIONAL INDEX ^[11]			5.08	3.14	12.62	2.46	12.62	14.07	9.63	7.17		01/01/95
<i>Excess</i>			-0.19	-1.27	-1.96	-1.02	-1.96	0.80	0.69	0.54		
RECORD CURRENCY MANAGEMENT	15,544,365	0.0										05/01/09
TOTAL INTL DEVELOPED EQUITY EX OVERLAY ^[8]	5,094,433,190	7.2	4.64	2.04	11.34	1.80	11.34	15.15	10.10	8.17	6.71	01/01/95
MSRA CUSTOM INTERNATIONAL INDEX ^[11]			5.08	3.14	12.62	2.46	12.62	14.07	9.63	7.17	5.76	01/01/95
<i>Excess</i>			-0.44	-1.10	-1.28	-0.66	-1.28	1.08	0.47	1.00	0.95	
International Equity Tactical	59,309,218	0.1										01/01/17
International Equity Structural	30,002,801	0.0										02/01/17
TOTAL INTL DEVELOPED EQUITY OVERLAY	89,312,018	0.1										12/01/16
TOTAL INTL DEVELOPED EQUITY	5,183,745,209	7.3	4.89	2.27	12.82	2.05	12.82	16.10	10.63	8.43	6.81	01/01/95
MSRA CUSTOM INTERNATIONAL INDEX ^[11]			5.08	3.14	12.62	2.46	12.62	14.07	9.63	7.17	5.76	01/01/95
<i>Excess</i>			-0.19	-0.88	0.20	-0.41	0.20	2.03	1.00	1.26	1.05	
EMERGING MARKETS												
SSGA EMERGING MARKETS INDEX FUND	37,187,218	0.1	1.87	-1.26	-2.70	-9.32	-2.70	11.06	9.73		5.26	06/01/12
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		5.72	06/01/12
<i>Excess</i>			-0.00	0.05	-0.16	-0.03	-0.16	0.12	-0.15		-0.46	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
EMERGING MARKETS EQUITY PASSIVE	37,187,218	0.1	1.87	-1.26	-2.70	-9.32	-2.70	11.08	10.31		8.99	11/01/15
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		8.70	11/01/15
<i>Excess</i>			<i>-0.00</i>	<i>0.05</i>	<i>-0.16</i>	<i>-0.03</i>	<i>-0.16</i>	<i>0.14</i>	<i>0.44</i>		<i>0.28</i>	
BAILLIE GIFFORD EMERGING MARKETS	1,028,119,865	1.5	1.41	-2.04	-9.20	-14.20	-9.20	14.88	14.64		11.76	11/01/15
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		8.70	11/01/15
<i>Excess</i>			<i>-0.46</i>	<i>-0.73</i>	<i>-6.66</i>	<i>-4.91</i>	<i>-6.66</i>	<i>3.94</i>	<i>4.76</i>		<i>3.06</i>	
DFA EMERGING MARKETS	241,842,643	0.3	3.73	0.87	5.83	-5.45	5.83	11.82	10.10		11.53	02/01/16
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		11.50	02/01/16
<i>Excess</i>			<i>1.85</i>	<i>2.18</i>	<i>8.38</i>	<i>3.85</i>	<i>8.38</i>	<i>0.88</i>	<i>0.23</i>		<i>0.02</i>	
POLUNIN CAPITAL PARTNERS	548,029,937	0.8	3.32	-3.46	4.60	-5.19	4.60	13.35	10.31		11.21	04/01/16
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		9.49	04/01/16
<i>Excess</i>			<i>1.44</i>	<i>-2.15</i>	<i>7.14</i>	<i>4.11</i>	<i>7.14</i>	<i>2.41</i>	<i>0.44</i>		<i>1.73</i>	
AXIOM INTERNATIONAL INVESTORS	1,060,693,649	1.5	2.22	-1.40	-3.54	-9.34	-3.54	16.24	13.32		12.36	05/01/16
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		9.52	05/01/16
<i>Excess</i>			<i>0.34</i>	<i>-0.09</i>	<i>-1.00</i>	<i>-0.05</i>	<i>-1.00</i>	<i>5.30</i>	<i>3.45</i>		<i>2.84</i>	
WESTWOOD GLOBAL INVESTMENTS	817,849,735	1.2	5.27	0.28	1.35	-5.30	1.35	7.88	7.85	5.79	10.89	12/01/08
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87	5.49	9.25	12/01/08
<i>Excess</i>			<i>3.40</i>	<i>1.59</i>	<i>3.89</i>	<i>4.00</i>	<i>3.89</i>	<i>-3.05</i>	<i>-2.02</i>	<i>0.31</i>	<i>1.64</i>	
MARSHALL WACE TOPS CHINA A	497,760,017	0.7	0.66	4.14	17.99	3.50	17.99	39.51			35.71	11/01/18
MSCI China A Share Net			0.75	3.42	4.03	-0.74	4.03	26.05			23.86	11/01/18
<i>Excess</i>			<i>-0.09</i>	<i>0.72</i>	<i>13.96</i>	<i>4.23</i>	<i>13.96</i>	<i>13.45</i>			<i>11.85</i>	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TT INTERNATIONAL EMERGING MARKETS	724,563,494	1.0	1.22	-3.39	-1.58	-15.13	-1.58				11.21	08/01/19
MSCI Emerging Markets IMI Index (Net)			2.17	-0.98	-0.28	-8.30	-0.28				10.64	08/01/19
<i>Excess</i>			-0.95	-2.41	-1.30	-6.83	-1.30				0.57	
RWC PARTNERS EMERGING MARKETS	412,675,800	0.6	-0.32	-1.52	-3.79	-10.47	-3.79				16.53	12/01/19
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54				10.83	12/01/19
<i>Excess</i>			-2.19	-0.21	-1.24	-1.17	-1.24				5.70	
MARSHALL WACE TOPS EMERGING MARKETS	839,122,865	1.2	1.27	-1.89	4.11	-7.58	4.11				34.68	04/01/20
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54				26.45	04/01/20
<i>Excess</i>			-0.61	-0.57	6.65	1.71	6.65				8.23	
TRANSITION ACCOUNT EMERGING MARKETS	0	0.0										05/01/16
TOTAL EMERGING MARKET ACTIVE	6,170,703,802	8.7	2.09	-1.26	0.01	-8.72	0.01	14.35	12.05	6.45	5.59	07/01/10
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87	5.49	5.05	07/01/10
<i>Excess</i>			0.21	0.06	2.55	0.58	2.55	3.41	2.17	0.96	0.54	
EMERGING MARKETS EQUITY TERRA MARIA	2,443,217	0.0										11/01/15
EMERGING MARKETS ACTIVE AND TM	6,173,147,019	8.7	2.08	-1.26	-0.13	-8.71	-0.13	14.07	11.81		10.48	11/01/15
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		8.70	11/01/15
<i>Excess</i>			0.21	0.06	2.41	0.59	2.41	3.13	1.93		1.77	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL EMERGING MARKETS EQUITY EX OVERLAY	6,210,334,237	8.8	2.08	-1.26	-0.15	-8.72	-0.15	14.04	11.85		10.21	11/01/15
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		8.70	11/01/15
<i>Excess</i>			<i>0.21</i>	<i>0.06</i>	<i>2.39</i>	<i>0.58</i>	<i>2.39</i>	<i>3.10</i>	<i>1.98</i>		<i>1.51</i>	
Emrg Mkts Structural Overlay	53,064,244	0.1										02/01/17
Emrg Mkts Tactical Overlay	32,982,506	0.0										10/01/17
TOTAL EMERGING MARKETS OVERLAY	86,046,750	0.1										02/01/17
TOTAL EMERGING MARKETS EQUITY	6,296,380,987	8.9	2.10	-1.29	-0.39	-8.60	-0.39	13.33	11.41		9.86	11/01/15
MSCI EMERGING MARKETS			1.88	-1.31	-2.54	-9.30	-2.54	10.94	9.87		8.70	11/01/15
<i>Excess</i>			<i>0.22</i>	<i>0.02</i>	<i>2.15</i>	<i>0.69</i>	<i>2.15</i>	<i>2.39</i>	<i>1.53</i>		<i>1.15</i>	
GLOBAL EQUITY												
BAILLIE GIFFORD	1,213,440,107	1.7	-8.49	-2.72	2.64	-7.98	2.64	41.57	33.99	23.36	15.63	02/01/08
MSCI AC WORLD INDEX NET			4.00	6.68	18.54	5.55	18.54	20.38	14.40	11.85	7.43	02/01/08
<i>Excess</i>			<i>-12.49</i>	<i>-9.40</i>	<i>-15.90</i>	<i>-13.53</i>	<i>-15.90</i>	<i>21.19</i>	<i>19.59</i>	<i>11.51</i>	<i>8.20</i>	
LONGVIEW PRNRS GLOBAL EQUITY	1,198,214	0.0										10/01/09
AQR CAPITAL - GLOBAL EQUITY	252,677,651	0.4	4.45	7.12	19.07	4.62	19.07	17.30	11.71	11.06	10.45	08/01/10
MSCI AC WORLD INDEX NET			4.00	6.68	18.54	5.55	18.54	20.38	14.40	11.85	10.92	08/01/10
<i>Excess</i>			<i>0.45</i>	<i>0.45</i>	<i>0.53</i>	<i>-0.94</i>	<i>0.53</i>	<i>-3.08</i>	<i>-2.68</i>	<i>-0.79</i>	<i>-0.46</i>	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
D.E. SHAW INV - GLOBAL EQUITY	694,498,073	1.0	4.33	7.54	19.85	6.64	19.85	20.79	14.93	13.16	12.36	08/01/10
MSCI WORLD INDEX			4.27	7.77	21.82	7.76	21.82	21.70	15.03	12.70	11.82	08/01/10
<i>Excess</i>			0.05	-0.22	-1.97	-1.12	-1.97	-0.92	-0.10	0.47	0.54	
TOTAL GLOBAL EQUITY ACTIVE	2,162,079,813	3.1	-2.63	1.76	11.29	-1.31	11.29	22.60	16.80	13.93	9.30	10/01/05
MSCI AC WORLD INDEX NET			4.00	6.68	18.54	5.55	18.54	20.38	14.40	11.85	7.97	10/01/05
<i>Excess</i>			-6.63	-4.91	-7.25	-6.87	-7.25	2.22	2.40	2.08	1.34	
MARSHALL WACE EUREKA FUND	765,055,370	1.1	0.75	1.69	10.93	5.49	10.93	12.86	10.28		10.84	10/01/12
HFRI Equity Hedge (Total) Index			1.59	0.65	11.67	-0.26	11.67	14.39	9.51		7.48	10/01/12
<i>Excess</i>			-0.84	1.04	-0.74	5.75	-0.74	-1.53	0.78		3.36	
TOTAL EQUITY HEDGE FUND	765,055,370	1.1	0.75	1.69	10.88	5.49	10.88	12.08	7.44		6.06	07/01/12
HFRI Equity Hedge (Total) Index			1.59	0.65	11.67	-0.26	11.67	14.39	9.51		7.66	07/01/12
<i>Excess</i>			-0.84	1.04	-0.79	5.75	-0.79	-2.31	-2.07		-1.60	
TOTAL GLB EQ TM + GLB EQ ACTIVE + HF	2,927,135,183	4.1	-1.83	1.81	11.62	0.14	11.62	21.00	14.76	12.42	8.29	07/01/08
TM GLOBAL + ACTIVE GLOBAL BM + EQ HF ^[2]			3.54	5.60	17.75	4.82	17.75	19.39	13.35	11.15	7.41	07/01/08
<i>Excess</i>			-5.37	-3.79	-6.14	-4.68	-6.14	1.61	1.42	1.26	0.88	
GLOBAL EQUITY TRANSITION ACCOUNT	7,243,373	0.0										06/01/11
TOTAL GLOBAL EQUITY EX RECORD CURRENCY	2,934,378,556	4.2	-1.82	1.81	11.62	0.14	11.62	21.01	14.80	12.53	8.47	10/01/05
MSRA CUSTOM GLOBAL INDEX ^[12]			4.00	6.68	18.54	5.55	18.54	20.38	14.40	11.85	8.04	10/01/05
<i>Excess</i>			-5.82	-4.87	-6.91	-5.42	-6.91	0.62	0.41	0.68	0.43	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
RECORD CURRENCY - GLOBAL	4,389,616	0.0										05/01/09
TOTAL GLOBAL EQUITY EX OVERLAY	2,938,768,172	4.2	-1.91	1.85	11.77	0.24	11.77	21.07	14.76	12.67	8.56	10/01/05
MSRA CUSTOM GLOBAL INDEX ^[12]			4.00	6.68	18.54	5.55	18.54	20.38	14.40	11.85	8.04	10/01/05
<i>Excess</i>			<i>-5.91</i>	<i>-4.83</i>	<i>-6.76</i>	<i>-5.31</i>	<i>-6.76</i>	<i>0.69</i>	<i>0.36</i>	<i>0.82</i>	<i>0.52</i>	
Global Equity Tactical	69,910,115	0.1										01/01/20
TOTAL GLOBAL EQUITY OVERLAY	69,910,115	0.1										01/01/20
TOTAL GLOBAL EQUITY	3,008,678,287	4.3	-1.36	2.58	13.53	0.62	13.53	22.77	15.72	13.15	8.84	10/01/05
MSRA CUSTOM GLOBAL INDEX ^[12]			4.00	6.68	18.54	5.55	18.54	20.38	14.40	11.85	8.04	10/01/05
<i>Excess</i>			<i>-5.36</i>	<i>-4.10</i>	<i>-5.00</i>	<i>-4.93</i>	<i>-5.00</i>	<i>2.38</i>	<i>1.32</i>	<i>1.29</i>	<i>0.79</i>	
PUBLIC EQUITY												
TOTAL PUBLIC EQUITY EX OVERLAY	22,788,196,953	32.3	2.68	3.51	12.71	0.84	12.71	19.72	13.99	12.06		04/01/94
PUBLIC EQ BM 2 ^[13]			3.63	4.42	13.33	1.69	13.33	18.20	13.27	11.35		04/01/94
<i>Excess</i>			<i>-0.96</i>	<i>-0.91</i>	<i>-0.62</i>	<i>-0.84</i>	<i>-0.62</i>	<i>1.52</i>	<i>0.72</i>	<i>0.71</i>		
TOTAL PUBLIC EQUITY OVERLAY	539,758,498	0.8										12/01/16
TOTAL PUBLIC EQUITY	23,327,955,450	33.0	2.80	3.68	13.01	1.12	13.01	19.80	14.03	12.08		04/01/94
PUBLIC EQ BM 2 ^[13]			3.63	4.42	13.33	1.69	13.33	18.20	13.27	11.35		04/01/94
<i>Excess</i>			<i>-0.83</i>	<i>-0.74</i>	<i>-0.33</i>	<i>-0.56</i>	<i>-0.33</i>	<i>1.60</i>	<i>0.76</i>	<i>0.73</i>		



