STATE RETIREMENT AGENCY
120 East Baltimore Street
Baltimore, MD 21202-6700

MARYLAND
STATE RETIREMENT
and PENSION SYSTEM

410-625-5555 • 1-800-492-5909
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August 14, 2020

The Honorable Guy J. Guzzone Chair, Budget & Taxation Committee Miller Senate Office Building, 3 West 11 Bladen Street Annapolis, MD 21401	The Honorable Maggie McIntosh 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 Michael A. Jackson House Chair, Joint Committee on Pensions House Office Building, Room 207 6 Bladen Street Annapolis, MD 21401

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

Dear Chairmen Guzzone, McIntosh, Elfreth, and Jackson:

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 June 30, 2020. 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,

R. Dean Kenderdine
Secretary to the Board of Trustees

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

State Retirement Agency of Maryland

Rates of Return - Net Mgr
Periods Ending June 30, 2020

EXHIBIT A

STATE STREET

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	**54,767,091,950**	**100.0**	**1.88**	**7.38**	**-1.53**	**3.57**	**3.57**	**6.01**	**5.81**	**7.57**	**7.89**	**07/01/86**
TOTAL PLAN POLICY INDEX [1]			1.36	7.14	-1.94	3.14	3.14	5.92	5.84	7.17		07/01/86
Excess			*0.52*	*0.24*	*0.41*	*0.43*	*0.43*	*0.09*	*-0.03*	*0.40*		
TOTAL GROWTH EQUITY	**27,590,108,388**	**50.4**	**3.24**	**11.97**	**-5.26**	**2.09**	**2.09**	**6.99**	**7.34**	**10.14**	**5.91**	**01/01/98**
GROWTH EQUITY CUSTOM BENCHMARK [2]			1.98	9.63	-7.17	-0.39	-0.39	5.92				01/01/98
Excess			*1.25*	*2.35*	*1.91*	*2.48*	*2.48*	*1.07*				
TOTAL RATE SENSITIVE	**10,186,335,384**	**18.6**	**1.21**	**4.08**	**14.47**	**18.10**	**18.10**	**9.12**	**6.82**	**5.46**	**7.30**	**07/01/86**
CUSTOM RATE SENSITIVE BENCHMARK [3]			0.58	2.33	13.51	17.15	17.15	8.89	6.70	4.94		07/01/86
Excess			*0.64*	*1.75*	*0.95*	*0.94*	*0.94*	*0.23*	*0.12*	*0.52*		
TOTAL CREDIT/DEBT STRATEGIES	**5,116,741,387**	**9.3**	**0.65**	**5.59**	**-3.81**	**-0.43**	**-0.43**	**2.75**	**4.05**	**6.00**	**8.11**	**03/01/09**
MSRA CUSTOM CREDIT BENCHMARK [4]			1.17	9.50	-3.53	-0.06	-0.06	3.16	4.38	5.14	7.17	03/01/09
Excess			*-0.53*	*-3.91*	*-0.28*	*-0.37*	*-0.37*	*-0.41*	*-0.33*	*0.85*	*0.94*	
TOTAL REAL ASSETS	**6,473,324,881**	**11.8**	**-1.40**	**-0.98**	**-6.76**	**-5.42**	**-5.42**	**2.50**	**2.08**	**2.74**	**3.58**	**02/01/06**
CUSTOM REAL ASSETS BENCHMARK [5]			0.13	4.33	-5.03	-2.30	-2.30	4.26	3.73	2.72	3.17	02/01/06
Excess			*-1.52*	*-5.31*	*-1.73*	*-3.12*	*-3.12*	*-1.76*	*-1.65*	*0.03*	*0.41*	
TOTAL ABSOLUTE RETURN	**4,290,308,815**	**7.8**	**1.49**	**3.06**	**-3.92**	**-2.47**	**-2.47**	**1.22**	**0.77**	**2.74**	**2.73**	**04/01/08**
CUSTOM ABSOLUTE RETURN BENCHMARK [6]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40	3.12	1.68	04/01/08
Excess			*-0.21*	*-2.68*	*-2.31*	*-2.90*	*-2.90*	*-1.67*	*-1.63*	*-0.38*	*1.05*	
TOTAL MULTI ASSET	**840,569,622**	**1.5**	**2.34**	**12.84**	**-1.71**	**2.93**	**2.93**				**3.66**	**07/01/18**
TOTAL PLAN POLICY INDEX [1]			1.36	7.14	-1.94	3.14	3.14				5.10	07/01/18
Excess			*0.98*	*5.70*	*0.23*	*-0.21*	*-0.21*				*-1.44*	

Provided by GS Performance Services

State Retirement Agency of Maryland
Rates of Return - Net Mgr
Periods Ending June 30, 2020

STATE STREET

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	**269,703,473**	**0.5**	**0.01**	**4.59**	**3.18**	**5.08**	**5.08**	**7.98**	**6.26**	**4.42**	**4.17**	**07/01/08**
FTSE 3 MONTH T-BILL			0.01	0.14	0.52	1.56	1.56	1.72	1.15	0.61	0.58	07/01/08
Excess			*0.00*	*4.45*	*2.66*	*3.52*	*3.52*	*6.25*	*5.11*	*3.82*	*3.59*	

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.

State Retirement Agency of Maryland
Rates of Return - Net Mgr
Periods Ending June 30, 2020

EXHIBIT B

STATE STREET.

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												
RHUMBLINE RUSSELL 1000	2,476,457,370	4.5	2.21	21.76	-2.79	7.37	7.37	10.61	10.45		13.08	11/01/12
Russell 1000			2.21	21.82	-2.81	7.48	7.48	10.64	10.47		13.10	11/01/12
Excess			*-0.00*	*-0.06*	*0.02*	*-0.11*	*-0.11*	*-0.03*	*-0.02*		*-0.03*	
RHUMBLINE S&P 600 INDEX	251,200,701	0.5	3.77	19.93	-19.15	-12.71	-12.71	0.02			0.50	03/01/17
S&P SMALLCAP 600			3.74	21.94	-17.85	-11.29	-11.29	0.56			0.98	03/01/17
Excess			*0.04*	*-2.01*	*-1.29*	*-1.43*	*-1.43*	*-0.54*			*-0.48*	
TOTAL US EQUITY PASSIVE	**2,727,658,074**	**5.0**	**2.35**	**21.34**	**-5.62**	**3.93**	**3.93**	**8.93**			**10.00**	**11/01/15**
D.E. SHAW ALL CAP CORE ENHANCED	1,063,947,342	1.9	2.29	22.37	-2.81	7.79	7.79	10.95	10.80		12.29	04/01/13
D.E. Shaw All Cap Custom Benchmark [1]			2.21	21.82	-2.81	7.48	7.48	10.64	10.45		11.95	04/01/13
Excess			*0.08*	*0.55*	*0.00*	*0.31*	*0.31*	*0.31*	*0.35*		*0.33*	
T. ROWE PRICE ENHANCED	1,166,857,050	2.1	2.17	21.09	-3.35	7.41	7.41	11.22	11.35	14.32	9.13	05/01/06
S&P 500			1.99	20.54	-3.08	7.51	7.51	10.73	10.73	13.99	8.52	05/01/06
Excess			*0.18*	*0.54*	*-0.27*	*-0.09*	*-0.09*	*0.49*	*0.62*	*0.34*	*0.61*	
RHUMBLINE US SCIENTIFIC BETA	441,280,968	0.8	-0.12	19.10	-9.98	-2.49	-2.49	5.69			7.53	01/01/17
SciBeta USA Multi-Beta MStrat 4F-EW TR			-0.11	18.37	-10.01	-2.45	-2.45	5.78			7.64	01/01/17
Excess			*-0.01*	*0.72*	*0.04*	*-0.04*	*-0.04*	*-0.10*			*-0.11*	
DURABLE CAPITAL PARTNERS	535,573,950	1.0	7.34	42.45	17.95						17.95	01/01/20
Russell 2000 Growth			3.84	30.58	-3.06						-3.06	01/01/20
Excess			*3.50*	*11.86*	*21.01*						*21.01*	

