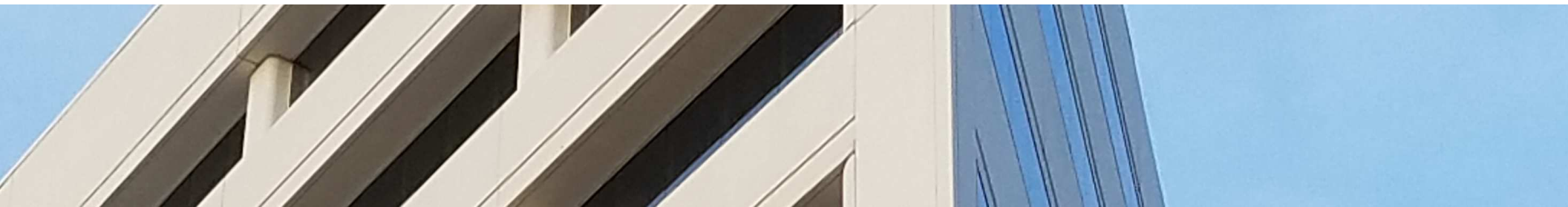




WILSHIRE ASSOCIATES

Wilshire Consulting



Kentucky Retirement Systems Pension

Monthly Performance Summary

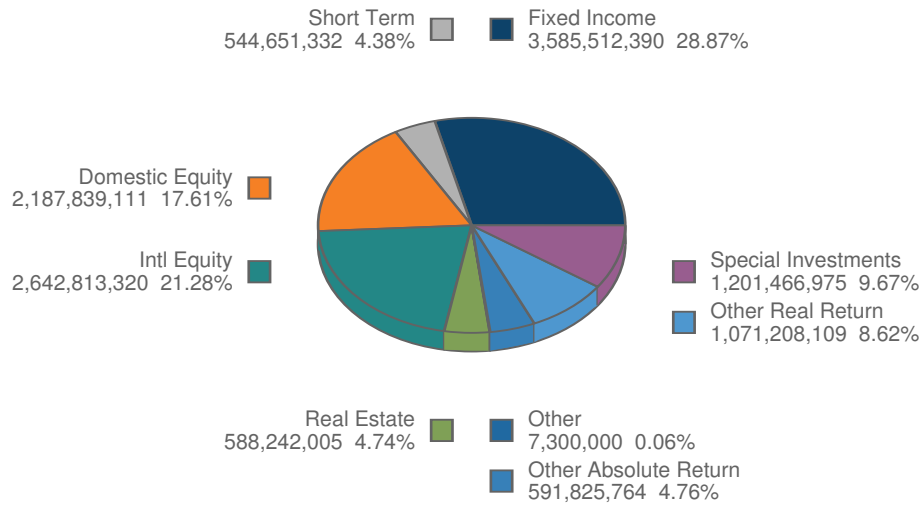
July 31, 2018

ACTUAL ALLOCATION VS POLICY ALLOCATION

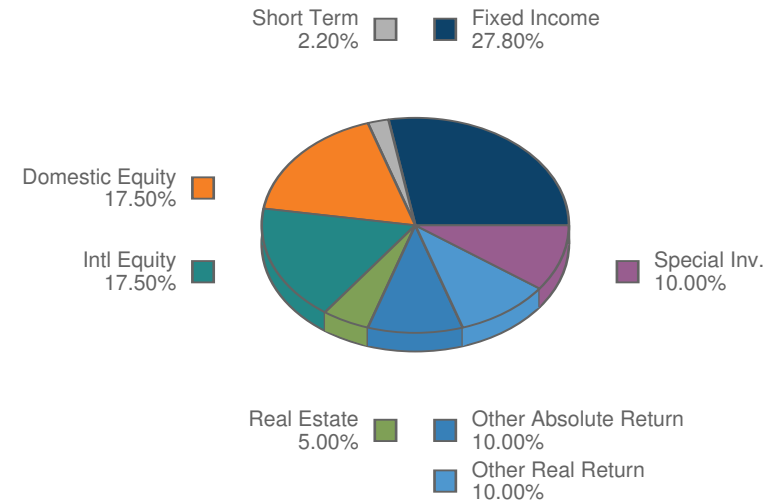
KRS Pension Plan Composite

As of July 31, 2018

Total Fund



Policy Index



MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$
KRS Pension Plan	1.38	1.38	2.59	1.38	8.11	7.52	7.46	9.16	3/31/84	12,420,859,005
KRS Allocation Index	1.42	1.42	1.95	1.42	7.51	7.52	7.60	9.29	3/31/84	
Value Added	-0.04	-0.04	0.63	-0.04	0.60	-0.01	-0.14	-0.13	3/31/84	
KRS IPS Benchmark	1.45	1.45	2.37	1.45	6.99				3/31/84	
KERS Pension Plan	1.28	1.28	2.25	1.28	7.14	6.56	7.02	9.09	3/31/84	2,009,995,450
KERS Allocation Index	1.34	1.34	1.52	1.34	6.67	6.49	6.91	9.19	3/31/84	
Value Added	-0.06	-0.06	0.73	-0.06	0.47	0.06	0.11	-0.10	3/31/84	
KERS IPS Benchmark	1.33	1.33	1.79	1.33	6.70				3/31/84	
Assumed Rate 5.25%	0.43	0.43	3.03	0.43	5.25				3/31/84	
KERS (H) Pension Plan	1.40	1.40	2.58	1.40	8.19	7.66	7.52	9.17	3/31/84	655,587,441
KERS (H) Allocation Index	1.44	1.44	2.04	1.44	8.18	7.69	7.62	9.30	3/31/84	
Value Added	-0.04	-0.04	0.54	-0.04	0.01	-0.03	-0.10	-0.13	3/31/84	
KERS (H) IPS Benchmark	1.48	1.48	2.45	1.48	7.49				3/31/84	
Assumed Rate 6.25%	0.51	0.51	3.60	0.51	6.25				3/31/84	
CERS Pension Plan	1.40	1.40	2.63	1.40	8.28	7.71	7.54	9.17	3/31/84	7,122,641,346
CERS Allocation Index	1.44	1.44	2.08	1.44	8.24	7.71	7.63	9.30	3/31/84	
Value Added	-0.04	-0.04	0.55	-0.04	0.04	0.00	-0.09	-0.13	3/31/84	
CERS IPS Benchmark	1.48	1.48	2.49	1.48	7.55				3/31/84	
Assumed Rate 6.25%	0.51	0.51	3.60	0.51	6.25				3/31/84	