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
PRIVATE EQUITY												
TOTAL PRIVATE EQUITY	13,203,411,809	18.7	0.97	5.84	47.08	18.60	47.08	24.50	22.44	17.99	9.83	03/01/94
Custom MD/SS PEI Index ^[14]			1.36	6.25	49.22	18.02	49.22	22.40	19.41	15.19		03/01/94
<i>Excess</i>			<i>-0.39</i>	<i>-0.41</i>	<i>-2.14</i>	<i>0.58</i>	<i>-2.14</i>	<i>2.10</i>	<i>3.03</i>	<i>2.80</i>		
TOTAL GROWTH EQUITY	36,531,367,259	51.7	2.11	4.45	23.40	6.87	23.40	21.67	16.60	13.71	7.54	01/01/98
GROWTH EQUITY CUSTOM BENCHMARK ^[15]			2.76	5.12	24.47	7.28	24.47	20.12	15.41			01/01/98
<i>Excess</i>			<i>-0.65</i>	<i>-0.67</i>	<i>-1.07</i>	<i>-0.42</i>	<i>-1.07</i>	<i>1.54</i>	<i>1.19</i>			
RATE SENSITIVE												
NOMINAL FIXED INCOME												
MD LONG GOVERNMENT BONDS	1,715,873,400	2.4	-1.73	2.59	-4.51	3.01	-4.51				-0.56	03/01/20
Bloomberg U.S. Government: Long			-1.42	3.05	-4.57	3.52	-4.57				-0.81	03/01/20
<i>Excess</i>			<i>-0.31</i>	<i>-0.46</i>	<i>0.07</i>	<i>-0.52</i>	<i>0.07</i>				<i>0.25</i>	
MD IG CORPORATE BONDS	536,445,837	0.8	-0.20	-0.01		0.20					0.20	07/01/21
Bloomberg U.S. Corporate Inv Grade			-0.08	0.23		0.23					0.23	07/01/21
<i>Excess</i>			<i>-0.12</i>	<i>-0.24</i>		<i>-0.02</i>					<i>-0.02</i>	
MD SECURITIZED BONDS	237,846,807	0.3	-0.15	-0.44							-0.44	10/01/21
Bloomberg US Securitized:MBS, ABS & CMBS			-0.09	-0.39							-0.39	10/01/21
<i>Excess</i>			<i>-0.06</i>	<i>-0.05</i>							<i>-0.05</i>	
US NOMINAL FIXED INCOME PASSIVE	2,490,166,044	3.5	-1.25	1.73	-3.12	2.07	-3.12	8.42	6.21		5.19	11/01/15
US NOMINAL FI PASSIVE BENCHMARK ^[16]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75		4.92	11/01/15
<i>Excess</i>			<i>-0.28</i>	<i>-0.28</i>	<i>0.21</i>	<i>-0.28</i>	<i>0.21</i>	<i>0.63</i>	<i>0.47</i>		<i>0.28</i>	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
PIMCO	1,465,973,617	2.1	-1.00	1.24	-3.97	1.43	-3.97	8.68	6.53	4.40		06/01/84
PIMCO Custom Blended Index ^[17]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75	3.83		06/01/84
<i>Excess</i>			-0.03	-0.77	-0.65	-0.92	-0.65	0.89	0.78	0.57		
WESTERN ASSET MANAGEMENT	2,625,101,755	3.7	-0.98	1.69	-2.87	2.07	-2.87	8.99	6.67	4.98	6.07	09/01/03
WESTERN ASSET MANAGEMENT CUSTOM BM ^[18]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75	3.81	4.62	09/01/03
<i>Excess</i>			-0.01	-0.32	0.46	-0.28	0.46	1.20	0.93	1.17	1.45	
DOUBLELINE US SECURITIZED	510,733,156	0.7	-0.27	-0.92	-1.06	-0.79	-1.06	3.10			2.51	10/01/17
Bloomberg US Securitized:MBS, ABS & CMBS			-0.09	-0.39	-1.04	-0.30	-1.04	3.15			2.49	10/01/17
<i>Excess</i>			-0.18	-0.53	-0.01	-0.49	-0.01	-0.05			0.02	
GARDA FIRVO	413,400,000	0.6	1.75	-0.38	2.33	-0.43	2.33	11.39	8.40		8.15	04/01/16
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70		5.80	04/01/16
<i>Excess</i>			0.96	-1.19	-6.22	-2.48	-6.22	3.58	2.71		2.35	
DODGE & COX - FI CORE	386,648,904	0.5	0.09	0.19	-0.53	0.26	-0.53	8.69	6.16	5.03	5.85	03/01/09
CORE BOND CUSTOM BENCHMARK ^[20]			-0.08	0.23	-1.04	0.23	-1.04	7.59	5.26	3.63	4.50	03/01/09
<i>Excess</i>			0.17	-0.04	0.51	0.03	0.51	1.10	0.90	1.40	1.34	
VOYA MSR FUND	194,499,630	0.3	-0.32								-0.01	11/01/21
Bloomberg US Securitized:MBS, ABS & CMBS			-0.09								-0.19	11/01/21
<i>Excess</i>			-0.23								0.18	
US NOMINAL FIXED INCOME ACTIVE	5,596,357,061	7.9	-0.63	1.06	-2.43	1.30	-2.43	8.58	6.41	4.60	5.33	07/01/08
CUSTOM NOMINAL FIXED INCOME BENCHMARK ^[21]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75	3.90	4.57	07/01/08
<i>Excess</i>			0.35	-0.95	0.89	-1.05	0.89	0.79	0.67	0.70	0.76	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
US NOMINAL FIXED INCOME TERRA MARIA	636,033,020	0.9	-0.14	-0.29	-0.72	-0.16	-0.72	4.84	3.55	3.04	4.99	11/01/08
TERRA MARIA FI BENCHMARK ^[22]			-0.18	-0.22	-1.39	-0.17	-1.39	4.25	3.12	2.53	5.44	11/01/08
<i>Excess</i>			0.04	-0.06	0.66	0.01	0.66	0.59	0.42	0.51	-0.45	
TOTAL RATE SENSITIVE (CP)	636,033,019	0.9	-0.14	-0.29	-0.72	-0.16	-0.72	4.84	3.55	3.23	4.87	11/01/08
RATE SENSITIVE (CP) BENCHMARK ^[22]			-0.18	-0.22	-1.39	-0.17	-1.39	4.25	3.13	2.64	4.14	11/01/08
<i>Excess</i>			0.04	-0.06	0.66	0.01	0.66	0.59	0.42	0.59	0.73	
TOTAL US NOMINAL FI ACTIVE + TM	6,232,390,080	8.8	-0.58	0.91	-2.26	1.15	-2.26	8.20	6.12	4.45	5.21	07/01/08
CUSTOM NOMINAL FIXED INCOME BENCHMARK ^[21]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75	3.90	4.57	07/01/08
<i>Excess</i>			0.39	-1.10	1.06	-1.20	1.06	0.41	0.38	0.54	0.64	
US NOMINAL FIXED INCOME	8,722,556,124	12.3	-0.77	1.15	-2.42	1.41	-2.42	8.27	6.16	4.37	5.29	07/01/08
US NOMINAL FIXED INCOME BENCHMARK ^[23]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75	3.83	4.64	07/01/08
<i>Excess</i>			0.20	-0.86	0.91	-0.93	0.91	0.48	0.41	0.54	0.65	
NOMINAL FIXED INCOME EX OVERLAY	8,722,556,235	12.3	-0.77	1.15	-2.42	1.41	-2.42	8.27	6.16	4.51	6.98	07/01/86
CUSTOM NOMINAL FIXED INCOME BENCHMARK ^[21]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75	3.90		07/01/86
<i>Excess</i>			0.20	-0.86	0.91	-0.93	0.91	0.48	0.41	0.61		
Nominal FI Tactical	114,435,131	0.2										01/01/17
Nominal FI Structural	642,299,867	0.9										01/01/17
NOMINAL FIXED INCOME OVERLAY	756,734,998	1.1										01/01/17