State Retirement Agency of Maryland

Rates of Return - Net Mgr
Periods Ending June 30, 2020

STATE STREET

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	**3,207,659,310**	**5.9**	**2.71**	**24.68**	**-1.52**	**8.44**	**8.44**	**10.74**	**10.55**	**13.31**		**06/01/94**
ACTIVE US EQ BM [2]			2.06	22.02	-3.87	5.77	5.77	9.61	9.93	13.59		06/01/94
Excess			*0.65*	*2.66*	*2.35*	*2.68*	*2.68*	*1.13*	*0.62*	*-0.28*		
CAPITAL PROSPECTS US SMALL CAP (TM)	**352,677,799**	**0.6**	**5.03**	**28.63**	**-14.51**	**-9.01**	**-9.01**	**1.55**			**2.43**	**04/01/17**
S&P 600 Small Cap USD NET			3.69	21.80	-18.06	-11.72	-11.72	0.10			0.59	04/01/17
Excess			*1.34*	*6.83*	*3.55*	*2.71*	*2.71*	*1.45*			*1.84*	
US EQUITY TERRA MARIA	**352,678,025**	**0.6**	**5.03**	**28.61**	**-15.62**	**-10.35**	**-10.35**	**-0.09**	**1.97**	**9.16**	**6.14**	**04/01/07**
TERRA MARIA US EQUITY BENCHMARK [3]			3.51	24.99	-14.09	-7.72	-7.72	1.46	4.53	10.91	6.57	04/01/07
Excess			*1.51*	*3.62*	*-1.53*	*-2.64*	*-2.64*	*-1.55*	*-2.56*	*-1.75*	*-0.44*	
TOTAL US EQUITY TM + U.S. EQUITY ACTIVE	**3,560,337,335**	**6.5**	**2.94**	**25.09**	**-3.31**	**5.92**	**5.92**	**9.20**	**8.89**	**12.62**	**9.18**	**07/01/08**
TM US EQ + ACTIVE US EQ BM [2]			2.20	22.31	-5.15	3.99	3.99	8.46	9.12	13.25	9.63	07/01/08
Excess			*0.74*	*2.78*	*1.84*	*1.93*	*1.93*	*0.75*	*-0.23*	*-0.63*	*-0.45*	
U.S. EQUITY EX OVERLAY	**6,287,995,409**	**11.5**	**2.68**	**23.53**	**-4.30**	**5.12**	**5.12**	**9.16**	**9.15**	**12.96**	**8.82**	**04/01/94**
MSRA CUSTOM US EQUITY INDEX [4]			2.29	22.03	-3.48	6.53	6.53	10.04	10.03	13.72		04/01/94
Excess			*0.40*	*1.50*	*-0.83*	*-1.41*	*-1.41*	*-0.89*	*-0.89*	*-0.77*		
US Equity Tactical	57,443,123	0.1										10/01/18
US Equity Structural	14,454,634	0.0										02/01/17
U.S. EQUITY OVERLAY	**71,897,757**	**0.1**										**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	**6,359,893,166**	**11.6**	**2.73**	**23.24**	**-3.86**	**4.98**	**4.98**	**9.34**	**9.26**	**13.01**	**8.84**	**04/01/94**
MSRA CUSTOM US EQUITY INDEX [4]			2.29	22.03	-3.48	6.53	6.53	10.04	10.03	13.72		04/01/94
Excess			*0.44*	*1.22*	*-0.38*	*-1.55*	*-1.55*	*-0.70*	*-0.77*	*-0.71*		
INTERNATIONAL DEVELOPED MARKETS												
SSGA INTERNATIONAL FUND	1,313,326	0.0										05/01/03
INTERNATIONAL DEVELOPED EQUITY PASSIVE	**1,313,326**	**0.0**										**11/01/15**
ARTISAN PARTNERS, L.P.	613,349,717	1.1	4.76	17.59	-6.77	0.32	0.32	6.59	4.28	8.76	8.19	11/01/03
ARTISAN CUSTOM BENCHMARK [5]			3.42	15.34	-11.49	-5.42	-5.42	0.84	2.01	5.52	6.11	11/01/03
Excess			*1.34*	*2.25*	*4.72*	*5.74*	*5.74*	*5.75*	*2.27*	*3.24*	*2.07*	
AQR ENHANCED ACWI EX-US	301,400,880	0.6	3.46	17.16	-12.11	-7.32	-7.32	-1.72	0.42		0.86	12/01/13
AQR Enhanced Custom Benchmark [6]			3.42	15.34	-11.49	-5.42	-5.42	0.84	1.84		1.53	12/01/13
Excess			*0.04*	*1.81*	*-0.63*	*-1.90*	*-1.90*	*-2.56*	*-1.42*		*-0.67*	
BROWN CAPITAL MANAGEMENT INT'L	614,090,207	1.1	2.21	19.21	2.27	8.06	8.06	6.40	5.78	8.52	11.26	12/01/08
Brown Capital Management International Custom Benchmark [7]			3.19	16.21	-11.68	-5.11	-5.11	0.80	1.76	4.83	6.98	12/01/08
Excess			*-0.98*	*3.01*	*13.95*	*13.17*	*13.17*	*5.60*	*4.02*	*3.69*	*4.28*	
DFA INTERNATIONAL CORE EQUITY	377,806,589	0.7	2.83	17.61	-14.20	-7.15	-7.15	-0.76	1.99		3.35	05/01/13
MSCI WORLD EX US (NET)			3.42	15.34	-11.49	-5.42	-5.42	0.84	2.01		2.80	05/01/13
Excess			*-0.59*	*2.27*	*-2.71*	*-1.72*	*-1.72*	*-1.60*	*-0.02*		*0.55*	

STATE STREET.

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	569,645,564	1.0	2.98	14.62	-17.66	-11.65	-11.65	-2.82			0.02	03/01/17
SciBeta Developed ex USA Value Div MS			3.05	14.83	-17.53	-11.43	-11.43	-2.38			0.48	03/01/17
Excess			*-0.07*	*-0.21*	*-0.13*	*-0.22*	*-0.22*	*-0.43*			*-0.46*	
INTERNATIONAL DEVELOPED EQUITY ACTIVE [8]	**2,476,432,118**	**4.5**	**3.26**	**17.24**	**-9.40**	**-3.23**	**-3.23**	**1.69**	**2.24**	**5.17**		**01/01/95**
CUSTOM INTL DEV EQ ACTIVE BENCHMARK [9]			3.28	15.44	-13.02	-6.84	-6.84	0.05	1.50	4.56		01/01/95
Excess			*-0.02*	*1.80*	*3.61*	*3.61*	*3.61*	*1.64*	*0.74*	*0.61*		
ATTUCKS INTL DEVELOPED (TM)	**413,131,126**	**0.8**	**3.29**	**18.50**	**-11.17**	**-3.53**	**-3.53**	**1.02**	**3.76**	**8.12**	**10.07**	**12/01/08**
MSCI WORLD EX US NET (DAILY)			3.42	15.34	-11.49	-5.42	-5.42	0.84	2.01	5.43	6.58	12/01/08
Excess			*-0.13*	*3.16*	*0.32*	*1.89*	*1.89*	*0.17*	*1.75*	*2.69*	*3.49*	
XPONANCE INTL SMALL CAP (TM)	**259,669,583**	**0.5**	**1.55**	**19.97**	**-14.27**	**-5.55**	**-5.55**	**-0.75**			**1.96**	**04/01/17**
MSCI WORLD EX US SMALL CAP (NET)			1.78	21.66	-12.87	-3.20	-3.20	0.53			2.69	04/01/17
Excess			*-0.23*	*-1.70*	*-1.39*	*-2.35*	*-2.35*	*-1.28*			*-0.73*	
LEADING EDGE INTL DEVELOPED (TM)	**426,377,013**	**0.8**	**3.09**	**20.57**	**-6.69**	**1.14**	**1.14**	**2.79**	**3.92**	**7.23**	**9.66**	**12/01/08**
MSCI WORLD EX US NET (DAILY)			3.42	15.34	-11.49	-5.42	-5.42	0.84	2.01	5.43	6.58	12/01/08
Excess			*-0.33*	*5.23*	*4.80*	*6.56*	*6.56*	*1.95*	*1.91*	*1.80*	*3.08*	
INTL DEVELOPED EQUITY TERRA MARIA [8]	**1,099,290,853**	**2.0**	**2.80**	**19.64**	**-10.29**	**-2.28**	**-2.28**	**1.24**	**2.78**	**5.82**	**2.36**	**11/01/07**
TERRA MARIA INTL DEVELOPED EQ BM [10]			2.97	16.48	-11.89	-4.81	-4.81	0.72	1.96	4.93	0.95	11/01/07
Excess			*-0.17*	*3.16*	*1.59*	*2.53*	*2.53*	*0.52*	*0.83*	*0.89*	*1.41*	
INTL DEVELOPED EQUITY ACTIVE AND TM [8]	**3,575,722,971**	**6.5**	**3.12**	**17.96**	**-9.68**	**-2.96**	**-2.96**	**1.55**	**2.39**	**5.31**	**2.27**	**07/01/08**
TM INTL DEV EQ + ACTIVE INTL DEV EQ BM [9]			3.17	15.74	-12.68	-6.24	-6.24	0.26	1.64	4.67	1.74	07/01/08
Excess			*-0.06*	*2.22*	*3.00*	*3.28*	*3.28*	*1.29*	*0.74*	*0.64*	*0.53*	

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	-138	-0.0										11/01/04
TOTAL INTL DEV EQUITY EX RECORD CURRENCY [8]	**3,577,036,158**	**6.5**	**3.12**	**17.95**	**-9.68**	**-2.96**	**-2.96**	**1.49**	**2.19**	**5.13**		**01/01/95**
MSRA CUSTOM INTERNATIONAL INDEX [11]			3.42	15.34	-11.49	-5.42	-5.42	0.84	1.63	4.65		01/01/95
Excess			*-0.31*	*2.61*	*1.81*	*2.46*	*2.46*	*0.65*	*0.57*	*0.48*		
RECORD CURRENCY MANAGEMENT	11,070,934	0.0										05/01/09
TOTAL INTL DEVELOPED EQUITY EX OVERLAY [8]	**3,588,107,092**	**6.6**	**3.02**	**17.57**	**-9.21**	**-2.37**	**-2.37**	**1.81**	**2.10**	**5.15**	**5.83**	**01/01/95**
MSRA CUSTOM INTERNATIONAL INDEX [11]			3.42	15.34	-11.49	-5.42	-5.42	0.84	1.63	4.65	4.81	01/01/95
Excess			*-0.40*	*2.23*	*2.28*	*3.05*	*3.05*	*0.97*	*0.47*	*0.50*	*1.02*	
International Equity Tactical	69,892,801	0.1										01/01/17
International Equity Structural	33,790,788	0.1										02/01/17
TOTAL INTL DEVELOPED EQUITY OVERLAY	**103,683,589**	**0.2**										**12/01/16**
TOTAL INTL DEVELOPED EQUITY	**3,691,790,681**	**6.7**	**3.28**	**18.65**	**-10.01**	**-2.82**	**-2.82**	**1.68**	**2.01**	**5.10**	**5.82**	**01/01/95**
MSRA CUSTOM INTERNATIONAL INDEX [11]			3.42	15.34	-11.49	-5.42	-5.42	0.84	1.63	4.65	4.81	01/01/95
Excess			*-0.15*	*3.31*	*1.48*	*2.60*	*2.60*	*0.84*	*0.38*	*0.46*	*1.00*	
EMERGING MARKETS												
SSGA EMERGING MARKETS INDEX FUND	29,141,040	0.1	7.31	18.02	-9.01	-2.65	-2.65	1.86	2.65		3.14	06/01/12
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90	2.86		3.63	06/01/12
Excess			*-0.04*	*-0.07*	*0.78*	*0.74*	*0.74*	*-0.04*	*-0.21*		*-0.49*	