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$
	CERS (H) Pension Plan	1.40	1.40	2.67	1.40	8.30	7.74	7.55	9.18	3/31/84
CERS (H) Allocation Index	1.44	1.44	2.13	1.44	8.30	7.73	7.64	9.30	3/31/84	
Value Added	-0.04	-0.04	0.54	-0.04	-0.00	0.01	-0.09	-0.13	3/31/84	
CERS (H) IPS Benchmark	1.48	1.48	2.54	1.48	7.61				3/31/84	
Assumed Rate 6.25%	0.51	0.51	3.60	0.51	6.25				3/31/84	
SPRS Pension Plan	1.31	1.31	2.21	1.31	7.22	6.57	6.83	9.07	3/31/84	259,866,536
SPRS Allocation Index	1.35	1.35	1.83	1.35	7.37	7.18	7.30	9.25	3/31/84	
Value Added	-0.04	-0.04	0.37	-0.04	-0.15	-0.61	-0.47	-0.18	3/31/84	
SPRS IPS Benchmark	1.33	1.33	1.97	1.33	6.90				3/31/84	
Assumed Rate 5.25%	0.43	0.43	3.03	0.43	5.25				3/31/84	

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
KERS Pension Plan	1.28	1.28	2.25	1.28	7.14	6.56	7.02	9.09	3/31/84	2,009,995,450	
KERS Allocation Index	1.34	1.34	1.52	1.34	6.67	6.49	6.91	9.19	3/31/84		
Value Added	-0.06	-0.06	0.73	-0.06	0.47	0.06	0.11	-0.10	3/31/84		
KERS IPS Benchmark	1.33	1.33	1.79	1.33	6.70				3/31/84		
Assumed Rate 5.25%	0.43	0.43	3.03	0.43	5.25				3/31/84		
US Equity Composite	3.36	3.36	6.94	3.36	16.34	12.17	12.67	13.84	6/30/13	300,182,386	14.93
Russell 3000	3.32	3.32	6.64	3.32	16.39	12.18	12.83	13.79	6/30/13		
Value Added	0.04	0.04	0.30	0.04	-0.05	-0.01	-0.16	0.05	6/30/13		
Non-US Equity Composite	2.09	2.09	0.40	2.09	8.91	7.23	6.49	7.28	6/30/13	378,888,622	18.85
Policy Index	2.15	2.15	-1.57	2.15	6.23	6.44	6.04	6.84	6/30/13		
Value Added	-0.06	-0.06	1.97	-0.06	2.68	0.79	0.46	0.45	6/30/13		
Fixed Income Composite	0.53	0.53	0.47	0.53	1.01	4.29	3.96	4.01	6/30/13	631,002,680	31.39
Policy Index	0.24	0.24	-0.88	0.24	0.14	4.84	4.31	4.31	6/30/13		
Value Added	0.28	0.28	1.35	0.28	0.88	-0.55	-0.35	-0.30	6/30/13		
Real Return Composite	1.47	1.47	1.47	1.47	2.65	4.17	3.05	3.13	6/30/13	163,207,285	8.12
Real Return Index (P)	0.92	0.92	0.67	0.92	0.90	2.42	1.82	1.88	6/30/13		
Value Added	0.55	0.55	0.80	0.55	1.74	1.75	1.24	1.25	6/30/13		
Real Estate Composite	1.68	1.68	5.79	1.68	10.39	8.97	8.23	8.15	6/30/13	96,707,550	4.81
NCREIF ODCE NOF 1 Quarter Lag	1.85	1.85	5.78	1.85	7.51	8.39	10.04	10.64	6/30/13		
Value Added	-0.17	-0.17	0.02	-0.17	2.88	0.58	-1.81	-2.49	6/30/13		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Absolute Return Composite	0.18	0.18	2.34	0.18	4.62	1.82	3.73	3.53	6/30/13	107,971,858	5.37
HFRI FOF Div (1 Month Lag)	-0.31	-0.31	1.57	-0.31	5.20	1.75	3.30	2.98	6/30/13		
Value Added	0.49	0.49	0.76	0.49	-0.58	0.08	0.43	0.55	6/30/13		
Private Equity Composite	0.20	0.20	2.66	0.20	13.76	9.87	12.13	11.87	6/30/13	236,489,660	11.77
KERS Short Term PE Index	0.20	0.20	2.66	0.20	13.76	9.87	12.13	11.87	6/30/13		
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6/30/13		
Russell 3000 +3% Qtr Lag	0.63	0.63	7.90	0.63	16.50	14.36	16.85	17.01	6/30/13		
Cash Composite	0.21	0.21	1.19	0.21	1.96	1.15	0.78	0.80	6/30/13	93,665,506	4.66
91-Day Treasury Bill	0.16	0.16	0.97	0.16	1.43	0.73	0.45	0.45	6/30/13		
Value Added	0.05	0.05	0.21	0.05	0.52	0.42	0.32	0.35	6/30/13		
Other Assets	0.00	0.00	0.00	0.00				0.00	8/31/17	1,879,904	0.09