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
NOMINAL FIXED INCOME	9,479,291,233	13.4	-1.11	2.26	-3.61	2.41	-3.61	8.63	6.35	4.61	7.00	07/01/86
CUSTOM NOMINAL FIXED INCOME BENCHMARK ^[21]			-0.98	2.01	-3.32	2.35	-3.32	7.79	5.75	3.90		07/01/86
<i>Excess</i>			<i>-0.13</i>	<i>0.25</i>	<i>-0.29</i>	<i>0.06</i>	<i>-0.29</i>	<i>0.85</i>	<i>0.60</i>	<i>0.70</i>		
INFLATION SENSITIVE												
MD TIPS	2,893,589,081	4.1	0.15	2.41	5.87	4.27	5.87				7.82	07/01/19
Bloomberg US Govt Inflation-Linked			0.31	2.52	6.00	4.36	6.00				7.86	07/01/19
<i>Excess</i>			<i>-0.17</i>	<i>-0.11</i>	<i>-0.12</i>	<i>-0.09</i>	<i>-0.12</i>				<i>-0.04</i>	
TOTAL U.S. TIPS	2,893,589,081	4.1	0.15	2.41	5.88	4.27	5.88	8.71	5.50	3.14	4.65	02/01/06
CUSTOM US TIPS MD BM ^[24]			0.31	2.52	6.00	4.36	6.00	8.74	5.53	3.17	4.49	02/01/06
<i>Excess</i>			<i>-0.17</i>	<i>-0.11</i>	<i>-0.12</i>	<i>-0.09</i>	<i>-0.12</i>	<i>-0.03</i>	<i>-0.03</i>	<i>-0.03</i>	<i>0.16</i>	
INFLATION SENSITIVE FI EX OVERLAY	2,893,589,081	4.1	0.15	2.41	5.88	4.27	5.88	8.70	5.49	3.56	4.52	07/01/08
CUSTOM INFLATION SENSITIVE BENCHMARK ^[25]			0.31	2.52	6.00	4.36	6.00	8.74	5.53	3.62	4.36	07/01/08
<i>Excess</i>			<i>-0.17</i>	<i>-0.11</i>	<i>-0.12</i>	<i>-0.09</i>	<i>-0.12</i>	<i>-0.04</i>	<i>-0.04</i>	<i>-0.06</i>	<i>0.17</i>	
Inflation Sensitive FI Tactical	-1	0.0										07/01/17
Inflation Sensitive FI Structural	8,024	0.0										07/01/17
INFLATION SENSITIVE FIXED INCOME OVERLAY	8,022	0.0										07/01/17
INFLATION SENSITIVE FIXED INCOME	2,893,597,104	4.1	0.17	2.46	6.09	4.37	6.09	8.85	5.55	3.59	4.54	07/01/08
CUSTOM INFLATION SENSITIVE BENCHMARK ^[25]			0.31	2.52	6.00	4.36	6.00	8.74	5.53	3.62	4.36	07/01/08
<i>Excess</i>			<i>-0.15</i>	<i>-0.06</i>	<i>0.09</i>	<i>0.01</i>	<i>0.09</i>	<i>0.11</i>	<i>0.02</i>	<i>-0.03</i>	<i>0.19</i>	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL RATE SENSITIVE EX OVERLAY	11,616,145,317	16.4	-0.55	1.46	-0.41	2.12	-0.41	8.49	6.08	4.46	6.96	07/01/86
CUSTOM RATE SENSITIVE BENCHMARK ^[26]			-0.71	2.13	-1.42	2.78	-1.42	8.04	5.72	3.96		07/01/86
<i>Excess</i>			<i>0.16</i>	<i>-0.66</i>	<i>1.01</i>	<i>-0.66</i>	<i>1.01</i>	<i>0.45</i>	<i>0.36</i>	<i>0.50</i>		
TOTAL RATE SENSITIVE OVERLAY	756,743,020	1.1										01/01/17
TOTAL RATE SENSITIVE	12,372,888,337	17.5	-0.81	2.30	-1.30	2.89	-1.30	8.82	6.25	4.55	6.99	07/01/86
CUSTOM RATE SENSITIVE BENCHMARK ^[26]			-0.71	2.13	-1.42	2.78	-1.42	8.04	5.72	3.96		07/01/86
<i>Excess</i>			<i>-0.10</i>	<i>0.18</i>	<i>0.12</i>	<i>0.11</i>	<i>0.12</i>	<i>0.78</i>	<i>0.54</i>	<i>0.59</i>		
CREDIT/DEBT												
US CREDIT												
PIMCO HIGH QUALITY HY	1,511,416,143	2.1	2.02	0.67	4.32	1.64	4.32	8.82			7.02	07/01/18
Bloomberg Ba to B U.S. High Yield			1.88	0.79	4.71	1.70	4.71	9.13			7.35	07/01/18
<i>Excess</i>			<i>0.15</i>	<i>-0.11</i>	<i>-0.38</i>	<i>-0.06</i>	<i>-0.38</i>	<i>-0.32</i>			<i>-0.33</i>	
CREDIT SUISSE US BANK LOANS	885,034,046	1.3	0.69	0.88	5.25	1.85	5.25	5.87			5.27	07/01/18
S&P/LSTA Leverage Loan Index			0.64	0.75	5.20	1.86	5.20	5.63			4.30	07/01/18
<i>Excess</i>			<i>0.05</i>	<i>0.14</i>	<i>0.05</i>	<i>-0.02</i>	<i>0.05</i>	<i>0.24</i>			<i>0.98</i>	
PINE BRIDGE HIGH QUALITY HY	848,818,187	1.2	2.17	1.03	5.47	1.81	5.47	9.88			7.39	07/01/18
Bloomberg Ba to B U.S. High Yield			1.88	0.79	4.71	1.70	4.71	9.13			7.35	07/01/18
<i>Excess</i>			<i>0.29</i>	<i>0.24</i>	<i>0.76</i>	<i>0.11</i>	<i>0.76</i>	<i>0.75</i>			<i>0.04</i>	
HIGHBRIDGE CONVERTIBLE DISLOCATION	23,191,246	0.0	1.45	-1.36	10.45	-0.08	10.45				22.50	08/01/20
Bloomberg U.S. Corporate High Yield			1.87	0.71	5.28	1.60	5.28				8.29	08/01/20
<i>Excess</i>			<i>-0.42</i>	<i>-2.07</i>	<i>5.17</i>	<i>-1.69</i>	<i>5.17</i>				<i>14.20</i>	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
KKR BANK LOANS	8,552,624	0.0										09/01/10
CREDIT/DEBT TRANSITION ACCOUNT	0	0.0										02/01/09
CREDIT/DEBT TERRA MARIA ^[27]	59,322,280	0.1	1.61	0.96	5.88	1.90	5.88					01/01/10
HIGH YIELD/BANK LOAN EX OVERLAY	3,336,405,469	4.7	1.62	0.77	4.88	1.55	4.88	8.69	5.76		5.90	11/01/15
HIGH YIELD CUSTOM BENCHMARK ^[28]			1.63	0.72	5.27	1.66	5.27	8.20	5.89		6.53	11/01/15
<i>Excess</i>			<i>-0.01</i>	<i>0.05</i>	<i>-0.38</i>	<i>-0.10</i>	<i>-0.38</i>	<i>0.49</i>	<i>-0.13</i>		<i>-0.63</i>	
High Yield Structural	1,472	0.0										10/01/16
High Yield Tactical	-4	-0.0										07/01/19
HIGH YIELD/BANK LOAN OVERLAY	1,468	0.0										07/01/19
HIGH YIELD/BANK LOAN	3,336,406,937	4.7	1.63	0.78	4.94	1.58	4.94	8.75	5.80		5.93	11/01/15
HIGH YIELD CUSTOM BENCHMARK ^[28]			1.63	0.72	5.27	1.66	5.27	8.20	5.89		6.53	11/01/15
<i>Excess</i>			<i>-0.00</i>	<i>0.06</i>	<i>-0.33</i>	<i>-0.08</i>	<i>-0.33</i>	<i>0.55</i>	<i>-0.10</i>		<i>-0.60</i>	
TOTAL PRIVATE CREDIT	1,739,869,057	2.5	-0.15	4.62	22.47	9.59	22.47	7.99	9.09	9.84	8.49	01/01/10
PERELLA WEINBERG	43,370,835	0.1	0.00	0.88	18.75	4.93	18.75	-2.15	-2.44	1.92	3.12	07/01/10
HFRI ED: Distressed/Restructuring Index			0.61	0.73	15.61	0.90	15.61	10.00	6.81	6.19	5.86	07/01/10
<i>Excess</i>			<i>-0.61</i>	<i>0.14</i>	<i>3.13</i>	<i>4.03</i>	<i>3.13</i>	<i>-12.14</i>	<i>-9.25</i>	<i>-4.26</i>	<i>-2.74</i>	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL CREDIT HEDGE FUND	43,370,835	0.1	0.00	0.88	18.75	4.93	18.75	-2.09	0.59	3.62	4.29	07/01/10
HFRI ED: Distressed/Restructuring Index			0.61	0.73	15.61	0.90	15.61	10.00	6.81	6.19	5.86	07/01/10
<i>Excess</i>			<i>-0.61</i>	<i>0.14</i>	<i>3.13</i>	<i>4.03</i>	<i>3.13</i>	<i>-12.09</i>	<i>-6.22</i>	<i>-2.57</i>	<i>-1.57</i>	
US CREDIT EX OVERLAY	5,119,645,362	7.2	1.01	2.03	10.09	4.10	10.09	8.42	7.03	7.75	8.78	03/01/09
U.S. CREDIT CUSTOM BENCHMARK ^[29]			1.63	0.72	5.27	1.66	5.27	8.20	5.89	5.98	8.03	03/01/09
<i>Excess</i>			<i>-0.62</i>	<i>1.31</i>	<i>4.82</i>	<i>2.44</i>	<i>4.82</i>	<i>0.22</i>	<i>1.14</i>	<i>1.78</i>	<i>0.76</i>	
NON US CREDIT												
LOGAN CIRCLE HARD CURRENCY EM	663,520,971	0.9	1.49	-1.14	-0.54	-1.44	-0.54	7.94			6.91	07/01/18
Custom EM HC Benchmark ^[30]			0.86	-1.38	-3.34	-2.73	-3.34	5.28			4.80	07/01/18
<i>Excess</i>			<i>0.64</i>	<i>0.24</i>	<i>2.80</i>	<i>1.29</i>	<i>2.80</i>	<i>2.67</i>			<i>2.10</i>	
SSGA LOCAL CURRENCY EM	612,638,885	0.9	1.08	-1.71	-8.04	-4.74	-8.04	1.87			2.97	11/01/18
Custom EM Debt Benchmark ^[31]			1.10	-1.65	-8.08	-4.67	-8.08	2.02			3.07	11/01/18
<i>Excess</i>			<i>-0.02</i>	<i>-0.06</i>	<i>0.05</i>	<i>-0.07</i>	<i>0.05</i>	<i>-0.15</i>			<i>-0.11</i>	
NON US CREDIT EX OVERLAY	1,276,159,856	1.8	1.30	-1.42	-4.28	-3.05	-4.28	4.71	4.09	0.98	0.76	10/01/10
NON-U.S. CREDIT CUSTOM BENCHMARK ^[32]			0.98	-1.52	-5.73	-3.70	-5.73	3.67	3.96	1.48	1.12	10/01/10
<i>Excess</i>			<i>0.32</i>	<i>0.10</i>	<i>1.45</i>	<i>0.65</i>	<i>1.45</i>	<i>1.04</i>	<i>0.13</i>	<i>-0.50</i>	<i>-0.36</i>	
Non US Credit Tactical	233	0.0										07/01/19
Non US Credit Structural	1,198	0.0										10/01/16
NON US CREDIT OVERLAY	1,430	0.0										07/01/19