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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	**29,141,040**	**0.1**	**7.31**	**18.02**	**-9.01**	**-2.65**	**-2.65**	**2.77**			**6.39**	**11/01/15**
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			5.95	11/01/15
Excess			*-0.04*	*-0.07*	*0.78*	*0.73*	*0.73*	*0.87*			*0.45*	
BAILLIE GIFFORD EMERGING MARKETS	923,894,169	1.7	8.15	24.47	-8.49	-0.11	-0.11	6.41			9.65	11/01/15
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			5.95	11/01/15
Excess			*0.80*	*6.39*	*1.30*	*3.28*	*3.28*	*4.51*			*3.70*	
DFA EMERGING MARKETS	320,984,787	0.6	7.07	20.76	-13.43	-8.29	-8.29	-0.78			7.39	02/01/16
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			9.46	02/01/16
Excess			*-0.28*	*2.67*	*-3.64*	*-4.90*	*-4.90*	*-2.67*			*-2.07*	
POLUNIN CAPITAL PARTNERS	381,255,619	0.7	6.35	22.94	-13.65	-7.56	-7.56	-1.44			6.02	04/01/16
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			6.71	04/01/16
Excess			*-1.00*	*4.86*	*-3.86*	*-4.18*	*-4.18*	*-3.33*			*-0.69*	
AXIOM INTERNATIONAL INVESTORS	989,383,246	1.8	8.94	21.40	-4.71	4.85	4.85	5.78			9.72	05/01/16
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			6.71	05/01/16
Excess			*1.59*	*3.32*	*5.07*	*8.24*	*8.24*	*3.88*			*3.02*	
WESTWOOD GLOBAL INVESTMENTS	593,378,526	1.1	4.70	13.59	-19.17	-11.26	-11.26	-3.05	1.30	3.63	9.32	12/01/08
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90	2.86	3.27	8.20	12/01/08
Excess			*-2.65*	*-4.49*	*-9.38*	*-7.88*	*-7.88*	*-4.94*	*-1.56*	*0.36*	*1.12*	
MARSHALL WACE TOPS CHINA A	313,235,301	0.6	9.97	19.79	10.46	22.60	22.60				31.01	11/01/18
MSCI China A Share Net			9.99	15.96	4.68	12.19	12.19				23.25	11/01/18
Excess			*-0.03*	*3.83*	*5.78*	*10.41*	*10.41*				*7.76*	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
TT INTERNATIONAL EMERGING MARKETS	654,669,906	1.2	8.20	19.03	-13.08						-4.92	08/01/19
MSCI Emerging Markets IMI Index (Net)			7.51	18.93	-10.09						-2.75	08/01/19
Excess			*0.69*	*0.10*	*-2.99*						*-2.17*	
RWC PARTNERS EMERGING MARKETS	290,294,400	0.5	10.38	27.11	-9.09						-3.24	12/01/19
MSCI EMERGING MARKETS			7.35	18.08	-9.78						-3.05	12/01/19
Excess			*3.03*	*9.03*	*0.69*						*-0.18*	
MARSHALL WACE TOPS EMERGING MARKETS	577,884,469	1.1	7.65	19.88							19.88	04/01/20
MSCI EMERGING MARKETS			7.35	18.08							18.08	04/01/20
Excess			*0.30*	*1.80*							*1.80*	
TRANSITION ACCOUNT EMERGING MARKETS	0	0.0										05/01/16
TOTAL EMERGING MARKET ACTIVE	**5,044,977,891**	**9.2**	**7.86**	**20.39**	**-10.46**	**-3.28**	**-3.28**	**2.03**	**4.33**	**3.06**	**3.06**	**07/01/10**
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90	2.86	3.27	3.27	07/01/10
Excess			*0.51*	*2.31*	*-0.68*	*0.11*	*0.11*	*0.13*	*1.47*	*-0.21*	*-0.21*	
EMERGING MARKETS EQUITY TERRA MARIA	**330,883,299**	**0.6**	**6.99**	**18.77**	**-12.68**	**-8.72**	**-8.72**					**11/01/15**
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39					11/01/15
Excess			*-0.36*	*0.69*	*-2.90*	*-5.34*	*-5.34*					
EMERGING MARKETS ACTIVE AND TM	**5,375,861,190**	**9.8**	**7.81**	**20.26**	**-10.62**	**-3.68**	**-3.68**	**1.83**			**6.50**	**11/01/15**
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			5.95	11/01/15
Excess			*0.46*	*2.18*	*-0.84*	*-0.29*	*-0.29*	*-0.07*			*0.56*	

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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	**5,405,002,231**	**9.9**	**7.80**	**20.25**	**-10.60**	**-3.68**	**-3.68**	**1.90**			**6.17**	**11/01/15**
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			5.95	11/01/15
Excess			*0.45*	*2.17*	*-0.82*	*-0.29*	*-0.29*	*-0.00*			*0.23*	
Emrg Mkts Structural Overlay	9,678,503	0.0										02/01/17
Emrg Mkts Tactical Overlay	51,400,005	0.1										10/01/17
TOTAL EMERGING MARKETS OVERLAY	**61,078,508**	**0.1**										**02/01/17**
TOTAL EMERGING MARKETS EQUITY	**5,466,080,738**	**10.0**	**8.01**	**20.76**	**-11.79**	**-4.70**	**-4.70**	**1.78**			**6.08**	**11/01/15**
MSCI EMERGING MARKETS			7.35	18.08	-9.78	-3.39	-3.39	1.90			5.95	11/01/15
Excess			*0.66*	*2.68*	*-2.00*	*-1.31*	*-1.31*	*-0.11*			*0.13*	
GLOBAL EQUITY												
BAILLIE GIFFORD	1,049,471,574	1.9	12.92	44.78	40.68	58.52	58.52	30.02	23.56	20.44	13.93	02/01/08
MSCI AC WORLD INDEX NET			3.20	19.22	-6.25	2.11	2.11	6.14	6.46	9.16	5.06	02/01/08
Excess			*9.72*	*25.56*	*46.94*	*56.41*	*56.41*	*23.89*	*17.11*	*11.29*	*8.87*	
LONGVIEW PRTNRS GLOBAL EQUITY	653,951,151	1.2	-1.43	13.77	-17.17	-7.24	-7.24	3.35	5.30	11.49	10.54	10/01/09
MSCI AC WORLD INDEX NET			3.20	19.22	-6.25	2.11	2.11	6.14	6.46	9.16	7.96	10/01/09
Excess			*-4.63*	*-5.45*	*-10.92*	*-9.35*	*-9.35*	*-2.78*	*-1.16*	*2.33*	*2.59*	
AQR CAPITAL - GLOBAL EQUITY	953,595,360	1.7	3.21	19.14	-8.36	-1.02	-1.02	2.66	4.15		8.08	08/01/10
MSCI AC WORLD INDEX NET			3.20	19.22	-6.25	2.11	2.11	6.14	6.46		8.38	08/01/10
Excess			*0.02*	*-0.08*	*-2.11*	*-3.14*	*-3.14*	*-3.48*	*-2.30*		*-0.30*	

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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	917,631,008	1.7	2.67	20.89	-6.37	1.49	1.49	6.03	6.59		9.71	08/01/10
MSCI WORLD INDEX			2.65	19.36	-5.77	2.84	2.84	6.70	6.90		9.18	08/01/10
Excess			*0.03*	*1.54*	*-0.60*	*-1.35*	*-1.35*	*-0.67*	*-0.31*		*0.53*	
TOTAL GLOBAL EQUITY ACTIVE	**3,575,125,290**	**6.5**	**4.81**	**25.02**	**0.52**	**10.51**	**10.51**	**9.46**	**8.86**	**11.37**	**7.53**	**10/01/05**
MSCI AC WORLD INDEX NET			3.20	19.22	-6.25	2.11	2.11	6.14	6.46	9.16	6.01	10/01/05
Excess			*1.62*	*5.80*	*6.77*	*8.40*	*8.40*	*3.32*	*2.40*	*2.22*	*1.52*	
MARSHALL WACE EUREKA FUND	601,082,721	1.1	0.96	5.83	-0.36	4.94	4.94	6.46	6.24		9.61	10/01/12
HFRI Equity Hedge (Total) Index			2.75	13.39	-3.15	0.83	0.83	3.04	3.11		4.76	10/01/12
Excess			*-1.78*	*-7.55*	*2.79*	*4.11*	*4.11*	*3.42*	*3.13*		*4.85*	
INDUS PACIFIC OPPORTUNITIES FUND	5,913,129	0.0										06/01/13
TOTAL EQUITY HEDGE FUND	**606,995,850**	**1.1**	**0.95**	**5.77**	**-0.27**	**3.19**	**3.19**	**2.52**	**1.67**		**4.10**	**07/01/12**
HFRI Equity Hedge (Total) Index			2.75	13.39	-3.15	0.83	0.83	3.04	3.11		5.05	07/01/12
Excess			*-1.79*	*-7.61*	*2.88*	*2.36*	*2.36*	*-0.52*	*-1.44*		*-0.95*	
TOTAL GLB EQ TM + GLB EQ ACTIVE + HF	**4,182,121,140**	**7.6**	**4.23**	**21.80**	**0.41**	**9.56**	**9.56**	**7.75**	**7.02**	**10.07**	**6.16**	**07/01/08**
TM GLOBAL + ACTIVE GLOBAL BM + EQ HF [2]			3.01	18.30	-5.71	1.93	1.93	5.44	5.63	8.61	5.05	07/01/08
Excess			*1.23*	*3.50*	*6.12*	*7.63*	*7.63*	*2.31*	*1.39*	*1.46*	*1.11*	
GLOBAL EQUITY TRANSITION ACCOUNT	4,850,078	0.0										06/01/11
TOTAL GLOBAL EQUITY EX RECORD CURRENCY	**4,186,971,218**	**7.6**	**4.24**	**21.80**	**0.41**	**9.56**	**9.56**	**7.75**	**7.10**	**10.18**	**6.75**	**10/01/05**
MSRA CUSTOM GLOBAL INDEX [12]			3.20	19.22	-6.25	2.11	2.11	6.14	6.46	9.16	6.09	10/01/05
Excess			*1.04*	*2.59*	*6.66*	*7.45*	*7.45*	*1.62*	*0.64*	*1.02*	*0.66*	