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
KERS (H) Pension Plan	1.40	1.40	2.58	1.40	8.19	7.66	7.52	9.17	3/31/84	655,587,441	
KERS (H) Allocation Index	1.44	1.44	2.04	1.44	8.18	7.69	7.62	9.30	3/31/84		
Value Added	-0.04	-0.04	0.54	-0.04	0.01	-0.03	-0.10	-0.13	3/31/84		
KERS (H) IPS Benchmark	1.48	1.48	2.45	1.48	7.49				3/31/84		
Assumed Rate 6.25%	0.51	0.51	3.60	0.51	6.25				3/31/84		
US Equity Composite	3.36	3.36	6.94	3.36	16.33	11.77	12.04	13.03	6/30/13	119,036,484	18.16
Russell 3000	3.32	3.32	6.64	3.32	16.39	12.18	12.83	13.79	6/30/13		
Value Added	0.04	0.04	0.30	0.04	-0.06	-0.41	-0.78	-0.76	6/30/13		
Non-US Equity Composite	2.09	2.09	0.40	2.09	8.91	7.74	6.85	7.63	6/30/13	142,465,127	21.73
Policy Index	2.15	2.15	-1.57	2.15	6.23	6.44	6.04	6.84	6/30/13		
Value Added	-0.06	-0.06	1.98	-0.06	2.68	1.29	0.81	0.80	6/30/13		
Fixed Income Composite	0.52	0.52	-0.02	0.52	0.44	3.99	3.83	3.88	6/30/13	190,240,976	29.02
Policy Index	0.65	0.65	-0.11	0.65	1.02	5.11	4.47	4.46	6/30/13		
Value Added	-0.13	-0.13	0.09	-0.13	-0.58	-1.12	-0.65	-0.59	6/30/13		
Real Return Composite	1.31	1.31	1.01	1.31	1.96	4.27	3.19	3.39	6/30/13	55,975,525	8.54
Real Return Index (P)	0.92	0.92	0.67	0.92	0.90	2.42	1.82	1.88	6/30/13		
Value Added	0.39	0.39	0.34	0.39	1.06	1.85	1.38	1.51	6/30/13		
Real Estate Composite	1.25	1.25	5.72	1.25	10.87	10.33	9.52	9.23	6/30/13	30,410,346	4.64
NCREIF ODCE NOF 1 Quarter Lag	1.85	1.85	5.78	1.85	7.51	8.39	10.04	10.64	6/30/13		
Value Added	-0.60	-0.60	-0.06	-0.60	3.35	1.94	-0.52	-1.40	6/30/13		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Absolute Return Composite	0.18	0.18	2.34	0.18	4.62	1.82	3.77	3.57	6/30/13	28,349,860	4.32
HFRI FOF Div (1 Month Lag)	-0.31	-0.31	1.57	-0.31	5.20	1.75	3.30	2.98	6/30/13		
Value Added	0.49	0.49	0.76	0.49	-0.58	0.08	0.47	0.59	6/30/13		
Private Equity Composite	0.19	0.19	6.69	0.19	18.95	12.41	13.82	13.62	6/30/13	61,450,223	9.37
KERS (H) Short Term PE Index	0.19	0.19	6.69	0.19	18.95	12.41	13.82	13.62	6/30/13		
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6/30/13		
Russell 3000 +3% Qtr Lag	0.63	0.63	7.90	0.63	16.50	14.36	16.85	17.01	6/30/13		
Cash Composite	0.22	0.22	1.24	0.22	2.05	1.19	0.80	0.82	6/30/13	26,118,177	3.98
91-Day Treasury Bill	0.16	0.16	0.97	0.16	1.43	0.73	0.45	0.45	6/30/13		
Value Added	0.06	0.06	0.27	0.06	0.62	0.46	0.35	0.38	6/30/13		
Other Assets	0.00	0.00	0.00	0.00				0.00	8/31/17	1,540,723	0.24

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
CERS Pension Plan	1.40	1.40	2.63	1.40	8.28	7.71	7.54	9.17	3/31/84	7,122,641,346	
CERS Allocation Index	1.44	1.44	2.08	1.44	8.24	7.71	7.63	9.30	3/31/84		
Value Added	-0.04	-0.04	0.55	-0.04	0.04	0.00	-0.09	-0.13	3/31/84		
CERS IPS Benchmark	1.48	1.48	2.49	1.48	7.55				3/31/84		
Assumed Rate 6.25%	0.51	0.51	3.60	0.51	6.25				3/31/84		
US Equity Composite	3.36	3.36	6.94	3.36	16.33	11.83	12.03	13.02	6/30/13	1,295,198,356	18.18
Russell 3000	3.32	3.32	6.64	3.32	16.39	12.18	12.83	13.79	6/30/13		
Value Added	0.04	0.04	0.30	0.04	-0.06	-0.35	-0.80	-0.77	6/30/13		
Non-US Equity Composite	2.09	2.09	0.41	2.09	8.92	7.72	6.84	7.62	6/30/13	1,552,517,649	21.80
Policy Index	2.15	2.15	-1.57	2.15	6.23	6.44	6.04	6.84	6/30/13		
Value Added	-0.06	-0.06	1.98	-0.06	2.68	1.27	0.80	0.79	6/30/13		
Fixed Income Composite	0.52	0.52	0.04	0.52	0.49	3.99	3.84	3.89	6/30/13	2,010,641,899	28.23
Policy Index	0.65	0.65	-0.11	0.65	1.02	5.11	4.47	4.46	6/30/13		
Value Added	-0.13	-0.13	0.15	-0.13	-0.53	-1.12	-0.63	-0.57	6/30/13		
Real Return Composite	1.30	1.30	1.00	1.30	1.95	4.25	3.18	3.23	6/30/13	618,674,384	8.69
Real Return Index (P)	0.92	0.92	0.67	0.92	0.90	2.42	1.82	1.88	6/30/13		
Value Added	0.39	0.39	0.33	0.39	1.05	1.83	1.36	1.34	6/30/13		
Real Estate Composite	1.25	1.25	5.70	1.25	10.85	10.37	9.51	9.30	6/30/13	340,911,493	4.79
NCREIF ODCE NOF 1 Quarter Lag	1.85	1.85	5.78	1.85	7.51	8.39	10.04	10.64	6/30/13		
Value Added	-0.60	-0.60	-0.08	-0.60	3.34	1.98	-0.53	-1.34	6/30/13		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Absolute Return Composite	0.18	0.18	2.34	0.18	4.62	1.82	3.78	3.58	6/30/13	337,117,791	4.73
HFRI FOF Div (1 Month Lag)	-0.31	-0.31	1.57	-0.31	5.20	1.75	3.30	2.98	6/30/13		
Value Added	0.49	0.49	0.76	0.49	-0.58	0.08	0.48	0.60	6/30/13		
Private Equity Composite	0.18	0.18	7.09	0.18	19.57	12.86	14.13	13.90	6/30/13	658,420,372	9.24
CERS Short Term PE Index	0.18	0.18	7.09	0.18	19.57	12.86	14.13	13.90	6/30/13		
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6/30/13		
Russell 3000 +3% Qtr Lag	0.63	0.63	7.90	0.63	16.50	14.36	16.85	17.01	6/30/13		
Cash Composite	0.22	0.22	1.30	0.22	2.18	1.24	0.83	0.85	6/30/13	307,476,943	4.32
91-Day Treasury Bill	0.16	0.16	0.97	0.16	1.43	0.73	0.45	0.45	6/30/13		
Value Added	0.06	0.06	0.33	0.06	0.75	0.51	0.37	0.40	6/30/13		
Other Assets	0.00	0.00	0.00	0.00				0.00	8/31/17	1,682,460	0.02