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
NON US CREDIT	1,276,161,286	1.8	1.30	-1.41	-4.26	-3.05	-4.26	4.73	4.10	0.98	0.76	10/01/10
NON-U.S. CREDIT CUSTOM BENCHMARK ^[32]			0.98	-1.52	-5.73	-3.70	-5.73	3.67	3.96	1.48	1.12	10/01/10
<i>Excess</i>			0.32	0.11	1.47	0.66	1.47	1.06	0.15	-0.49	-0.35	
TOTAL CREDIT/DEBT STRATEGIES EX OVERLAY	6,395,805,218	9.1	1.07	1.33	6.92	2.59	6.92	7.62	6.21	6.71	8.46	03/01/09
MSRA CUSTOM CREDIT BENCHMARK ^[33]			1.48	0.22	2.77	0.46	2.77	7.20	5.60	5.12	7.35	03/01/09
<i>Excess</i>			-0.42	1.10	4.15	2.13	4.15	0.41	0.61	1.59	1.11	
TOTAL CREDIT/DEBT STRATEGIES OVERLAY	2,898	0.0										07/01/19
TOTAL CREDIT/DEBT STRATEGIES	6,395,808,116	9.1	1.07	1.33	6.95	2.61	6.95	7.65	6.23	6.72	8.47	03/01/09
MSRA CUSTOM CREDIT BENCHMARK ^[33]			1.48	0.22	2.77	0.46	2.77	7.20	5.60	5.12	7.35	03/01/09
<i>Excess</i>			-0.41	1.11	4.18	2.14	4.18	0.45	0.64	1.60	1.12	
REAL ASSETS												
REAL ESTATE												
TOTAL REITS EX RECORD CURRENCY	75,394	0.0										04/01/94
RECORD CURRENCY MANAGEMENT-REITS	0	0.0										07/01/11
TOTAL REITS EX OVERLAY	75,394	0.0										04/01/94
Real Estate Structural	100	0.0										08/01/21
TOTAL REITS OVERLAY	100	0.0										06/01/21
TOTAL REITS	75,494	0.0										04/01/94