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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	3,794,624	0.0										05/01/09
TOTAL GLOBAL EQUITY EX OVERLAY	**4,190,765,842**	**7.7**	**4.21**	**21.66**	**0.56**	**9.79**	**9.79**	**7.91**	**7.08**	**10.10**	**6.85**	**10/01/05**
MSRA CUSTOM GLOBAL INDEX [12]			3.20	19.22	-6.25	2.11	2.11	6.14	6.46	9.16	6.09	10/01/05
Excess			*1.01*	*2.44*	*6.81*	*7.67*	*7.67*	*1.78*	*0.63*	*0.94*	*0.76*	
Global Equity Tactical	79,045,180	0.1										01/01/20
TOTAL GLOBAL EQUITY OVERLAY	**79,045,180**	**0.1**										**01/01/20**
TOTAL GLOBAL EQUITY	**4,269,811,021**	**7.8**	**4.39**	**22.70**	**1.11**	**10.38**	**10.38**	**8.11**	**7.20**	**10.16**	**6.89**	**10/01/05**
MSRA CUSTOM GLOBAL INDEX [12]			3.20	19.22	-6.25	2.11	2.11	6.14	6.46	9.16	6.09	10/01/05
Excess			*1.20*	*3.48*	*7.36*	*8.27*	*8.27*	*1.97*	*0.74*	*1.00*	*0.80*	
PUBLIC EQUITY												
TOTAL PUBLIC EQUITY EX OVERLAY	**19,471,870,573**	**35.6**	**4.45**	**21.23**	**-5.91**	**2.33**	**2.33**	**5.41**	**5.93**	**9.22**		**04/01/94**
PUBLIC EQ BM 2 [13]			4.10	19.10	-7.49	0.36	0.36	5.13	6.06	9.08		04/01/94
Excess			*0.35*	*2.14*	*1.58*	*1.96*	*1.96*	*0.28*	*-0.12*	*0.14*		
TOTAL PUBLIC EQUITY OVERLAY	**315,705,034**	**0.6**										**12/01/16**
TOTAL PUBLIC EQUITY	**19,787,575,607**	**36.1**	**4.60**	**21.69**	**-6.16**	**2.00**	**2.00**	**5.45**	**5.96**	**9.23**		**04/01/94**
PUBLIC EQ BM 2 [13]			4.10	19.10	-7.49	0.36	0.36	5.13	6.06	9.08		04/01/94
Excess			*0.50*	*2.59*	*1.33*	*1.64*	*1.64*	*0.33*	*-0.10*	*0.15*		

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	**7,802,532,781**	**14.2**	**-0.09**	**-7.04**	**-2.87**	**2.46**	**2.46**	**11.69**	**12.27**	**13.69**	**7.98**	**03/01/94**
Custom MD/SS PEI Index [14]			-3.26	-9.99	-6.08	-1.94	-1.94	8.00	8.41	10.53		03/01/94
Excess			*3.17*	*2.95*	*3.21*	*4.41*	*4.41*	*3.69*	*3.85*	*3.15*		
TOTAL GROWTH EQUITY	**27,590,108,388**	**50.4**	**3.24**	**11.97**	**-5.26**	**2.09**	**2.09**	**6.99**	**7.34**	**10.14**	**5.91**	**01/01/98**
GROWTH EQUITY CUSTOM BENCHMARK [15]			1.98	9.63	-7.17	-0.39	-0.39	5.92				01/01/98
Excess			*1.25*	*2.35*	*1.91*	*2.48*	*2.48*	*1.07*				
RATE SENSITIVE												
NOMINAL FIXED INCOME												
SSGA US GOVT LONG BOND INDEX	98,867,746	0.2	0.14	-0.44	21.54	25.77	25.77	12.09			8.92	11/01/16
BBG BARC US Gov Lg Idx			0.14	0.28	20.97	25.14	25.14	11.96			8.84	11/01/16
Excess			*0.00*	*-0.72*	*0.57*	*0.62*	*0.62*	*0.13*			*0.07*	
SSGA US SECURITIZED INDEX	139,071,430	0.3	0.01	0.82	3.44	5.41	5.41	3.74			2.94	11/01/16
BBG BARC Sec Idx			0.05	0.94	3.62	5.74	5.74	4.04			3.20	11/01/16
Excess			*-0.04*	*-0.12*	*-0.18*	*-0.33*	*-0.33*	*-0.30*			*-0.26*	
SSGA US LONG INVEST GRADE CORP INDEX	133,665,073	0.2	2.59	12.22	5.36	12.87	12.87	8.78			7.69	11/01/16
BBG BARC Lg Corp			2.52	11.36	6.34	13.79	13.79	8.80			8.04	11/01/16
Excess			*0.07*	*0.86*	*-0.98*	*-0.92*	*-0.92*	*-0.01*			*-0.35*	
SSGA US INTERM INVEST GRADE INDEX	450,442,518	0.8	1.57	7.40	2.72	5.73	5.73	4.64			4.07	11/01/16
BBG BARC US Corp Int Inv Grd Idx			1.63	7.63	4.23	7.21	7.21	5.05			4.42	11/01/16
Excess			*-0.06*	*-0.22*	*-1.51*	*-1.48*	*-1.48*	*-0.41*			*-0.35*	

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SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
SSGA PASSIVE FIXED INCOME	**822,046,767**	**1.5**	**1.29**	**5.58**	**12.12**	**15.83**	**15.83**	**8.75**	**6.53**	**4.85**	**4.95**	**05/01/03**
SSgA Aggregate Bond Custom Benchmark [16]			0.43	1.81	15.37	19.34	19.34	9.81	7.26	5.20		05/01/03
Excess			*0.87*	*3.77*	*-3.25*	*-3.51*	*-3.51*	*-1.06*	*-0.73*	*-0.35*		
MD LONG GOVERNMENT BONDS	1,189,531,857	2.2	0.28	-0.33							6.04	03/01/20
BBG BARC US Gov Lg Idx			0.14	0.28							6.23	03/01/20
Excess			*0.14*	*-0.62*							*-0.19*	
US NOMINAL FIXED INCOME PASSIVE	**2,011,578,624**	**3.7**	**0.71**	**2.03**	**16.66**	**20.52**	**20.52**	**10.20**			**7.74**	**11/01/15**
US NOMINAL FI PASSIVE BENCHMARK [17]			0.43	1.81	15.37	19.34	19.34	9.81			7.57	11/01/15
Excess			*0.28*	*0.22*	*1.29*	*1.18*	*1.18*	*0.39*			*0.17*	
PIMCO	1,273,886,428	2.3	1.10	3.85	16.28	19.99	19.99	10.34	7.52	5.49		06/01/84
PIMCO Custom Blended Index [18]			0.43	1.81	15.37	19.34	19.34	9.81	7.26	5.20		06/01/84
Excess			*0.67*	*2.04*	*0.91*	*0.65*	*0.65*	*0.53*	*0.26*	*0.29*		
WESTERN ASSET MANAGEMENT	2,397,483,235	4.4	1.04	4.49	15.06	19.39	19.39	10.21	7.87	6.39	6.78	09/01/03
WESTERN ASSET MANAGEMENT CUSTOM BM [19]			0.43	1.81	15.37	19.34	19.34	9.81	7.22	5.18	5.32	09/01/03
Excess			*0.61*	*2.68*	*-0.31*	*0.05*	*0.05*	*0.40*	*0.65*	*1.21*	*1.46*	
DOUBLELINE US SECURITIZED	447,446,237	0.8	0.57	2.19	3.27	5.04	5.04				4.01	10/01/17
BBG BARC Sec Dly			0.05	0.94	3.62	5.74	5.74				4.06	10/01/17
Excess			*0.52*	*1.24*	*-0.35*	*-0.69*	*-0.69*				*-0.05*	
GARDA FIRVO	375,400,000	0.7	2.40	7.04	13.83	18.72	18.72	9.35			8.70	04/01/16
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89			3.68	04/01/16
Excess			*0.70*	*1.30*	*15.44*	*18.29*	*18.29*	*6.46*			*5.02*	