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
CERS (H) Pension Plan	1.40	1.40	2.67	1.40	8.30	7.74	7.55	9.18	3/31/84	2,372,768,236	
CERS (H) Allocation Index	1.44	1.44	2.13	1.44	8.30	7.73	7.64	9.30	3/31/84		
Value Added	-0.04	-0.04	0.54	-0.04	-0.00	0.01	-0.09	-0.13	3/31/84		
CERS (H) IPS Benchmark	1.48	1.48	2.54	1.48	7.61				3/31/84		
Assumed Rate 6.25%	0.51	0.51	3.60	0.51	6.25				3/31/84		
US Equity Composite	3.36	3.36	6.94	3.36	16.33	11.89	12.06	13.05	6/30/13	432,287,435	18.22
Russell 3000	3.32	3.32	6.64	3.32	16.39	12.18	12.83	13.79	6/30/13		
Value Added	0.04	0.04	0.29	0.04	-0.06	-0.30	-0.77	-0.74	6/30/13		
Non-US Equity Composite	2.09	2.09	0.40	2.09	8.91	7.71	6.84	7.63	6/30/13	518,894,654	21.87
Policy Index	2.15	2.15	-1.57	2.15	6.23	6.44	6.04	6.84	6/30/13		
Value Added	-0.06	-0.06	1.98	-0.06	2.68	1.26	0.81	0.79	6/30/13		
Fixed Income Composite	0.51	0.51	-0.03	0.51	0.41	3.94	3.82	3.86	6/30/13	666,346,405	28.08
Policy Index	0.65	0.65	-0.11	0.65	1.02	5.11	4.47	4.46	6/30/13		
Value Added	-0.14	-0.14	0.08	-0.14	-0.61	-1.17	-0.66	-0.60	6/30/13		
Real Return Composite	1.32	1.32	1.03	1.32	1.99	4.30	3.22	3.33	6/30/13	211,088,909	8.90
Real Return Index (P)	0.92	0.92	0.67	0.92	0.90	2.42	1.82	1.88	6/30/13		
Value Added	0.40	0.40	0.36	0.40	1.09	1.88	1.40	1.45	6/30/13		
Real Estate Composite	1.25	1.25	5.70	1.25	10.85	10.34	9.51	9.28	6/30/13	107,540,300	4.53
NCREIF ODCE NOF 1 Quarter Lag	1.85	1.85	5.78	1.85	7.51	8.39	10.04	10.64	6/30/13		
Value Added	-0.60	-0.60	-0.08	-0.60	3.34	1.95	-0.53	-1.36	6/30/13		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Absolute Return Composite	0.18	0.18	2.34	0.18	4.62	1.82	3.78	3.59	6/30/13	106,959,369	4.51
HFRI FOF Div (1 Month Lag)	-0.31	-0.31	1.57	-0.31	5.20	1.75	3.30	2.98	6/30/13		
Value Added	0.49	0.49	0.76	0.49	-0.58	0.08	0.48	0.61	6/30/13		
Private Equity Composite	0.17	0.17	7.54	0.17	20.20	13.33	14.57	14.38	6/30/13	224,445,288	9.46
CERS (H) Short Term PE Index	0.17	0.17	7.54	0.17	20.20	13.33	14.57	14.38	6/30/13		
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6/30/13		
Russell 3000 +3% Qtr Lag	0.63	0.63	7.90	0.63	16.50	14.36	16.85	17.01	6/30/13		
Cash Composite	0.21	0.21	1.29	0.21	2.16	1.23	0.82	0.84	6/30/13	103,374,174	4.36
91-Day Treasury Bill	0.16	0.16	0.97	0.16	1.43	0.73	0.45	0.45	6/30/13		
Value Added	0.06	0.06	0.31	0.06	0.72	0.50	0.37	0.40	6/30/13		
Other Assets	0.00	0.00	0.00	0.00				0.00	8/31/17	1,831,701	0.08