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL PRIVATE REAL ESTATE	5,688,615,427	8.1	0.03	7.35	15.92	7.75	15.92	7.05	7.73	9.71	8.97	03/01/94
CUSTOM MD PRIVATE REAL ESTATE BM ^[34]			0.41	7.75	21.48	14.77	21.48	9.55	9.00	10.63	9.63	03/01/94
<i>Excess</i>			-0.38	-0.40	-5.56	-7.02	-5.56	-2.50	-1.27	-0.92	-0.67	
MSIM Cus FTSE EPRA NAREIT Dev ex US(Net) ^[35]			6.33	10.16	26.09	9.17	26.09	11.82	7.81	9.13		11/01/06
WILSHIRE RESI			8.86	17.15	46.11	19.08	46.11	19.16	11.05	11.64		01/01/78
TOTAL REAL ESTATE	5,688,690,821	8.1	0.03	7.35	15.94	7.76	15.94	7.55	7.57	9.84	6.88	07/01/87
REAL ESTATE CUSTOM INDEX ^[36]			0.41	7.75	21.48	14.77	21.48	10.14	8.99	10.65	8.35	07/01/87
<i>Excess</i>			-0.38	-0.40	-5.54	-7.01	-5.54	-2.60	-1.43	-0.81	-1.48	
NATURAL RESOURCE AND INFRASTRUCTURE												
TORTOISE CAPITAL DOMESTIC EQ	93,713,528	0.1	2.14	0.62	36.83	-2.68	36.83	1.75	-2.48	2.23	7.10	08/01/09
S&P MLP Total Return Index			2.92	1.21	41.99	-3.07	41.99	3.56	-1.52	0.73	5.57	08/01/09
<i>Excess</i>			-0.77	-0.60	-5.16	0.39	-5.16	-1.80	-0.96	1.50	1.53	
HARVEST FUND ADVISORS	355,371,028	0.5	1.46	1.37	41.20	1.01	41.20	5.75	-0.46	4.11	8.86	11/01/09
S&P MLP Total Return Index			2.92	1.21	41.99	-3.07	41.99	3.56	-1.52	0.73	5.35	11/01/09
<i>Excess</i>			-1.46	0.15	-0.79	4.08	-0.79	2.19	1.06	3.38	3.50	
RHUMBLINE DJ BROOKFIELD GLOBAL INFRA	906,597,841	1.3	7.18	6.86	21.16	5.55	21.16	12.15			7.16	11/01/17
DJ Brookfield Global Infra Comp			7.15	6.70	20.23	5.15	20.23	11.24			5.97	11/01/17
<i>Excess</i>			0.03	0.16	0.93	0.40	0.93	0.90			1.20	
RHUMBLINE GLOBAL NATURAL RESOURCES	404,702,944	0.6	7.12	7.24	24.73	4.20	24.73	13.60			7.85	11/01/17
S&P Global Natural Resources (Net)			7.14	7.18	24.40	4.07	24.40	13.12			7.19	11/01/17
<i>Excess</i>			-0.02	0.06	0.33	0.12	0.33	0.48			0.66	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL ENERGY FUNDS	673,395,822	1.0	-0.00	0.43	38.84	17.58	38.84	1.43	6.09	4.89	6.35	01/01/10
TOTAL INFRASTRUCTURE	51,487,366	0.1	-0.00	-3.02	-6.90	-2.16	-6.90	-7.06	-6.06	0.05	0.65	10/01/09
TIMBER LP FUNDS	187,784,865	0.3	-0.00	0.04	3.29	0.39	3.29	2.97	3.02	4.30	5.72	05/01/10
NATURAL RESOURCE AND INFRA EX OVERLAY	2,673,053,395	3.8	3.65	3.55	26.22	6.72	26.22	5.81	4.47	5.07	8.31	08/01/09
NATURAL RESOURCE AND INFRASTRUCTURE BM ^[37]			7.15	6.99	22.91	4.52	22.91	12.61	8.46	8.07	7.81	08/01/09
<i>Excess</i>			<i>-3.49</i>	<i>-3.44</i>	<i>3.31</i>	<i>2.21</i>	<i>3.31</i>	<i>-6.79</i>	<i>-3.99</i>	<i>-3.00</i>	<i>0.50</i>	
NR & Infra Structural Overlay	100	0.0										08/01/21
Real Assets Tactical	0	0.0										07/01/19
NATURAL RESOURCE AND INFRA OVERLAY	100	0.0										07/01/19
NATURAL RESOURCE AND INFRASTRUCTURE	2,673,053,495	3.8	3.65	3.56	26.24	6.74	26.24				3.85	07/01/19
NATURAL RESOURCE AND INFRASTRUCTURE BM ^[37]			7.15	6.99	22.91	4.52	22.91				8.57	07/01/19
<i>Excess</i>			<i>-3.49</i>	<i>-3.43</i>	<i>3.34</i>	<i>2.22</i>	<i>3.34</i>				<i>-4.72</i>	
COMMODITIES												
Commodity Tactical	355	0.0										10/01/16
Commodity Structural	18,722,122	0.0										01/01/17
TOTAL COMMODITY OVERLAY	18,722,478	0.0										01/01/17