STATE STREET

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
DODGE & COX - FI CORE	367,663,068	0.7	2.19	10.43	5.61	10.45	10.45	6.82	6.31	5.35	6.18	03/01/09
CORE BOND CUSTOM BENCHMARK [21]			1.96	8.98	5.02	9.50	9.50	6.15	5.17	4.17	4.79	03/01/09
Excess			*0.23*	*1.44*	*0.58*	*0.94*	*0.94*	*0.67*	*1.13*	*1.18*	*1.38*	
VOYA TALF OPPORTUNITY FUND	20,000,000	0.0										06/01/20
WESTERN ASSET - ISRAEL BD	15	0.0	0.37	2.26	2.82	4.47	4.47	3.29	1.91	2.02	2.79	06/01/05
US NOMINAL FIXED INCOME ACTIVE	**4,881,879,109**	**8.9**	**1.20**	**4.71**	**13.72**	**17.70**	**17.70**	**9.41**	**7.31**	**5.67**	**6.10**	**07/01/08**
CUSTOM NOMINAL FIXED INCOME BENCHMARK [22]			0.43	1.81	15.37	19.34	19.34	9.81	7.26	5.21	5.54	07/01/08
Excess			*0.77*	*2.90*	*-1.65*	*-1.64*	*-1.64*	*-0.40*	*0.05*	*0.46*	*0.55*	
US NOMINAL FIXED INCOME TERRA MARIA	**623,928,384**	**1.1**	**1.33**	**4.64**	**4.59**	**6.94**	**6.94**	**4.59**	**3.78**	**3.77**	**5.47**	**11/01/08**
TERRA MARIA FI BENCHMARK [23]			0.55	2.70	5.40	7.72	7.72	4.76	3.72	3.45	6.18	11/01/08
Excess			*0.78*	*1.93*	*-0.81*	*-0.78*	*-0.78*	*-0.17*	*0.06*	*0.32*	*-0.71*	
TOTAL RATE SENSITIVE (CP)	**623,928,384**	**1.1**	**1.33**	**4.64**	**4.59**	**6.94**	**6.94**	**4.61**	**3.85**	**4.03**	**5.35**	**11/01/08**
RATE SENSITIVE (CP) BENCHMARK [23]			0.55	2.70	5.40	7.72	7.72	4.79	3.80	3.59	4.71	11/01/08
Excess			*0.78*	*1.93*	*-0.81*	*-0.78*	*-0.78*	*-0.18*	*0.05*	*0.44*	*0.63*	
TOTAL US NOMINAL FI ACTIVE + TM	**5,505,807,493**	**10.1**	**1.21**	**4.70**	**12.76**	**16.57**	**16.57**	**8.91**	**6.95**	**5.48**	**5.93**	**07/01/08**
CUSTOM NOMINAL FIXED INCOME BENCHMARK [22]			0.43	1.81	15.37	19.34	19.34	9.81	7.26	5.21	5.54	07/01/08
Excess			*0.79*	*2.89*	*-2.61*	*-2.77*	*-2.77*	*-0.90*	*-0.31*	*0.27*	*0.39*	
US NOMINAL FIXED INCOME	**7,517,386,117**	**13.7**	**1.08**	**3.96**	**13.71**	**17.53**	**17.53**	**9.22**	**7.09**	**5.47**	**6.08**	**07/01/08**
US NOMINAL FIXED INCOME BENCHMARK [24]			0.43	1.81	15.37	19.34	19.34	9.81	7.26	5.20	5.62	07/01/08
Excess			*0.65*	*2.15*	*-1.66*	*-1.81*	*-1.81*	*-0.58*	*-0.17*	*0.28*	*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
NOMINAL FIXED INCOME EX OVERLAY	**7,517,386,221**	**13.7**	**1.08**	**3.96**	**13.71**	**17.53**	**17.53**	**9.22**	**7.08**	**5.59**	**7.33**	**07/01/86**
CUSTOM NOMINAL FIXED INCOME BENCHMARK [22]			0.43	1.81	15.37	19.34	19.34	9.81	7.26	5.21		07/01/86
Excess			*0.65*	*2.15*	*-1.66*	*-1.81*	*-1.81*	*-0.58*	*-0.18*	*0.37*		
Nominal FI Tactical	191,566,677	0.3										01/01/17
Nominal FI Structural	23,754,189	0.0										01/01/17
NOMINAL FIXED INCOME OVERLAY	**215,320,866**	**0.4**										**01/01/17**
NOMINAL FIXED INCOME	**7,732,707,086**	**14.1**	**1.23**	**3.97**	**16.63**	**20.64**	**20.64**	**10.21**	**7.67**	**5.88**	**7.42**	**07/01/86**
CUSTOM NOMINAL FIXED INCOME BENCHMARK [22]			0.43	1.81	15.37	19.34	19.34	9.81	7.26	5.21		07/01/86
Excess			*0.80*	*2.16*	*1.27*	*1.30*	*1.30*	*0.40*	*0.41*	*0.66*		
INFLATION SENSITIVE												
SSGA PASSIVE US TIPS	106,214,562	0.2	1.14	4.27	6.34	8.63	8.63	5.22	3.88		1.71	12/01/12
BBG BARC US TIPS Idx			1.15	4.36	6.37	8.74	8.74	5.26	3.91		1.76	12/01/12
Excess			*-0.01*	*-0.09*	*-0.03*	*-0.11*	*-0.11*	*-0.04*	*-0.03*		*-0.05*	
MD TIPS	2,347,413,736	4.3	1.15	4.34	6.49	8.83	8.83				8.83	07/01/19
BBG Barc US Gov Infl-Lkd All Maturities			1.15	4.36	6.37	8.74	8.74				8.74	07/01/19
Excess			*0.01*	*-0.02*	*0.12*	*0.10*	*0.10*				*0.10*	
TOTAL U.S. TIPS	**2,453,628,298**	**4.5**	**1.15**	**4.34**	**6.48**	**8.82**	**8.82**	**5.28**	**3.91**	**3.51**	**4.39**	**02/01/06**
CUSTOM US TIPS MD BM [25]			1.15	4.36	6.37	8.74	8.74	5.26	3.91	3.58	4.20	02/01/06
Excess			*0.01*	*-0.02*	*0.11*	*0.09*	*0.09*	*0.02*	*-0.00*	*-0.06*	*0.19*	

STATE STREET

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
INFLATION SENSITIVE FI EX OVERLAY	**2,453,628,299**	**4.5**	**1.15**	**4.34**	**6.48**	**8.83**	**8.83**	**5.27**	**4.01**	**3.88**	**4.20**	**07/01/08**
CUSTOM INFLATION SENSITIVE BENCHMARK [26]			1.15	4.36	6.37	8.74	8.74	5.26	4.04	3.96	4.00	07/01/08
Excess			*0.01*	*-0.02*	*0.11*	*0.10*	*0.10*	*0.01*	*-0.03*	*-0.08*	*0.20*	
Inflation Sensitive FI Tactical	-1	0.0										07/01/17
INFLATION SENSITIVE FIXED INCOME OVERLAY	**-1**	**0.0**										**07/01/17**
INFLATION SENSITIVE FIXED INCOME	**2,453,628,298**	**4.5**	**1.17**	**4.39**	**6.57**	**8.95**	**8.95**	**5.26**	**4.01**	**3.87**	**4.20**	**07/01/08**
CUSTOM INFLATION SENSITIVE BENCHMARK [26]			1.15	4.36	6.37	8.74	8.74	5.26	4.04	3.96	4.00	07/01/08
Excess			*0.02*	*0.03*	*0.20*	*0.22*	*0.22*	*0.00*	*-0.03*	*-0.08*	*0.20*	
TOTAL RATE SENSITIVE EX OVERLAY	**9,971,014,519**	**18.2**	**1.10**	**4.05**	**12.16**	**15.65**	**15.65**	**8.35**	**6.36**	**5.23**	**7.23**	**07/01/86**
CUSTOM RATE SENSITIVE BENCHMARK [27]			0.58	2.33	13.51	17.15	17.15	8.89	6.70	4.94		07/01/86
Excess			*0.52*	*1.72*	*-1.35*	*-1.51*	*-1.51*	*-0.54*	*-0.34*	*0.29*		
TOTAL RATE SENSITIVE OVERLAY	**215,320,865**	**0.4**										**01/01/17**
TOTAL RATE SENSITIVE	**10,186,335,384**	**18.6**	**1.21**	**4.08**	**14.47**	**18.10**	**18.10**	**9.12**	**6.82**	**5.46**	**7.30**	**07/01/86**
CUSTOM RATE SENSITIVE BENCHMARK [27]			0.58	2.33	13.51	17.15	17.15	8.89	6.70	4.94		07/01/86
Excess			*0.64*	*1.75*	*0.95*	*0.94*	*0.94*	*0.23*	*0.12*	*0.52*		
CREDIT/DEBT												
US CREDIT												
PIMCO HIGH QUALITY HY	1,590,960,741	2.9	0.17	8.39	-2.77	1.65	1.65				5.17	07/01/18
BBG BARC Ba to B US HY Idx			0.74	10.38	-2.19	2.13	2.13				5.41	07/01/18
Excess			*-0.57*	*-1.99*	*-0.58*	*-0.49*	*-0.49*				*-0.24*	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
CREDIT SUISSE US BANK LOANS	384,227,143	0.7	1.75	10.66	-4.54	-1.65	-1.65				2.35	07/01/18
S&P/LSTA Leverage Loan Index			1.14	9.70	-4.61	-1.99	-1.99				0.94	07/01/18
Excess			*0.61*	*0.95*	*0.07*	*0.34*	*0.34*				*1.41*	
PINE BRIDGE HIGH QUALITY HY	659,104,889	1.2	0.92	9.29	-2.00	1.70	1.70				4.81	07/01/18
BBG BARC Ba to B US HY Idx			0.74	10.38	-2.19	2.13	2.13				5.41	07/01/18
Excess			*0.18*	*-1.09*	*0.19*	*-0.44*	*-0.44*				*-0.60*	
PIMCO CCC HIGH YIELD	211,670,274	0.4	0.55								5.46	05/01/20
BBG BARC Ba to B US HY Idx			0.74								4.95	05/01/20
Excess			*-0.19*								*0.51*	
KKR BANK LOANS	8,355,417	0.0										09/01/10
CREDIT/DEBT TRANSITION ACCOUNT	0	0.0										02/01/09
CREDIT/DEBT TERRA MARIA [28]	**50,976,789**	**0.1**	**0.83**	**6.71**	**-3.71**	**-0.80**	**-0.80**					**01/01/10**
HIGH YIELD/BANK LOAN EX OVERLAY	**2,905,681,426**	**5.3**	**0.52**	**8.87**	**-3.00**	**0.98**	**0.98**	**3.55**			**4.51**	**11/01/15**
HIGH YIELD CUSTOM BENCHMARK [29]			1.01	10.08	-3.96	-0.37	-0.37	3.08			5.22	11/01/15
Excess			*-0.49*	*-1.22*	*0.96*	*1.35*	*1.35*	*0.46*			*-0.71*	
HIGH YIELD/BANK LOAN OVERLAY	**0**	**0.0**										**07/01/19**
HIGH YIELD/BANK LOAN	**2,905,681,426**	**5.3**	**0.53**	**8.89**	**-2.96**	**1.07**	**1.07**	**3.58**			**4.53**	**11/01/15**
HIGH YIELD CUSTOM BENCHMARK [29]			1.01	10.08	-3.96	-0.37	-0.37	3.08			5.22	11/01/15
Excess			*-0.49*	*-1.19*	*1.00*	*1.44*	*1.44*	*0.49*			*-0.69*	