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
SPRS Pension Plan	1.31	1.31	2.21	1.31	7.22	6.57	6.83	9.07	3/31/84	259,866,536	
SPRS Allocation Index	1.35	1.35	1.83	1.35	7.37	7.18	7.30	9.25	3/31/84		
Value Added	-0.04	-0.04	0.37	-0.04	-0.15	-0.61	-0.47	-0.18	3/31/84		
SPRS IPS Benchmark	1.33	1.33	1.97	1.33	6.90				3/31/84		
Assumed Rate 5.25%	0.43	0.43	3.03	0.43	5.25				3/31/84		
US Equity Composite	3.36	3.36	6.93	3.36	16.31	11.28	11.76	12.79	6/30/13	41,134,448	15.83
Russell 3000	3.32	3.32	6.64	3.32	16.39	12.18	12.83	13.79	6/30/13		
Value Added	0.04	0.04	0.28	0.04	-0.08	-0.91	-1.06	-1.01	6/30/13		
Non-US Equity Composite	2.09	2.09	0.40	2.09	8.91	7.27	6.55	7.34	6/30/13	50,047,267	19.26
Policy Index	2.15	2.15	-1.57	2.15	6.23	6.44	6.04	6.84	6/30/13		
Value Added	-0.06	-0.06	1.98	-0.06	2.68	0.83	0.52	0.50	6/30/13		
Fixed Income Composite	0.47	0.47	-0.11	0.47	0.25	3.78	3.75	3.80	6/30/13	87,280,434	33.59
Policy Index	0.65	0.65	-0.11	0.65	1.02	5.11	4.47	4.46	6/30/13		
Value Added	-0.18	-0.18	-0.00	-0.18	-0.77	-1.32	-0.73	-0.66	6/30/13		
Real Return Composite	1.27	1.27	0.89	1.27	1.84	4.02	3.04	3.18	6/30/13	22,262,005	8.57
Real Return Index (P)	0.92	0.92	0.67	0.92	0.90	2.42	1.82	1.88	6/30/13		
Value Added	0.35	0.35	0.22	0.35	0.93	1.60	1.22	1.30	6/30/13		
Real Estate Composite	1.36	1.36	5.76	1.36	10.85	10.16	9.27	9.24	6/30/13	12,672,317	4.88
NCREIF ODCE NOF 1 Quarter Lag	1.85	1.85	5.78	1.85	7.51	8.39	10.04	10.64	6/30/13		
Value Added	-0.49	-0.49	-0.02	-0.49	3.33	1.77	-0.77	-1.40	6/30/13		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Absolute Return Composite	0.18	0.18	2.34	0.18	4.62	1.83	3.74	3.54	6/30/13	11,426,887	4.40
HFRI FOF Div (1 Month Lag)	-0.31	-0.31	1.57	-0.31	5.20	1.75	3.30	2.98	6/30/13		
Value Added	0.49	0.49	0.76	0.49	-0.58	0.08	0.44	0.56	6/30/13		
Private Equity Composite	0.24	0.24	4.40	0.24	15.86	10.53	12.42	12.27	6/30/13	20,661,430	7.95
SPRS Short Term PE Index	0.24	0.24	4.40	0.24	15.86	10.53	12.42	12.27	6/30/13		
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6/30/13		
Russell 3000 +3% Qtr Lag	0.63	0.63	7.90	0.63	16.50	14.36	16.85	17.01	6/30/13		
Cash Composite	0.21	0.21	1.19	0.21	1.94	1.16	0.78	0.80	6/30/13	14,016,535	5.39
91-Day Treasury Bill	0.16	0.16	0.97	0.16	1.43	0.73	0.45	0.45	6/30/13		
Value Added	0.05	0.05	0.22	0.05	0.51	0.43	0.33	0.36	6/30/13		
Other Assets	0.00	0.00	0.00	0.00				0.00	8/31/17	365,213	0.14

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns								Market Value		
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
KRS Pension Plan	1.38	1.38	2.59	1.38	8.11	7.52	7.46	9.16	3/31/84	12,420,859,005	100.00
KRS Allocation Index	1.42	1.42	1.95	1.42	7.51	7.52	7.60	9.29	3/31/84		
Value Added	-0.04	-0.04	0.63	-0.04	0.60	-0.01	-0.14	-0.13	3/31/84		
KRS IPS Benchmark	1.45	1.45	2.37	1.45	6.99				3/31/84		
US Equity Composite	3.36	3.36	6.95	3.36	16.34	11.91	12.15	11.44	3/31/84	2,187,839,111	17.61
Russell 3000	3.32	3.32	6.64	3.32	16.39	12.18	12.83	11.46	3/31/84		
Value Added	0.04	0.04	0.31	0.04	-0.05	-0.27	-0.68	-0.02	3/31/84		
S&P 500 Index	3.72	3.72	6.80	3.72	16.64	12.58	13.13	7.54	6/30/01	1,016,325,294	8.18
Standard & Poor's 500	3.72	3.72	6.47	3.72	16.24	12.52	13.13	7.12	6/30/01		
Value Added	-0.00	-0.00	0.33	-0.00	0.40	0.05	0.00	0.42	6/30/01		
Scientific Beta	3.54	3.54	6.12	3.54	14.36			14.78	6/30/16	297,453,344	2.39
Standard & Poor's 500	3.72	3.72	6.47	3.72	16.24			17.47	6/30/16		
Value Added	-0.18	-0.18	-0.36	-0.18	-1.88			-2.69	6/30/16		
River Road									6/30/11	19,390,947	0.16
Russell 3000 Value									6/30/11		
Value Added									6/30/11		
River Road FAV	3.71	3.71	8.29	3.71	9.54			18.76	6/30/16	128,930,198	1.04
Russell 3000 Value	3.79	3.79	2.59	3.79	9.91			13.15	6/30/16		
Value Added	-0.08	-0.08	5.70	-0.08	-0.37			5.61	6/30/16		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Westfield Capital	3.81	3.81	11.52	3.81	20.92	10.69	13.16	13.46	6/30/11	141,480,891	1.14
Russell 3000 Growth	2.84	2.84	10.49	2.84	22.86	14.52	15.55	14.96	6/30/11		
Value Added	0.97	0.97	1.03	0.97	-1.93	-3.83	-2.40	-1.50	6/30/11		
Systematic	2.97	2.97	2.89	2.97	16.13	10.44	9.77	12.92	6/30/12	254,578,307	2.05
Russell Mid Cap Value	2.72	2.72	2.56	2.72	9.07	9.82	10.71	14.14	6/30/12		
Value Added	0.25	0.25	0.33	0.25	7.05	0.62	-0.94	-1.23	6/30/12		
Internal US Mid Cap	1.78	1.78	6.31	1.78	15.72	11.83		11.64	7/31/14	134,566,556	1.08
S&P 400 Mid Cap	1.76	1.76	5.31	1.76	14.49	11.49		11.44	7/31/14		
Value Added	0.02	0.02	0.99	0.02	1.23	0.34		0.19	7/31/14		
NTGI Structured	2.26	2.26	10.47	2.26	19.66	12.88	12.26	10.66	9/30/99	195,062,675	1.57
Russell 2000	1.74	1.74	9.54	1.74	18.73	12.04	11.33	8.94	9/30/99		
Value Added	0.52	0.52	0.93	0.52	0.93	0.84	0.93	1.72	9/30/99		
Invesco									7/31/05	655	0.00
Transition Account									6/30/11	50,243	0.00