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL COMMODITIES	18,722,478	0.0										09/01/09
TOTAL REAL ASSETS EX OVERLAY	8,361,744,216	11.8	1.17	6.08	19.28	7.43	19.28	7.09	6.31	3.36	4.59	02/01/06
CUSTOM REAL ASSETS BENCHMARK ^[38]			2.54	7.51	21.98	11.28	21.98	10.95	8.43	4.17	4.55	02/01/06
<i>Excess</i>			-1.36	-1.43	-2.69	-3.85	-2.69	-3.86	-2.12	-0.81	0.04	
TOTAL REAL ASSETS OVERLAY	18,722,678	0.0										01/01/17
TOTAL REAL ASSETS	8,380,466,894	11.9	1.26	6.18	19.57	7.53	19.57	7.22	6.38	3.40	4.61	02/01/06
CUSTOM REAL ASSETS BENCHMARK ^[38]			2.54	7.51	21.98	11.28	21.98	10.95	8.43	4.17	4.55	02/01/06
<i>Excess</i>			-1.28	-1.33	-2.41	-3.75	-2.41	-3.73	-2.05	-0.77	0.06	
ABSOLUTE RETURN												
1977 MERGER ARBITRAGE FUND	268,887,509	0.4	0.16	0.69	2.77	-0.44	2.77	8.85			9.89	01/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81			5.83	01/01/18
<i>Excess</i>			-0.63	-0.12	-5.78	-2.49	-5.78	1.04			4.05	
KING STREET CAPITAL	158,682,836	0.2	1.79	2.35	16.73	3.84	16.73	8.96	6.50	6.13	6.11	12/01/11
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70	4.81	4.71	12/01/11
<i>Excess</i>			1.00	1.54	8.19	1.79	8.19	1.15	0.80	1.32	1.40	
EMPYREAN CAPITAL FUND	276,062,800	0.4	-0.10	-0.21	10.15	1.92	10.15	8.96			6.60	06/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81			5.94	06/01/18
<i>Excess</i>			-0.90	-1.02	1.61	-0.13	1.61	1.15			0.66	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
STANDARD GENERAL FUND II	183,596,634	0.3	1.15	-7.98	11.28	-2.93	11.28				9.88	02/01/19
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				7.35	02/01/19
<i>Excess</i>			0.36	-8.80	2.74	-4.98	2.74				2.54	
CONTRARIAN EMMA 2	190,189,271	0.3	2.75	-0.82	11.85	-4.32	11.85				-0.15	01/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				8.03	01/01/20
<i>Excess</i>			1.96	-1.64	3.31	-6.38	3.31				-8.18	
EVENT DRIVEN STRATEGIES	1,077,507,355	1.5	0.95	-1.15	10.17	-0.26	10.17	5.45				07/01/17
HFRI FoF CONSERVATIVE + 100 bps			0.79	0.82	8.55	2.05	8.55	7.81				07/01/17
<i>Excess</i>			0.16	-1.97	1.62	-2.31	1.62	-2.36				
BRIDGEWATER PURE ALPHA	454,051,843	0.6	7.86	4.04	9.92	6.26	9.92	-0.16	1.90	2.83	4.28	05/01/08
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70	4.81	2.74	05/01/08
<i>Excess</i>			7.07	3.23	1.37	4.21	1.37	-7.97	-3.80	-1.98	1.54	
FORT GLOBAL CONTRARIAN	204,942,500	0.3	0.71	5.08	-0.85	-2.54	-0.85	5.04			3.51	03/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81			5.90	03/01/18
<i>Excess</i>			-0.08	4.26	-9.40	-4.59	-9.40	-2.77			-2.39	
MANIYAR MACRO FUND	248,602,000	0.4	0.33	-1.16	-7.74	-0.39	-7.74				0.43	08/01/19
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				7.37	08/01/19
<i>Excess</i>			-0.46	-1.97	-16.29	-2.44	-16.29				-6.94	
KIRKOSWALD GLOBAL MACRO FUND	251,374,600	0.4	3.82	8.76	23.13	15.44	23.13				15.50	06/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				12.58	06/01/20
<i>Excess</i>			3.03	7.95	14.58	13.39	14.58				2.92	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
PHARO GAIA FUND	100,639,636	0.1	2.23	-2.00	-10.61	-1.85	-10.61				0.42	07/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				11.97	07/01/20
<i>Excess</i>			1.44	-2.81	-19.15	-3.90	-19.15				-11.54	
BREVA HOWARD FG MACRO FUND	135,687,900	0.2	-1.13	-3.85		-5.21					-9.54	06/01/21
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82		2.05					2.48	06/01/21
<i>Excess</i>			-1.92	-4.66		-7.26					-12.02	
GLOBAL MACRO/GTAA STRATEGIES	1,395,298,479	2.0	3.35	2.76	2.98	3.31	2.98	1.37	0.76	0.61	1.92	04/01/08
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70	4.81	2.76	04/01/08
<i>Excess</i>			2.56	1.94	-5.57	1.26	-5.57	-6.44	-4.94	-4.20	-0.85	
NEPHILA PALMETTO FUND	104,864,868	0.1	-1.12	-2.63	-7.52	-6.01	-7.52	-1.45	-2.92		-0.05	01/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70		4.30	01/01/14
<i>Excess</i>			-1.91	-3.45	-16.06	-8.06	-16.06	-9.26	-8.62		-4.35	
NIMBUS WEATHER FUND LTD	23,766,589	0.0	0.04	0.54	8.23	-1.03	8.23	4.42			2.08	06/01/17
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81			5.73	06/01/17
<i>Excess</i>			-0.76	-0.27	-0.32	-3.08	-0.32	-3.39			-3.65	
PRIVATE MARKET FUNDS	350,855,832	0.5	19.25	17.69	36.79	30.59	36.79	5.45			10.39	06/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81			5.94	06/01/18
<i>Excess</i>			18.46	16.88	28.25	28.54	28.25	-2.36			4.45	
HSCM BERMUDA FUND	211,248,241	0.3	-1.14	1.14	-6.57	-8.77	-6.57				3.94	07/01/19
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				7.25	07/01/19
<i>Excess</i>			-1.93	0.33	-15.12	-10.82	-15.12				-3.31	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
OPPORTUNISTIC	690,735,530	1.0	8.19	8.13	10.68	7.33	10.68	5.66	2.08		3.14	01/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70		4.30	01/01/14
<i>Excess</i>			7.40	7.32	2.13	5.28	2.13	-2.15	-3.62		-1.16	
HUDSON BAY FUND	497,144,500	0.7	-0.53	-0.81	13.74	2.63	13.74	12.71	10.97		7.46	10/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70		4.42	10/01/14
<i>Excess</i>			-1.32	-1.63	5.20	0.58	5.20	4.90	5.28		3.04	
ARISTEIA CAPITAL	391,573,000	0.6	0.17	1.68	8.15	2.30	8.15	11.87	9.45		7.33	12/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70		4.55	12/01/14
<i>Excess</i>			-0.62	0.86	-0.39	0.25	-0.39	4.06	3.75		2.78	
ARISTEIA CO-INVEST	7,495,610	0.0	4.27	0.71	0.06	2.11	0.06	10.01	10.74		8.88	03/01/16
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70		5.76	03/01/16
<i>Excess</i>			3.48	-0.10	-8.48	0.05	-8.48	2.21	5.05		3.12	
EXODUS POINT	498,305,200	0.7	2.04	0.44	5.26	2.62	5.26	8.24			7.25	08/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81			6.13	08/01/18
<i>Excess</i>			1.24	-0.38	-3.29	0.57	-3.29	0.44			1.11	
VOLORIDGE FUND	246,070,125	0.3	5.24	4.38	1.25	8.44	1.25				5.05	02/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				8.10	02/01/20
<i>Excess</i>			4.45	3.56	-7.30	6.39	-7.30				-3.05	
BFAM ASIAN OPPORTUNITIES FUND	213,759,250	0.3	-0.11	-11.02		-12.29					-14.50	04/01/21
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82		2.05					4.52	04/01/21
<i>Excess</i>			-0.90	-11.83		-14.34					-19.02	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
ARISTEIA SELECT OPPORTUNITIES II	41,445,920	0.1	5.16	6.97		3.61					3.61	07/01/21
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82		2.05					2.05	07/01/21
<i>Excess</i>			4.37	6.16		1.56					1.56	
RELATIVE VALUE STRATEGIES	1,895,793,605	2.7	1.19	-0.46	5.63	1.34	5.63	9.35	7.01		5.10	01/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70		4.30	01/01/14
<i>Excess</i>			0.40	-1.28	-2.91	-0.71	-2.91	1.55	1.31		0.80	
YIHENG CAPITAL PARTNERS LP	160,295,550	0.2	-2.00	-0.59	-14.97	-27.57	-14.97				-7.32	12/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				10.65	12/01/20
<i>Excess</i>			-2.79	-1.41	-23.51	-29.62	-23.51				-17.97	
AVIDITY CAPITAL FUND	161,245,950	0.2	3.97	6.03		10.47					7.50	03/01/21
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82		2.05					5.42	03/01/21
<i>Excess</i>			3.17	5.22		8.42					2.07	
TORQ CAPITAL	145,155,000	0.2	-3.23								-3.23	12/01/21
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79								0.79	12/01/21
<i>Excess</i>			-4.02								-4.02	
LONG/SHORT EQUITY	466,696,500	0.7	-0.42	1.66	-8.45	-12.64	-8.45				-0.80	12/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55				10.65	12/01/20
<i>Excess</i>			-1.21	0.84	-16.99	-14.69	-16.99				-11.44	
TOTAL ABSOLUTE RETURN	5,526,446,071	7.8	2.36	1.38	6.08	1.38	6.08	5.39	3.98	3.43	3.61	04/01/08
CUSTOM ABSOLUTE RETURN BENCHMARK ^[19]			0.79	0.82	8.55	2.05	8.55	7.81	5.70	4.81	2.76	04/01/08
<i>Excess</i>			1.57	0.57	-2.46	-0.67	-2.46	-2.42	-1.72	-1.38	0.85	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
MULTI ASSET												
BRIDGEWATER ALL WEATHER	305,831,487	0.4	2.63	4.53	13.51	6.24	13.51	13.24	9.03	6.53	8.71	07/01/09
CUSTOM BRIDGEWATER BENCHMARK ^[39]			0.79	0.82	8.55	2.05	8.55	7.81	5.70	4.86	5.91	07/01/09
<i>Excess</i>			1.84	3.72	4.97	4.19	4.97	5.43	3.33	1.66	2.80	
BLACKROCK CASH EQUITIZATION	388,522,266	0.6	2.36	3.94	11.51	2.45	11.51	15.77	10.59		11.46	12/01/16
FTSE 3 MONTH T-BILL			0.00	0.01	0.05	0.02	0.05	0.96	1.11		1.10	12/01/16
<i>Excess</i>			2.36	3.93	11.46	2.43	11.46	14.82	9.48		10.36	
TOTAL MULTI ASSET	694,353,753	1.0	2.48	4.20	12.17	4.08	12.17	13.73			9.81	07/01/18
TOTAL PLAN POLICY INDEX ^[40]			1.74	3.99	15.04	5.80	15.04	14.39			11.28	07/01/18
<i>Excess</i>			0.74	0.21	-2.87	-1.72	-2.87	-0.65			-1.47	
CASH												
MARYLAND MONEY MARKET ACCOUNT	716,757,501	1.0	0.01	0.01	0.06	0.02	0.06	0.95	1.23	0.69	0.64	01/01/11
FTSE 3 MONTH T-BILL			0.00	0.01	0.05	0.02	0.05	0.96	1.11	0.60	0.55	01/01/11
<i>Excess</i>			0.00	0.00	0.01	0.00	0.01	-0.00	0.11	0.09	0.08	
SELF LIQUIDATING ACCOUNT	0	0.0										06/01/84
TOTAL CASH	727,173,360	1.0	0.05	0.04	0.52	0.03	0.52	3.07	4.78	3.54	3.54	07/01/08
FTSE 3 MONTH T-BILL			0.00	0.01	0.05	0.02	0.05	0.96	1.11	0.60	0.52	07/01/08
<i>Excess</i>			0.05	0.03	0.48	0.01	0.48	2.12	3.67	2.94	3.02	



SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TOTAL PLAN	70,628,503,790	100.0	1.39	3.65	14.93	5.27	14.93	14.73	11.30	9.24	8.42	07/01/86
TOTAL PLAN POLICY INDEX ^[40]			1.74	3.99	15.04	5.80	15.04	14.39	10.84	8.64		07/01/86
<i>Excess</i>			<i>-0.35</i>	<i>-0.34</i>	<i>-0.11</i>	<i>-0.53</i>	<i>-0.11</i>	<i>0.34</i>	<i>0.46</i>	<i>0.61</i>		
TOTAL PLAN CUSTOM STATIC INDEX ^[41]			1.80	4.10	15.64	5.99	15.64	14.53	10.97	8.79		07/01/08

ENDNOTES

- [1] Since 12/01/2016: 100% Russell 1000
From 04/01/2013 to 11/30/2016: 100% Russell 3000
- [2] Benchmark is dynamically calculated using Beginning Market Value weights of the underlying portfolios and their benchmarks
- [3] Since 11/01/2008: Benchmark is dynamically calculated using Average Balance (BMV+ Weighted Net Cash Flows) weights of the underlying portfolios and their corresponding indices. From 09/01/2008 - 10/31/2008: Benchmark was dynamically calculated based on the beginning weights of the underlying portfolios and their corresponding indices. From 05/01/2008 - 08/31/2008: 11.1% S&P 500; 13.3% Russell 1000 Value; 33.3% Russell 1000 Growth; 16.7% Russell Mid Cap Growth; 25.6% Russell 2000 Value 11/01/2007 - 04/30/2008: 10.9% S&P 500; 13.1% Russell 1000 Value; 33.3% Russell 1000 Growth; 17.2% Russell Mid Cap Growth; 25.6 Russell 2000 Value Prior to 11/01/2007: 11% S&P 500; 13.1% Russell 1000 Value; 32% Russell 1000 Growth; 16.5% Russell Mid Cap Growth; 27.4% Russell 2000 Value
- [4] Since 07/01/2008: 100% Russell 3000
From 01/01/2005 to 6/30/2008: 100% Dow Jones Willshire 5000
Prior to 01/01/2005: 100% Russell 3000
- [5] From 11/01/2003: 100% of MSCI AC WORLD ex US (NET)
From 07/01/2012: 100% of MSCI WORLD EX US (NET)
- [6] Since 04/01/2016: 100% MSCI WORLD EX US (NET).
From 01/01/2013 to 03/31/2016: 100% MSCI AC World ex US Net.
- [7] Since 06/01/2016: 100% MSCI World Ex US IMI Net
From 12/01/2008 to 05/31/2016: 100% MSCI All Country World ex US IMI Net
- [8] Returns for periods prior to 11/01/2015 also included Emerging Market Equity portfolios.
- [9] Benchmark is dynamically calculated using Beginning Market Value weights of the underlying portfolios and their benchmarks. Returns for periods prior to 11/01/2015 also included Emerging Market Equity portfolios.
- [10] Since 11/01/2008: Benchmark is dynamically calculated using Average Balance (BMV+ Weighted Net Cash Flows) weights. Prior to 11/01/2008: 100% MSCI EAFE (net).
Returns for periods prior to 11/01/2015 also included Emerging Market Equity portfolios.
- [11] Since 11/01/2015: 100% MSCI WORLD EX US (NET)
From 07/01/2010 to 10/31/2015: 100% MSCI All Country World ex. U.S.
From 07/01/2009 to 06/30/2010: 100% MSCI All Country World ex. U.S. IMI Net
From 01/01/2003 to 06/30/2009: 100% MSCI All Country World ex. U.S.
Prior to 01/01/2003: 100% MSCI EAFE
- [12] Since 07/01/2010: 100% MSCI AC WORLD NET
From 07/01/2009 to 06/30/2010: 100% MSCI ACWI IMI NET
Prior to 07/01/2009: 100% MSCI AC WORLD NET
- [13] Since 10/01/2017: Weighted off Transitional Targets; 43.243% Russell 3000, 27.027% MSCI World ex. U.S. (Net), 29.730% MSCI EM
From 07/01/2016 to 09/30/2017: Weighted off Transitional Targets; 44.445% Russell 3000, 33.333% MSCI World ex. U.S. (Net), 22.222% MSCI EM
From 01/01/2016 to 06/30/2016: Weighted off Transitional Targets; 45.946% Russell 3000, 37.838% MSCI World ex. U.S. (Net), 16.216% MSCI EM
From 11/01/2015 to 12/31/2015: Weighted off Transitional Targets; 47.369% Russell 3000, 42.105% MSCI World ex. U.S. (Net), 10.526% MSCI EM
Prior to 11/01/2015: Benchmark is dynamically calculated using the weights of the US Equity, International Equity, and Global Equity aggregates and the corresponding asset class benchmarks
- [14] The Private Equity benchmark is the State Street Private Equity Index (1 quarter lag). However, in non-quarter end months, the actual Private Equity return will be applied. In the third month of the quarter, the return will be calculated so that when geometrically linked with months 1 and 2, the three month return equals the published SS PEI (1 quarter lag).

ENDNOTES

- [15] Benchmark is a dynamic blend of the Public Equity Benchmark and the State Street Private Equity Index based off of sub-asset class weights used in the policy benchmark.
- [16] Since 10/01/2017: 66.67% Barclays US Government Long Bond Index, 16.67% Barclays US Investment Grade Corporate Index, 16.66% Barclays US Securitized Index
From 11/01/2015 to 09/30/2017: 62.50% Barclays US Government Long Bond Index, 18.75% Barclays US Investment Grade Corporate Index, 18.75% Barclays US Securitized Index
- [17] Since 10/01/2017: 66.67% Barclays US Government Long Bond Index, 16.67% Barclays US Investment Grade Corporate Index, 16.66% Barclays US Securitized Index
From 11/01/2015 to 09/30/2017: 62.50% Barclays US Government Long Bond Index, 18.75% Barclays US Investment Grade Corporate Index, 18.75% Barclays US Securitized Index
From 07/01/2013 to 10/31/2015: 100% Barclays US Intermediate Aggregate Index
07/01/2009 to 06/30/2013: 100% Barclays Aggregate Bond
11/01/2003 to 06/30/2009: 100% Barclays US Universal Index
Prior to 11/01/2003: 100% Citigroup BIG
- [18] Since 10/01/2017: 66.67% Barclays US Government Long Bond Index, 16.67% Barclays US Investment Grade Corporate Index, 16.66% Barclays US Securitized Index
10/01/2015 to 09/30/2017: 62.50% Barclays US Government Long Bond Index, 18.75% Barclays US Investment Grade Corporate Index, 18.75% Barclays US Securitized Index
07/01/2013 to 09/30/2015: 100% Barclays US Intermediate Aggregate Index
07/01/2009 to 06/30/2013: 100% Barclays Aggregate Bond Index
Prior to 07/01/2009: 100% Barclays US Universal Index
- [19] Since 11/01/2015: HFRI Fund of Funds Conservative + 100 bps.
From 07/01/2014 to 10/31/2015: HFRI FOF: Conservative Index.
From 07/01/2008 to 06/30/2014 benchmark was HFRI Fund of Funds index.
Prior to 07/01/2008 benchmark was the Citigroup 3-Month T-bill + 500 bps.
- [20] Since 10/01/2017: 100% Barclays US Investment Grade Corporate Index
From 12/01/2015 to 09/30/2017: 62.50% Barclays US Government Long Bond Index, 18.75% Barclays US Investment Grade Corporate Index, 18.75% Barclays US Securitized Index
From 07/01/2013 to 11/31/2015: 100% Barclays US Intermediate Aggregate Index
Prior 07/01/2013: 100% Barclays Aggregate Bond
- [21] Since 10/01/2017: 66.67% Barclays US Government Long Bond Index, 16.67% Barclays US Investment Grade Corporate Index, 16.66% Barclays US Securitized Index
From 11/01/2015 to 09/30/2017: 62.50% Barclays US Government Long Bond Index, 18.75% Barclays US Investment Grade Corporate Index, 18.75% Barclays US Securitized Index
From 07/01/2013 to 10/31/2015: 80% BC Aggregate Intermediate, 20% BC Global Aggregate 1-10 Year Hedged
From 07/01/2010 to 06/30/2013: 80% BC Aggregate, 20% BC Global Bond Aggregate Hedged
From 01/01/2010 to 06/30/2010: 80% BC Aggregate, 20% BC Global Bond Aggregate Unhedged
From 07/01/2009 to 12/31/2009: Benchmark is dynamically calculated using Beginning Market Value weights of the underlying portfolios and their benchmarks
Prior to 07/01/2009: Benchmark is BC US Universal
- [22] Benchmark is dynamically calculated based on the Average Balance (BMV + Weighted Net Cash Flows) weights of the underlying portfolios and their corresponding indices
- [23] Since 11/01/2015: 66.67% Barclays US Government Long Bond Index, 16.67% Barclays US Investment Grade Corporate Index, 16.66% Barclays US Securitized Index
From 11/01/2015 to 09/30/2017: 62.50% Barclays US Government Long Bond Index, 18.75% Barclays US Investment Grade Corporate Index, 18.75% Barclays US Securitized Index
From 07/01/2013 to 10/31/2015: 100% Barclays US Intermediate Aggregate Index
Prior 07/01/2013: 100% Barclays Aggregate Bond
- [24] As of 12/01/2012: 100% of Barclays US TIPS Index, B Series
From 02/01/2006 to 11/30/2012: 100% of Barclays Global Inflation Linked:US TIPS, L Series
- [25] Since 11/01/2015: 100% Barclays US TIPS Index
From 12/01/2012 to 10/31/2015: 50% Barclays Global Inflation Linked:US TIPS; 50% Barclays World Inflat-Linked Bond Index
Prior to 11/30/2012: 65% Barclays Global Inflation Linked:US TIPS; 35% Barclays World Inflat-Linked Bond Index