State Retirement Agency of Maryland

Rates of Return - Net Mgr
Periods Ending June 30, 2020

STATE STREET

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 CREDIT	**1,081,670,608**	**2.0**	**0.40**	**-4.68**	**-6.10**	**-4.38**	**-4.38**	**2.32**	**5.49**	**7.27**	**6.93**	**01/01/10**
PERELLA WEINBERG	42,749,973	0.1	-14.51	-14.51	-13.71	-14.29	-14.29	-5.90	-6.61	2.23	2.23	07/01/10
HFRI ED: Distressed/Restructuring Index			5.03	10.74	-2.22	-3.97	-3.97	0.66	2.06	3.82	3.82	07/01/10
Excess			*-19.54*	*-25.26*	*-11.49*	*-10.32*	*-10.32*	*-6.56*	*-8.67*	*-1.59*	*-1.59*	
TOTAL CREDIT HEDGE FUND	**42,749,973**	**0.1**	**-14.51**	**-14.51**	**-13.71**	**-14.29**	**-14.29**	**-3.45**	**-2.30**	**3.57**	**3.57**	**07/01/10**
HFRI ED: Distressed/Restructuring Index			5.03	10.74	-2.22	-3.97	-3.97	0.66	2.06	3.82	3.82	07/01/10
Excess			*-19.54*	*-25.26*	*-11.49*	*-10.32*	*-10.32*	*-4.11*	*-4.36*	*-0.26*	*-0.26*	
US CREDIT EX OVERLAY	**4,030,102,006**	**7.4**	**0.31**	**4.64**	**-3.96**	**-0.69**	**-0.69**	**3.40**	**4.53**	**6.82**	**8.20**	**03/01/09**
U.S. CREDIT CUSTOM BENCHMARK [30]			1.01	10.08	-3.96	-0.37	-0.37	3.08	4.58	5.70	7.67	03/01/09
Excess			*-0.70*	*-5.45*	*-0.00*	*-0.32*	*-0.32*	*0.32*	*-0.05*	*1.11*	*0.52*	
NON US CREDIT												
LOGAN CIRCLE HARD CURRENCY EM	510,389,984	0.9	3.26	15.23	-2.03	2.28	2.28				7.08	07/01/18
Custom EM HC Benchmark [31]			2.76	10.47	-0.72	2.21	2.21				6.25	07/01/18
Excess			*0.50*	*4.76*	*-1.30*	*0.07*	*0.07*				*0.83*	
SSGA LOCAL CURRENCY EM	576,249,396	1.1	0.69	4.34	-3.63	-0.58	-0.58				5.33	11/01/18
Custom EM Debt Benchmark [32]			0.75	4.46	-3.51	-0.36	-0.36				5.42	11/01/18
Excess			*-0.05*	*-0.12*	*-0.12*	*-0.21*	*-0.21*				*-0.09*	
NON US CREDIT EX OVERLAY	**1,086,639,381**	**2.0**	**1.88**	**9.19**	**-3.19**	**0.47**	**0.47**	**2.28**	**2.68**		**0.34**	**10/01/10**
NON-U.S. CREDIT CUSTOM BENCHMARK [33]			1.75	7.44	-2.07	0.99	0.99	3.11	3.43		1.02	10/01/10
Excess			*0.13*	*1.74*	*-1.12*	*-0.51*	*-0.51*	*-0.84*	*-0.76*		*-0.68*	

STATE STREET.

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 Tactical	0	0.0										07/01/19
NON US CREDIT OVERLAY	**0**	**0.0**										**07/01/19**
NON US CREDIT	**1,086,639,381**	**2.0**	**1.88**	**9.19**	**-3.17**	**0.49**	**0.49**	**2.28**	**2.68**		**0.34**	**10/01/10**
NON-U.S. CREDIT CUSTOM BENCHMARK [33]			1.75	7.44	-2.07	0.99	0.99	3.11	3.43		1.02	10/01/10
Excess			*0.13*	*1.75*	*-1.11*	*-0.49*	*-0.49*	*-0.83*	*-0.75*		*-0.68*	
TOTAL CREDIT/DEBT STRATEGIES EX OVERLAY	**5,116,741,387**	**9.3**	**0.64**	**5.57**	**-3.84**	**-0.48**	**-0.48**	**2.74**	**4.04**	**5.99**	**8.10**	**03/01/09**
MSRA CUSTOM CREDIT BENCHMARK [34]			1.17	9.50	-3.53	-0.06	-0.06	3.16	4.38	5.14	7.17	03/01/09
Excess			*-0.53*	*-3.93*	*-0.31*	*-0.42*	*-0.42*	*-0.43*	*-0.34*	*0.85*	*0.93*	
TOTAL CREDIT/DEBT STRATEGIES OVERLAY	**0**	**0.0**										**07/01/19**
TOTAL CREDIT/DEBT STRATEGIES	**5,116,741,387**	**9.3**	**0.65**	**5.59**	**-3.81**	**-0.43**	**-0.43**	**2.75**	**4.05**	**6.00**	**8.11**	**03/01/09**
MSRA CUSTOM CREDIT BENCHMARK [34]			1.17	9.50	-3.53	-0.06	-0.06	3.16	4.38	5.14	7.17	03/01/09
Excess			*-0.53*	*-3.91*	*-0.28*	*-0.37*	*-0.37*	*-0.41*	*-0.33*	*0.85*	*0.94*	
REAL ASSETS												
REAL ESTATE												
TOTAL REITS EX RECORD CURRENCY	**300,001**	**0.0**										**04/01/94**
RECORD CURRENCY MANAGEMENT-REITS	-55,558	-0.0										07/01/11
TOTAL REITS EX OVERLAY	**244,443**	**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	**4,607,170,926**	**8.4**	**-1.57**	**-2.14**	**-0.74**	**1.28**	**1.28**	**5.55**	**7.31**	**10.56**	**8.84**	**03/01/94**
CUSTOM MD PRIVATE REAL ESTATE BM [35]			-0.02	-0.60	0.91	3.24	3.24	6.25	8.12	10.74	9.34	03/01/94
Excess			*-1.55*	*-1.54*	*-1.64*	*-1.96*	*-1.96*	*-0.71*	*-0.80*	*-0.17*	*-0.49*	
MSIM Cus FTSE EPRA NAREIT Dev ex US(Net) [36]			2.57	10.07	-21.33	-16.25	-16.25	-1.60	1.28	5.92		11/01/06
WILSHIRE RESI			2.28	10.57	-17.89	-12.39	-12.39	0.22	4.20	9.34		01/01/78
TOTAL REAL ESTATE	**4,607,415,369**	**8.4**	**-1.57**	**-2.14**	**-0.74**	**1.31**	**1.31**	**5.39**	**6.88**	**10.42**	**6.69**	**07/01/87**
REAL ESTATE CUSTOM INDEX [37]			-0.02	-0.60	0.91	3.24	3.24	6.20	7.76	10.68	8.06	07/01/87
Excess			*-1.55*	*-1.54*	*-1.64*	*-1.93*	*-1.93*	*-0.81*	*-0.88*	*-0.26*	*-1.37*	
NATURAL RESOURCE AND INFRASTRUCTURE												
TORTOISE CAPITAL DOMESTIC EQ	64,125,248	0.1	-8.05	28.01	-33.40	-38.56	-38.56	-15.25	-11.66	1.92	4.42	08/01/09
S&P MLP Total Return Index			-7.11	45.82	-35.66	-40.17	-40.17	-15.34	-12.68	-0.52	2.04	08/01/09
Excess			*-0.94*	*-17.81*	*2.26*	*1.61*	*1.61*	*0.09*	*1.02*	*2.45*	*2.38*	
HARVEST FUND ADVISORS	226,997,027	0.4	-4.38	32.61	-32.15	-36.35	-36.35	-13.57	-11.39	4.07	5.65	11/01/09
S&P MLP Total Return Index			-7.11	45.82	-35.66	-40.17	-40.17	-15.34	-12.68	-0.52	1.72	11/01/09
Excess			*2.73*	*-13.20*	*3.52*	*3.82*	*3.82*	*1.78*	*1.29*	*4.59*	*3.93*	
RHUMBLINE DJ BROOKFIELD GLOBAL INFRA	508,843,235	0.9	-1.65	13.53	-13.94	-9.05	-9.05				1.43	11/01/17
DJ Brookfield Global Infra Comp			-1.74	13.32	-14.39	-9.89	-9.89				0.07	11/01/17
Excess			*0.09*	*0.21*	*0.45*	*0.83*	*0.83*				*1.35*	
RHUMBLINE GLOBAL NATURAL RESOURCES	261,368,943	0.5	2.07	20.34	-19.03	-16.74	-16.74				-4.49	11/01/17
S&P Global Natural Resources (Net)			1.99	20.17	-19.47	-17.36	-17.36				-5.30	11/01/17
Excess			*0.08*	*0.16*	*0.44*	*0.62*	*0.62*				*0.81*	

STATE STREET.