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Non-US Equity Composite	2.09	2.09	0.42	2.09	8.92	7.61	6.76	3.52	6/30/00	2,642,813,320	21.28
Policy Index	2.15	2.15	-1.57	2.15	6.23	6.44	6.04	3.64	6/30/00		
Value Added	-0.06	-0.06	1.99	-0.06	2.69	1.17	0.72	-0.12	6/30/00		
BlackRock ACWI Ex US	2.37	2.37	-1.28	2.37	6.21	6.34	5.84	7.58	6/30/09	1,050,759,487	8.46
MSCI ACWI X US (N)	2.39	2.39	-1.47	2.39	5.94	6.00	5.59	7.35	6/30/09		
Value Added	-0.02	-0.02	0.19	-0.02	0.27	0.34	0.25	0.23	6/30/09		
American Century	1.57	1.57	5.60	1.57	16.01	8.75		5.99	6/30/14	357,920,417	2.88
Policy Index	2.15	2.15	-1.57	2.15	6.11	6.39		3.32	6/30/14		
Value Added	-0.58	-0.58	7.18	-0.58	9.91	2.37		2.66	6/30/14		
Franklin Templeton	1.11	1.11	7.48	1.11	20.24	12.86		8.78	6/30/14	269,887,479	2.17
Policy Index	2.15	2.15	-1.57	2.15	6.11	6.39		3.32	6/30/14		
Value Added	-1.04	-1.04	9.06	-1.04	14.13	6.48		5.46	6/30/14		
Lazard Asset Mgmt	1.69	1.69	-0.32	1.69	8.26	5.97		4.38	6/30/14	469,527,422	3.78
Policy Index	2.15	2.15	-1.57	2.15	6.11	6.39		3.32	6/30/14		
Value Added	-0.46	-0.46	1.25	-0.46	2.15	-0.42		1.06	6/30/14		
LSV Asset Mgmt	3.24	3.24	-2.48	3.24	4.38	5.79		3.17	6/30/14	407,767,771	3.28
Policy Index	2.15	2.15	-1.57	2.15	6.11	6.39		3.32	6/30/14		
Value Added	1.09	1.09	-0.90	1.09	-1.73	-0.60		-0.15	6/30/14		
NTGI Int'l Small Cap	0.73	0.73	-1.69	0.73	8.01	9.10	8.32	13.01	11/30/08	82,941,001	0.67
MSCI ACWI X US Small Cap (N)	0.70	0.70	-2.26	0.70	7.54	8.89	8.08	13.31	11/30/08		
Value Added	0.03	0.03	0.57	0.03	0.47	0.21	0.24	-0.31	11/30/08		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Pyramis Intl									7/31/01	2,162,515	0.02
Boston Company									4/30/05	750,975	0.01
Non-US Equity Transition									5/31/14	1,096,252	0.01