ENDNOTES

- [26] Since 10/01/2017: 53% Barclays Long-Term Government, 13% Barclays Securitized, 13% Barclays Corporate, 21% Barclays U.S. TIPS
From 07/01/2016 to 09/30/2017: 48% Barclays Long-Term Government, 14% Barclays Securitized, 14% Barclays Corporate, 24% Barclays U.S. TIPS
From 11/01/2015 to 06/30/2016: 50% Barclays Long-Term Government, 15% Barclays Securitized, 15% Barclays Corporate, 20% Barclays U.S. TIPS
From 07/01/2013 to 10/31/2015: 80% BC Aggregate Intermediate, 20% BC Global Aggregate 1-10 Year Hedged
From 07/01/2010 to 06/30/2013: 80% BC Aggregate, 20% BC Global Bond Aggregate Hedged
From 01/01/2010 to 06/30/2010: 80% BC Aggregate, 20% BC Global Bond Aggregate Unhedged
From 07/01/2009 to 12/31/2009: Benchmark is dynamically calculated using Beginning Market Value weights of the underlying portfolios and their benchmarks
Prior to 07/01/2009: Benchmark is BC US Universal.
Formerly named "Custom Fixed Income Benchmark" prior to 11/01/2015.
- [27] As of 01/01/2010 all high yield and convertible managers were moved out of the Fixed Income asset class and into the Credit/Debt asset class. Historical returns for high yield and convertible managers remain in Fixed Income composite.
- [28] 80% Barclays US High Yield, 20% S&P/LSTA Leveraged Loan
- [29] Since 11/01/2015: 80% Barclays US High Yield, 20% S&P/LSTA Leveraged Loan.
From 07/01/2013 to 10/31/2015: 62.5% Barclays US High Yield, 25% Barclays Credit, 12.5% S&P/LSTA Leveraged Loan.
From 01/01/2010 to 06/30/2013: 50% Barclays Credit, 50% Barclays Corp High Yield.
From 03/01/2009 to 12/31/2009: 75% Barclays Credit, 25% Barclays Corp High Yield.
- [30] 50% BBG Barc EM Hard Cur Agg: Sovereign/50% BBG Barc EM USD Aggregate Corporate TR
- [31] Since 07/01/2020: 100% Bloomberg EM Local Currency Liquid Government -30 BPS
From 10/01/2017 to 06/30/2020: 100% Bloomberg EM Local Govt -30 BPS
Prior to 10/01/2017: 100% JP Morgan GBI EM Global Diversified (G)
- [32] Since 07/01/2020: 50% BBG Barc EM Local Currency Liquid Govt -30bps, 25% BBG Barc EM Hard Cur Agg: Sovereign, 25% BBG Barc EM USD Aggregate Corporate TR.
From 10/01/2017 to 06/30/2020: 50% BBG Barc EM Local Govt -30bps, 25% BBG Barc EM Hard Cur Agg: Sovereign, 25% BBG Barc EM USD Aggregate Corporate TR.
From 11/01/2015 to 09/30/2017: 50% JP Morgan GBI EM Global Diversified, 25% JP Morgan EMBI Global Diversified, 25% JPMorgan CEMBI Broad.
Prior to 11/01/2015: 100% JP Morgan GBI EM Global Diversified.
- [33] Since 10/01/2017: 78% US Credit Benchmark, 22% non-U.S Credit Benchmark.
From 01/01/2016 to 09/30/2017: 67% US Credit Benchmark, 33% non-U.S Credit Benchmark.
From 11/01/2015 to 12/31/2015: 75% US Credit Benchmark, 25% non-U.S Credit Benchmark.
From 07/01/2013 to 10/31/2015: 50% BC High Yield / 20% BC Credit / 20% JP Morgan GBI EM Global Diversified/ 10% S&P/LSTA Leveraged Loan Index
From 01/01/2010 to 06/30/2013: 50% BC Credit / 50% BC High Yield
Prior to 01/01/2010: 75% BC Credit / 25% BC High Yield
- [34] From 07/01/2020: The Private Real Estate benchmark is the NCREIF ODCE Net + 40bps. However, in non-quarter end months, the actual Maryland Private Real Estate return will be applied. In the third month of the quarter, the return will be calculated so that when geometrically linked with months 1 and 2, the three month return equals the published NCREIF ODCE Net + 40bps.
For 06/2020: The Private Real Estate benchmark is the NCREIF ODCE.
From 07/01/2013 to 05/31/2020: The Private Real Estate benchmark is the NCREIF ODCE (1 quarter lag) since 07/01/2013. However, in non-quarter end months, the actual Maryland Private Real Estate return will be applied. In the third month of the quarter, the return will be calculated so that when geometrically linked with months 1 and 2, the three month return equals the published NCREIF ODCE (1 quarter lag).
Prior 07/01/2013, the Private Real Estate benchmark is the NCREIF PROPERTY INDEX QTR LAG.
- [35] Since 11/2007 benchmark is 100% FTSE EPRA NAREIT Developed Ex US (Net) index. Prior to 11/2007, the net version of the index was calculated by and provided to State Street by MSIM

ENDNOTES

- [36] From 07/01/2020: 100% NCREIF ODCE Net + 40bps.
For 06/2020: 100% NCREIF ODCE.
From 07/01/2019 to 05/31/2020: 100% NCREIF ODCE (one qtr lag).
Prior to 07/01/2016, a static blend of 85% NCREIF ODCE (one qtr lag) and 15% FTSE EPRA/NAREIT Developed Net Index.
Prior to 07/01/2016, a dynamic blend of the NCREIF ODCE (one qtr lag), and the FTSE EPRA/NAREIT Developed Net Index.
Prior to 05/01/2014, a dynamic blend of the Wilshire RESI, NCREIF ODCE (one qtr lag), and the MSIM Custom EPRA/NAREIT Global ex US
Prior to 07/01/2013, a dynamic blend of the Wilshire RESI, NCREIF Property (one qtr lag), and the MSIM Custom EPRA/NAREIT Global ex US
Prior to 07/01/2008: 50% Wilshire RESI & 50% NCREIF Property (one qtr lag)
- [37] Since 10/01/2017: 60% S&P Global Natural Resources Index (Net); 40% DJ Brookfield Global Infra Comp.
From 07/01/2016 to 09/30/2017: 75% S&P Global Natural Resources Index (Net); 25% DJ Brookfield Global Infra Comp.
From 11/01/2015 to 06/30/2016: 100% of CPI + 5%; 10% Max.
From 08/01/2009 to 10/31/2015: 100% of CPI + 5%; 8% Max.
- [38] Since 10/01/2017: Benchmark is dynamically calculated using the beginning market values of the Real Estate and Natural Resource/Infrastructure sub-asset classes and their corresponding benchmarks.
From 11/01/2015 to 09/30/2017: Benchmark is dynamically calculated using the beginning market values of the Real Estate, Commodities and Natural Resource/Infrastructure sub-asset classes and their corresponding benchmarks.
From 12/01/2012 to 10/31/2015: 30% - DJ UBS Commodities Index (Total Return), 10% - CPI + 5%; 8% Max , 60% - 50% BC US TIPS Index/50% BC World Inflat-Linked Bond Index
From 07/01/2011 to 11/30/2012: 30% - DJ UBS Commodities Index (Total Return), 10% - CPI + 5%; 8% Max , 60% - 65% BC US TIPS Index/35% BC Global Inflation Linked (USD Hedged) Index
From 07/01/2009 to 06/30/2011: 20% - DJ UBS Commodities Index (Total Return), 20% - CPI + 5%; 8% Max , 60% - 65% BC US TIPS Index/35% BC Global Inflation Linked (USD Hedged) Index
07/01/2008 to 06/30/2009: Benchmark is dynamically calculated using Beginning Market Value weights of the underlying portfolios and their benchmarks Prior to 07/01/2008: 100% Barclays US TIPS Index
Prior to 07/01/2008: 100% Barclays US TIPS Index
Formerly named "Custom Real Return Benchmark" prior to 11/01/2015.
- [39] Since 07/01/2014 Benchmark is 100% of Custom Absolute Return Benchmark.
From 07/01/2011 to 06/30/2014 Benchmark is composed of 100% 3 month T-Bill + 6.5%
From 07/01/2009 to 06/30/2011 Benchmark is composed of 75% Barclays Capital US TIPS , 10% DJ-AIG Commodities Total Return Index and 15% MSCI ACWI.
- [40] Since 07/01/2008: Calculated monthly using transitional weights and asset class benchmarks. Prior to 07/01/2008: MSRA TOTAL PLAN STATIC POLICY.
- [41] Calculated monthly using the strategic target weights and asset class benchmarks.

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