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	505,130,472	0.9	-0.04	-21.25	-22.66	-25.07	-25.07	-4.78	-3.07	3.70	3.58	01/01/10
TOTAL INFRASTRUCTURE	73,333,324	0.1	0.00	-3.86	-9.89	-10.24	-10.24	-5.86	-2.73	1.86	1.68	10/01/09
TIMBER LP FUNDS	204,218,909	0.4	0.00	-0.18	2.84	4.75	4.75	2.62	2.52	6.15	6.04	05/01/10
NATURAL RESOURCE AND INFRA EX OVERLAY	**1,844,017,159**	**3.4**	**-1.04**	**1.95**	**-19.16**	**-19.16**	**-19.16**	**-4.05**	**-2.72**	**5.08**	**6.47**	**08/01/09**
NATURAL RESOURCE AND INFRASTRUCTURE BM [38]			0.50	17.42	-17.36	-14.25	-14.25	0.35	3.88	5.31	5.41	08/01/09
Excess			*-1.54*	*-15.47*	*-1.79*	*-4.91*	*-4.91*	*-4.40*	*-6.60*	*-0.23*	*1.07*	
Real Assets Tactical	0	0.0										07/01/19
NATURAL RESOURCE AND INFRA OVERLAY	**0**	**0.0**										**07/01/19**
NATURAL RESOURCE AND INFRASTRUCTURE	**1,844,017,159**	**3.4**	**-1.04**	**1.95**	**-19.15**	**-19.14**	**-19.14**				**-19.14**	**07/01/19**
NATURAL RESOURCE AND INFRASTRUCTURE BM [38]			0.50	17.42	-17.36	-14.25	-14.25				-14.25	07/01/19
Excess			*-1.54*	*-15.46*	*-1.78*	*-4.89*	*-4.89*				*-4.89*	
TOTAL REAL ASSETS EX OVERLAY	**6,451,432,528**	**11.8**	**-1.42**	**-1.00**	**-6.74**	**-5.41**	**-5.41**	**2.49**	**2.08**	**2.75**	**3.58**	**02/01/06**
CUSTOM REAL ASSETS BENCHMARK [39]			0.13	4.33	-5.03	-2.30	-2.30	4.26	3.73	2.72	3.17	02/01/06
Excess			*-1.55*	*-5.34*	*-1.71*	*-3.10*	*-3.10*	*-1.77*	*-1.65*	*0.03*	*0.41*	
TOTAL REAL ASSETS OVERLAY	**21,892,353**	**0.0**										**01/01/17**
TOTAL REAL ASSETS	**6,473,324,881**	**11.8**	**-1.40**	**-0.98**	**-6.76**	**-5.42**	**-5.42**	**2.50**	**2.08**	**2.74**	**3.58**	**02/01/06**
CUSTOM REAL ASSETS BENCHMARK [39]			0.13	4.33	-5.03	-2.30	-2.30	4.26	3.73	2.72	3.17	02/01/06
Excess			*-1.52*	*-5.31*	*-1.73*	*-3.12*	*-3.12*	*-1.76*	*-1.65*	*0.03*	*0.41*	

STATE STREET.

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
ABSOLUTE RETURN												
1977 MERGER ARBITRAGE FUND	189,715,321	0.3	2.06	7.88	2.63	8.29	8.29				9.87	01/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				2.27	01/01/18
Excess			*0.35*	*2.13*	*4.24*	*7.85*	*7.85*				*7.60*	
SHOALS FINANCIALS OPPORTUNITY FUND, LP	20,425,484	0.0	-6.92	-56.98	-57.31	-61.46	-61.46				-31.87	03/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				2.13	03/01/18
Excess			*-8.62*	*-62.72*	*-55.70*	*-61.89*	*-61.89*				*-34.01*	
KING STREET CAPITAL	196,042,421	0.4	3.16	9.07	-2.52	-3.27	-3.27	0.76	1.66		3.98	12/01/11
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40		3.48	12/01/11
Excess			*1.45*	*3.32*	*-0.91*	*-3.71*	*-3.71*	*-2.14*	*-0.73*		*0.51*	
EMPYREAN CAPITAL FUND	291,675,000	0.5	1.24	3.95	-3.62	-3.88	-3.88				-1.34	06/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				1.74	06/01/18
Excess			*-0.46*	*-1.79*	*-2.01*	*-4.32*	*-4.32*				*-3.09*	
STANDARD GENERAL FUND II	159,096,800	0.3	2.56	7.37	-15.70	-24.88	-24.88				-13.80	02/01/19
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				2.57	02/01/19
Excess			*0.86*	*1.63*	*-14.08*	*-25.32*	*-25.32*				*-16.37*	
SGM CO-INVESTMENT FUND LP	7,309,400	0.0	-4.61	0.93	-25.22						-27.41	10/01/19
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61						0.24	10/01/19
Excess			*-6.31*	*-4.81*	*-23.61*						*-27.65*	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
CONTRARIAN EMMA 2	147,488,773	0.3	6.47	16.86	-26.26						-26.26	01/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61						-1.61	01/01/20
Excess			*4.77*	*11.11*	*-24.64*						*-24.64*	
EVENT DRIVEN STRATEGIES	**1,011,753,198**	**1.8**	**2.33**	**1.97**	**-12.69**	**-15.03**	**-15.03**					**07/01/17**
HFRI FoF CONSERVATIVE + 100 bps			1.70	5.74	-1.61	0.44	0.44					07/01/17
Excess			*0.62*	*-3.77*	*-11.08*	*-15.47*	*-15.47*					
BRIDGEWATER PURE ALPHA	371,863,817	0.7	0.17	4.68	-16.83	-13.76	-13.76	-2.46	-1.75	2.75	3.15	05/01/08
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40	3.12	1.65	05/01/08
Excess			*-1.53*	*-1.06*	*-15.22*	*-14.20*	*-14.20*	*-5.35*	*-4.15*	*-0.37*	*1.50*	
GRAHAM TACTICAL TREND	123,956,106	0.2	-2.59	-1.98	-10.09	-4.56	-4.56	-0.63	-3.56		-3.56	07/01/15
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40		2.40	07/01/15
Excess			*-4.29*	*-7.72*	*-8.48*	*-5.00*	*-5.00*	*-3.53*	*-5.96*		*-5.96*	
FORT GLOBAL CONTRARIAN	177,669,000	0.3	0.96	1.47	-1.81	0.69	0.69				5.29	03/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				2.13	03/01/18
Excess			*-0.75*	*-4.27*	*-0.19*	*0.25*	*0.25*				*3.16*	
MANIYAR MACRO FUND	220,163,000	0.4	1.03	1.98	9.88						10.08	08/01/19
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61						0.11	08/01/19
Excess			*-0.67*	*-3.76*	*11.49*						*9.97*	
KIRKOSWALD GLOBAL MACRO FUND	199,213,000	0.4	-0.39								-0.39	06/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70								1.70	06/01/20
Excess			*-2.10*								*-2.10*	

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	100,000,000	0.2										06/01/20
GLOBAL MACRO/GTAA STRATEGIES	**1,192,864,923**	**2.2**	**-0.10**	**2.27**	**-8.58**	**-5.28**	**-5.28**	**-0.43**	**-1.50**	**0.92**	**1.47**	**04/01/08**
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40	3.12	1.68	04/01/08
Excess			*-1.80*	*-3.47*	*-6.97*	*-5.72*	*-5.72*	*-3.32*	*-3.89*	*-2.20*	*-0.21*	
NEPHILA PALMETTO FUND	137,811,030	0.3	0.40	1.84	1.41	0.71	0.71	-2.73	-0.04		1.07	01/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40		2.59	01/01/14
Excess			*-1.30*	*-3.91*	*3.02*	*0.27*	*0.27*	*-5.62*	*-2.44*		*-1.52*	
NIMBUS WEATHER FUND LTD	95,682,500	0.2	-0.13	-17.16	-0.95	0.96	0.96	-2.28			-2.33	06/01/17
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89			2.79	06/01/17
Excess			*-1.83*	*-22.91*	*0.66*	*0.53*	*0.53*	*-5.17*			*-5.12*	
PRIVATE MARKET FUNDS	59,535,410	0.1	-5.77	-7.63	-17.62	-28.88	-28.88				-6.90	06/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				1.74	06/01/18
Excess			*-7.47*	*-13.37*	*-16.01*	*-29.32*	*-29.32*				*-8.65*	
HSCM BERMUDA FUND	206,178,442	0.4	-0.10	0.37	1.20	7.52	7.52				7.52	07/01/19
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				0.44	07/01/19
Excess			*-1.80*	*-5.38*	*2.81*	*7.08*	*7.08*				*7.08*	
OPPORTUNISTIC	**499,207,382**	**0.9**	**-0.68**	**-4.13**	**-1.74**	**-2.54**	**-2.54**	**-3.08**	**-0.28**		**0.88**	**01/01/14**
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40		2.59	01/01/14
Excess			*-2.38*	*-9.87*	*-0.13*	*-2.98*	*-2.98*	*-5.98*	*-2.68*		*-1.71*	