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Fixed Income Composite	0.52	0.52	0.11	0.52	0.81	4.13	4.14	7.49	3/31/84	3,585,512,390	28.87
Policy Index	0.65	0.65	-0.11	0.65	1.02	5.11	4.47	7.32	3/31/84		
Value Added	-0.13	-0.13	0.22	-0.13	-0.21	-0.98	-0.34	0.16	3/31/84		
Bloomberg Global Aggregate	-0.17	-0.17	-1.62	-0.17	-0.48	2.45	1.21		3/31/84		
NISA	-0.01	-0.01	-1.59	-0.01	-0.65	1.83	2.51	3.79	1/31/09	588,362,607	4.74
Bloomberg Aggregate	0.02	0.02	-1.59	0.02	-0.80	1.49	2.25	3.58	1/31/09		
Value Added	-0.03	-0.03	0.01	-0.03	0.15	0.34	0.26	0.21	1/31/09		
BlackRock IG Credit	0.43	0.43	-1.06	0.43	-0.63			0.90	3/31/17	496,083,883	3.99
Bloomberg Int Credit	0.38	0.38	-1.08	0.38	-0.66			1.04	3/31/17		
Value Added	0.06	0.06	0.01	0.06	0.03			-0.14	3/31/17		
BNY IG Credit	0.34	0.34	-1.10	0.34				-1.31	11/30/17	884,361,242	7.12
Bloomberg Int Credit	0.38	0.38	-1.08	0.38				-0.83	11/30/17		
Value Added	-0.04	-0.04	-0.02	-0.04				-0.48	11/30/17		
Manulife Asset Mgmt	0.86	0.86	-1.26	0.86	-0.63	2.34	2.85	3.80	11/30/11	489,360,095	3.94
Policy Index	0.21	0.21	-1.47	0.21	-0.56	1.95	0.95	1.01	11/30/11		
Value Added	0.65	0.65	0.21	0.65	-0.07	0.39	1.90	2.78	11/30/11		
Columbia	1.31	1.31	0.05	1.31	1.07	4.89	5.23	6.73	10/31/11	247,321,246	1.99
Bloomberg High Yield	1.09	1.09	1.25	1.09	2.60	6.12	5.35	6.81	10/31/11		
Value Added	0.22	0.22	-1.21	0.22	-1.53	-1.22	-0.12	-0.07	10/31/11		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns								Market Value		
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Marathon Bluegrass	0.58	0.58	2.16	0.58	1.43			7.37	12/31/15	315,074,237	2.54
Bloomberg High Yield	1.09	1.09	1.25	1.09	2.60			9.86	12/31/15		
Value Added	-0.51	-0.51	0.90	-0.51	-1.17			-2.49	12/31/15		
Waterfall	0.79	0.79	5.37	0.79	8.45	9.78	10.15	12.03	1/31/10	168,916,268	1.36
Policy Index	0.75	0.75	1.43	0.75	2.84	4.76	4.04	5.24	1/31/10		
Value Added	0.04	0.04	3.94	0.04	5.61	5.02	6.11	6.79	1/31/10		
Shenkman Capital	0.90	0.90	2.98	0.90	3.80	3.48	3.78	4.76	9/30/10	237,650,130	1.91
S&P LSTA Leverage Loan	0.74	0.74	2.91	0.74	4.42	4.47	4.43	5.71	9/30/10		
Value Added	0.16	0.16	0.07	0.16	-0.62	-0.99	-0.66	-0.95	9/30/10		
Cerberus Capital Mgmt	0.94	0.94	5.04	0.94	7.82	8.12		8.07	8/31/14	86,473,663	0.70
S&P LSTA Leverage Loan	0.74	0.74	2.91	0.74	4.42	4.47		3.85	8/31/14		
Value Added	0.20	0.20	2.13	0.20	3.40	3.66		4.23	8/31/14		
BSP Private Credit	0.00	0.00		0.00				-0.29	1/31/18	39,517,770	0.32
S&P LSTA Leverage Loan Index	0.74	0.74		0.74				1.93	1/31/18		
Value Added	-0.74	-0.74		-0.74				-2.22	1/31/18		
White Oak Yield Spectrum	0.00	0.00		0.00				0.34	2/28/18	32,124,870	0.26
S&P LSTA Leverage Loan Index	0.74	0.74		0.74				1.73	2/28/18		
Value Added	-0.74	-0.74		-0.74				-1.39	2/28/18		
Loomis									10/31/11	56,425	0.00
PIMCO									12/31/09	209,954	0.00

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Real Return Composite	1.33	1.33	1.03	1.33	2.01	4.23	3.16	3.86	6/30/11	1,071,208,109	8.62
Real Return Index (P)	0.92	0.92	0.67	0.92	0.90	2.42	1.82	2.62	6/30/11		
Value Added	0.41	0.41	0.37	0.41	1.10	1.81	1.34	1.23	6/30/11		
Internal TIPS	-0.27	-0.27	-0.08	-0.27	0.36	1.68	1.62	4.81	4/30/02	225,621,472	1.82
Bloomberg 1-10 Yrs TIPS	-0.39	-0.39	-0.17	-0.39	0.55	1.39	1.14	4.68	4/30/02		
Value Added	0.12	0.12	0.10	0.12	-0.19	0.28	0.48	0.13	4/30/02		
PIMCO All Asset	1.19	1.19	1.19	1.19	3.42	5.86	3.90	4.93	11/30/11	350,559,545	2.82
Bloomberg 1-10 Yrs TIPS	-0.39	-0.39	-0.17	-0.39	0.55	1.39	0.95	0.75	11/30/11		
Value Added	1.58	1.58	1.37	1.58	2.86	4.47	2.96	4.17	11/30/11		
Tortoise Capital	5.33	5.33	5.41	5.33	1.24	-1.84	1.79	11.96	7/31/09	157,298,148	1.27
Alerian MLP	6.58	6.58	5.91	6.58	0.40	-2.85	-2.77	8.15	7/31/09		
Value Added	-1.25	-1.25	-0.50	-1.25	0.84	1.01	4.56	3.82	7/31/09		
Nuveen Real Asset	1.73	1.73	0.47	1.73	2.82	6.32		5.00	1/31/15	213,922,163	1.72
Policy Index	0.99	0.99	0.18	0.99	1.56	6.07		4.91	1/31/15		
Value Added	0.74	0.74	0.29	0.74	1.26	0.25		0.10	1/31/15		
Amerra AGRI Fund II	0.00	0.00	-3.08	0.00	-4.70	3.24	5.24	4.11	11/30/12	24,035,294	0.19
Amerra AGRI Holdings	0.00	0.00	-1.68	0.00	-4.37	-1.13		-1.13	7/31/15	43,568,838	0.35
BTG Pactual	0.00	0.00	-4.50	0.00	-4.14	-3.64		-9.34	11/30/14	17,326,724	0.14
Magnetar MTP EOF II	0.00	0.00	3.12	0.00	4.01	1.53		1.53	7/31/15	19,231,375	0.15
Oberland Capital										1,120,113	0.01
Taurus Mine Finance	0.00	0.00	4.32	0.00	4.58	14.85		12.87	3/31/15	17,840,609	0.14
TPF II									9/30/08	683,827	0.01