SUMMARY OF PERFORMANCE

	Market Value	% of Plan	1 MO	3 MO	YTD	FYTD	1 YR	3 YRS	5 YRS	10 YRS	ITD	Inception Date
HUDSON BAY FUND	511,668,375	0.9	2.14	4.85	8.02	12.06	12.06	10.24	7.21		5.70	10/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40		2.52	10/01/14
Excess			*0.44*	*-0.90*	*9.63*	*11.62*	*11.62*	*7.35*	*4.81*		*3.19*	
ARISTEIA CAPITAL	393,114,300	0.7	2.86	10.03	6.05	8.82	8.82	7.13	6.27		5.20	12/01/14
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40		2.62	12/01/14
Excess			*1.16*	*4.28*	*7.66*	*8.38*	*8.38*	*4.23*	*3.87*		*2.58*	
ARISTEIA CO-INVEST	24,836,036	0.0	-1.30	3.74	3.83	16.35	16.35	17.15			9.92	03/01/16
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89			3.66	03/01/16
Excess			*-3.00*	*-2.01*	*5.44*	*15.91*	*15.91*	*14.25*			*6.26*	
EXODUS POINT	452,231,200	0.8	2.41	7.21	8.14	11.55	11.55				7.71	08/01/18
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44				1.72	08/01/18
Excess			*0.71*	*1.46*	*9.75*	*11.12*	*11.12*				*5.99*	
VOLORIDGE FUND	204,218,800	0.4	6.09	6.04								01/01/20
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74								01/01/20
Excess			*4.39*	*0.30*								
RELATIVE VALUE STRATEGIES	**1,586,068,711**	**2.9**	**2.83**	**6.90**	**6.59**	**10.18**	**10.18**	**6.74**	**4.12**		**4.12**	**01/01/14**
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40		2.59	01/01/14
Excess			*1.13*	*1.16*	*8.20*	*9.74*	*9.74*	*3.85*	*1.73*		*1.52*	
TOTAL ABSOLUTE RETURN	**4,290,308,815**	**7.8**	**1.49**	**3.06**	**-3.92**	**-2.47**	**-2.47**	**1.22**	**0.77**	**2.74**	**2.73**	**04/01/08**
CUSTOM ABSOLUTE RETURN BENCHMARK [20]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40	3.12	1.68	04/01/08
Excess			*-0.21*	*-2.68*	*-2.31*	*-2.90*	*-2.90*	*-1.67*	*-1.63*	*-0.38*	*1.05*	

State Retirement Agency of Maryland

Rates of Return - Net Mgr
Periods Ending June 30, 2020

STATE STREET

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	239,107,781	0.4	1.85	7.91	-2.75	1.39	1.39	5.08	4.22	6.58	7.52	07/01/09
CUSTOM BRIDGEWATER BENCHMARK [40]			1.70	5.74	-1.61	0.44	0.44	2.89	2.40	4.67	5.10	07/01/09
Excess			*0.15*	*2.17*	*-1.13*	*0.95*	*0.95*	*2.19*	*1.82*	*1.90*	*2.42*	
BLACKROCK CASH EQUITIZATION	601,461,841	1.1	2.45	14.33	-2.73	3.25	3.25	5.82			8.30	12/01/16
FTSE 3 MONTH T-BILL			0.01	0.14	0.52	1.56	1.56	1.72			1.54	12/01/16
Excess			*2.44*	*14.20*	*-3.25*	*1.69*	*1.69*	*4.10*			*6.76*	
TOTAL MULTI ASSET	**840,569,622**	**1.5**	**2.34**	**12.84**	**-1.71**	**2.93**	**2.93**				**3.66**	**07/01/18**
TOTAL PLAN POLICY INDEX [41]			1.36	7.14	-1.94	3.14	3.14				5.10	07/01/18
Excess			*0.98*	*5.70*	*0.23*	*-0.21*	*-0.21*				*-1.44*	
CASH												
MARYLAND MONEY MARKET ACCOUNT	265,452,145	0.5	0.01	0.02	0.40	1.47	1.47	1.86	1.32		0.72	01/01/11
FTSE 3 MONTH T-BILL			0.01	0.14	0.52	1.56	1.56	1.72	1.15		0.63	01/01/11
Excess			*0.00*	*-0.11*	*-0.13*	*-0.09*	*-0.09*	*0.14*	*0.17*		*0.09*	
SELF LIQUIDATING ACCOUNT	5,728	0.0	6.24	0.86	2.36	6.09	6.09					06/01/84
TOTAL CASH	**269,703,473**	**0.5**	**0.01**	**4.59**	**3.18**	**5.08**	**5.08**	**7.98**	**6.26**	**4.42**	**4.17**	**07/01/08**
FTSE 3 MONTH T-BILL			0.01	0.14	0.52	1.56	1.56	1.72	1.15	0.61	0.58	07/01/08
Excess			*0.00*	*4.45*	*2.66*	*3.52*	*3.52*	*6.25*	*5.11*	*3.82*	*3.59*	
TOTAL PLAN	**54,767,091,950**	**100.0**	**1.88**	**7.38**	**-1.53**	**3.57**	**3.57**	**6.01**	**5.81**	**7.57**	**7.89**	**07/01/86**
TOTAL PLAN POLICY INDEX [41]			1.36	7.14	-1.94	3.14	3.14	5.92	5.84	7.17		07/01/86
Excess			*0.52*	*0.24*	*0.41*	*0.43*	*0.43*	*0.09*	*-0.03*	*0.40*		

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 CUSTOM STATIC INDEX [42]			1.36	7.16	-2.24	2.85	2.85	5.91	5.89	7.20		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
From 07/01/2013 to 10/31/2015: 100% Barclays US Intermediate Aggregate Index
Prior 07/01/2013: 100% Barclays Aggregate Bond

[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

[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
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

[19] 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

[20] 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.

[21] 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

[22] 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

[23] Benchmark is dynamically calculated based on the Average Balance (BMV + Weighted Net Cash Flows) weights of the underlying portfolios and their corresponding indices

[24] 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

[25] 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

ENDNOTES

[26] 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

[27] 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.

[28] 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.

[29] 80% Barclays US High Yield, 20% S&P/LSTA Leveraged Loan

[30] 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.

[31] 50% BBG Barc EM Hard Cur Agg: Sovereign/50% BBG Barc EM USD Aggregate Corporate TR

[32] Since 10/01/2017: 100% Bloomberg EM Local Govt -30 BPS
Prior to 10/01/2017: 100% JP Morgan GBI EM Global Diversified (G)

[33] Since 10/01/2017: 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.

[34] 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

[35] 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.

[36] 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

[37] 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)

[38] 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.

[39] 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.

[40] 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.

[41] Since 07/01/2008: Calculated monthly using transitional weights and asset class benchmarks. Prior to 07/01/2008: MSRA TOTAL PLAN STATIC POLICY.

[42] Calculated monthly using the strategic target weights and asset class benchmarks.

EXHIBIT C

Andrew Palmer
Chief Investment Officer

- Executive Associate II — Antionette Butcher
- Deputy Chief Investment Officer — Robert Burd
  - Associate — (vacant)
  - Senior Compliance Manager — Toni Voglino
    - Senior Investment Compliance Analyst — Mildred "Mimi" Forbes
  - *Rates/Credit* — Managing Director — Dimitri Grechenko
    - Senior Portfolio Manager — Eric Farls
    - Senior Portfolio Manager — Ashu Pal
    - Senior Portfolio Manager — Michael Fang
  - Quantitative Strategies — Managing Director — Gregory Kasten
    - Senior Portfolio Manager — Anish Bedi
    - Senior Risk Manager — Frederick "Beau" Smith
  - *Public Equity* — *Managing Director* — *Lawrence Katsafanas*
    - Senior Portfolio Manager — Faina Kashtelyan
    - Senior Portfolio Manager — Ratnakar Kota
    - Senior Investment Analyst — Daniel Schick
    - Associate — Minh Ngugen
  - *Real Assets* — *Managing Director* — *Stephen Reilly*
    - Senior Investment Analyst — Michael McCord
    - Senior Investment Analyst — (vacant)
  - *Private Equity* — *Managing Director* — *David Ferguson*
    - Senior Portfolio Manager — Kyongdo Min
    - Senior Portfolio Manager — Stephen Muturi
    - Senior Portfolio Manager — Dana Johns
  - Admin. & Accounting — Managing Director, Investment Operations — (vacant)
    - Director-Accounting — Victor Adekoye
      - Acct. Lead Specialized — Charles Lee
      - Acct. Lead Specialized — Jane Daniel
    - Director-Investment Administration — Colleen Bower
      - Assistant Director — Sathy Kavanakudy
      - Assistant Director — Philip Tyler

Investment Division

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