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns								Market Value		
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Real Estate Composite	1.30	1.30	5.76	1.30	10.85	10.02	9.22	6.08	6/30/84	588,242,005	4.74
NCREIF ODCE NOF 1 Quarter Lag	1.85	1.85	5.78	1.85	7.51	8.39	10.04		6/30/84		
Value Added	-0.55	-0.55	-0.01	-0.55	3.34	1.63	-0.82		6/30/84		
Divcowest IV	0.00	0.00	16.86	0.00	16.13	30.79		23.02	2/28/14	4,274,757	0.03
Greenfield Acq VI	0.00	0.00	-9.46	0.00	-4.35	3.87	7.92	8.16	11/30/12	7,297,053	0.06
Greenfield Acq VII	0.00	0.00	6.86	0.00	15.90	15.05		11.53	6/30/14	30,034,766	0.24
H/2 Credit Partner	1.18	1.18	2.15	1.18	4.95	5.56	5.57	6.25	6/30/11	86,346,197	0.70
Harrison Street	1.63	1.63	6.06	1.63	11.62	10.96	10.58	9.00	4/30/12	80,195,345	0.65
Lubert Adler VII	0.00	0.00	4.94	0.00	11.31	5.79		-2.24	6/30/14	31,396,680	0.25
Mesa West Core Lend	0.00	0.00	3.50	0.00	6.94	7.67	6.84	6.51	4/30/13	58,547,154	0.47
Prologis Targeted US	5.13	5.13	14.62	5.13	24.89	18.60		16.55	9/30/14	77,472,351	0.62
Rubenstein PF II	0.00	0.00	6.56	0.00	15.45	8.17	13.72	13.48	6/30/13	16,856,432	0.14
Stockbridge Sm/Mkts	1.64	1.64	5.35	1.64	9.37	10.09		9.48	4/30/14	85,279,315	0.69
Walton St RE VI	0.00	0.00	4.71	0.00	9.55	4.62	8.51	-18.06	4/30/09	14,465,450	0.12
Walton St RE VII	0.00	0.00	4.33	0.00	10.74	12.88	13.19	12.96	6/30/13	21,051,322	0.17
Fundamental Partners III	0.00	0.00	1.57	0.00	3.46			4.08	4/30/17	33,639,059	0.27
Lubert Adler VII B	0.00	0.00	1.02	0.00	-3.13			-2.89	6/30/17	15,249,636	0.12
Mesa West IV	0.00	0.00	3.79	0.00	7.01			3.00	2/28/17	11,050,126	0.09
Patron Capital	0.20	0.20	19.98	0.20	24.08			-1.62	7/31/16	15,086,361	0.12

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Absolute Return Composite	0.18	0.18	2.34	0.18	4.62	1.82	3.77	4.13	3/31/10	591,825,764	4.76
HFRI FOF Div (1 Month Lag)	-0.31	-0.31	1.57	-0.31	5.20	1.75	3.30	2.98	3/31/10		
Value Added	0.49	0.49	0.76	0.49	-0.58	0.08	0.47	1.15	3/31/10		
Anchorage Capital	0.99	0.99	2.27	0.99	6.95			5.89	7/31/16	12,058,352	0.10
Arrowmark	0.89	0.89	0.89	0.89				0.89	5/31/18	17,368,465	0.14
Blackstone Strat Opp	0.32	0.32	3.40	0.32	5.25			5.25	7/31/17	7,823,041	0.06
Coatue Qualified Partners									6/30/15	678,142	0.01
Credit Suisse	0.51	0.51	3.96	0.51	6.81			7.33	5/31/17	31,175,349	0.25
Davidson Kempner LP	0.72	0.72	2.29	0.72	4.19			6.29	1/31/16	4,940,099	0.04
Gotham Neutral Strategies	1.47	1.47	3.83	1.47	3.10			-0.72	3/31/17	13,631,141	0.11
Governors Lane Onshore	0.74	0.74	-0.85	0.74	-1.44			1.17	3/31/17	21,810,154	0.18
Knighthead									12/31/13	353,736	0.00
Liquidalts H2O Force	5.80	5.80	5.89	5.80	6.21			8.94	7/31/16	17,008,056	0.14
Luxor Capital	0.28	0.28	8.06	0.28	17.89	4.46		1.62	3/31/14	2,040,948	0.02
Myriad Opportunities	-3.27	-3.27	-2.52	-3.27	2.67			7.50	4/30/16	47,336,664	0.38
PAAMCO									8/31/11	386,866	0.00
Pine River									4/30/14	506,732	0.00
PRISMA Capital	0.43	0.43	3.62	0.43	5.35	1.55	3.39	3.90	8/31/11	357,208,058	2.88
Prudential Fund I	0.84	0.84	2.81	0.84	3.20			5.35	3/31/17	16,428,489	0.13
SRS Partners US	-1.64	-1.64	0.57	-1.64	14.39			14.39	7/31/17	7,966,132	0.06
Senator LP	0.79	0.79	0.03	0.79	4.71			7.17	8/31/16	7,425,742	0.06
Systematica Blue Matrix	-1.09	-1.09	-0.04	-1.09	5.13			3.90	3/31/17	12,441,183	0.10
Tide Point Partners									3/31/17	803,023	0.01
Tourbillon Global Equity	0.30	0.30	-0.13	0.30	-11.88			-8.06	10/31/15	7,831,905	0.06
Tricadia Select	-6.26	-6.26	-18.82	-6.26				-22.27	8/31/17	4,603,489	0.04

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending July 31, 2018

	Net of Fee Returns									Market Value	
	Month	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	Inception Return	Inception Date	\$	Percent
Private Equity Composite	0.18	0.18	6.28	0.18	14.15	10.89	12.92	11.13	6/30/02	1,201,466,975	9.67
KRS Short Term PE Index	0.18	0.18	6.28	0.18	14.15	10.89	12.92	11.13	6/30/02		
Value Added	0.00	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00	6/30/02		
Russell 3000 +3% Qtr Lag	0.63	0.63	7.90	0.63	16.50	14.36	16.85	10.94	6/30/02		
Cash Composite	0.22	0.22	1.24	0.22	2.10	1.20	0.81	3.59	12/31/87	544,651,332	4.38
91-Day Treasury Bill	0.16	0.16	0.97	0.16	1.43	0.73	0.45	3.29	12/31/87		
Value Added	0.06	0.06	0.27	0.06	0.66	0.47	0.35	0.31	12/31/87		
Other Assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.14	3/31/99	7,300,000	0.06
Perimeter Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.14	3/31/99		