

KENTUCKY RETIREMENT SYSTEMS
Management and Performance Fees
For the Fiscal Year ended September 30, 2019
Unaudited

PUBLIC EQUITY

US Public Equity

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
INTERNAL MID CAP	160,948,473			69,915,553		
INVESCO	40,203					
NTGI STRUCTURED	181,863,990	59,289		80,052,739	(16,126)	
RIVER ROAD FAV	164,931,412	113,546		74,477,663	50,445	
S&P 500 INDEX	1,262,163,454			581,114,913		
SCIENTIFIC BETA	427,223,516			188,211,160		
TRANSITION ACCOUNT	12,795			12,677		
WESTFIELD CAPITAL	158,259,148	217,705		70,594,808	97,978	
Subtotal	\$ 2,355,442,991	\$ 390,540	\$ -	\$ 1,064,379,512	\$ 132,296	\$ -

Non-US Public Equity

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERICAN CENTURY	353,734,413	370,600		154,447,184	161,831	
BLACKROCK ACWI-EX	981,045,631	133,409		444,285,501	60,554	
BLACKROCK ACWI-EX SC (Insurance ONLY)				34,405,327		
BOSTON CO	722,107			130,381		
FRANKLIN TEMPLETON	256,545,583	258,628		110,458,066	111,402	
LAZARD ASSET MGMT	453,356,512	336,553		193,533,833	137,164	
LSV ASSET MGMT	385,877,672	594,736		162,575,866	253,088	
NON-US TRANS ACCT	1,429,071			475,365		
NTGI INTL SM CAP (Pension ONLY)	76,963,971	18,152				
PYRAMIS	2,093,233			739,156		
Subtotal	\$ 2,511,768,194	\$ 1,712,079	\$ -	\$ 1,101,050,680	\$ 724,040	\$ -
Total	\$ 4,867,211,185	\$ 2,102,620	\$ -	\$ 2,165,430,192	\$ 856,336	\$ -

FIXED INCOME

Core Fixed Income

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BNY IG CREDIT FI UNIT	104,227,673			47,161,240		
IG CREDIT FI UNIT	6			9		
LOOMIS CORE FIXED INCOME	583,305,068	87,301		212,110,738	31,745	
LORD ABBETT	1,028,423,837	397,852		492,380,274	176,129	
NISA	625,914,524	239,010		247,888,556	98,980	
Subtotal	\$ 2,341,871,106	\$ 724,163	\$ -	\$ 999,540,816	\$ 306,854	\$ -

Specialty Fixed Income						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BSP COINVEST	11,495,821			6,001,623		
BSP PRIVATE CREDIT FUND	61,295,948	140,473		30,647,975	70,236	
CERBERUS KRS LP	93,159,808	541,839	376,280	39,925,631	232,217	161,263
COLUMBIA	360,549,944	340,529		92,237,566	104,783	
H/2 CREDIT PARTNER	83,735,494			32,563,803		
LOOMIS	40,061			38,684	31,745	
MANULIFE ASSET MGMT	472,827,632	323,799		199,205,377	152,721	
MARATHON BLUEGRASS	356,299,792	486,825	1,362,169	140,588,541	191,407	534,487
MESA WEST CORE LEND	59,668,309	236,665		38,383,871	146,131	
MESA WEST IV	16,196,875	243,000	14,648	6,298,786	94,500	5,696
SHENKMAN CAP	239,509,838	300,012		118,616,266	148,563	
WATERFALL	200,975,287	275,071		96,515,508	132,237	
WHITE OAK YIELD SPECTRUM FUND	97,368,516	229,054	278,695	48,684,257	114,526	139,347
Subtotal	\$ 2,053,123,323	\$ 3,117,266	\$ 2,031,792	\$ 849,707,888	\$ 1,419,066	\$ 840,793
Total	\$ 4,394,994,430	\$ 3,841,429	\$ 2,031,792	\$ 1,849,248,704	\$ 1,725,920	\$ 840,793

OPPORTUNISTIC						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ARROWMARK	139,104,289		566,352	70,832,760		288,389
Total	\$ 139,104,289	\$ -	\$ 566,352	\$ 70,832,760	\$ -	\$ 288,389

ABOLUTE RETURN						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BLACKSTONE STRAT OPP	3,958,199			1,559,988		
CREDIT SUISSE	415,818	10,434	8,271	172,709	4,334	3,435
GOTHAM NEUTRAL STRATAGIES	12,908,852	21,750		5,361,666	9,034	
GOVERNORS LANE ONSHORE FUND	16,247,946	69,068		6,748,553	28,687	
LIQUIDALTS H20 FORCE	17,097,306			7,182,911		
LUXOR CAPITAL	1,603,029			534,343		
MYRIAD OPPORTUNITIES	43,411,239	109,634		17,287,482	43,678	
PAAMCO	7,095			1,910		
PINE RIVER	253,596	326		84,532	109	
PRISMA CAPITAL	96,376,598			40,033,400		
SRS PARTNERS US	8,349,395	27,020	(16,132)	3,290,637	10,649	(6,358)
TRICADIA SELECT	3,564,792	1,892		1,404,944	746	
Total	\$ 204,193,864	\$ 240,123	\$ (7,861)	\$ 83,663,076	\$ 97,236	\$ (2,923)

PRIVATE EQUITY						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ARBOR INVST II	122,407		237,260	13,601		26,362
ARCANO FUND	24,138,279	45,234		2,682,032	5,026	1,717
ARES SSF IV	23,299,566	81,895		12,283,156	43,174	
BAY HILLS EM PTNR I	9,202,203		639,808	1,022,468		71,089
BAY HILLS EM PTNR II	77,052,693	25,324	1,023,178	8,561,411	2,814	113,686
BAY HILLS EM PTNR III	52,675,928	216,614	638,760	45,065,472	185,019	545,591
BAY HILLS II B	57,271,294	29,884	765,863	6,363,476	3,320	85,095
BDCM OPPT FD IV	35,278,757	155,236		24,213,247	106,545	
BLACKSTONE CAP V	2,122,124		(175,118)	558,172		(46,083)
BLACKSTONE CAP VI	46,728,724			31,152,493		(171,801)
CM GROWTH I	8,305,014			922,779		
COLUMBIA CAP EQ IV	3,776,754			419,641		
CRESTVIEW PTNRS II	32,086,603	80,461	269,552	3,565,170	8,940	29,950
CRESTVIEW PTNRS III	29,555,000	123,419	(49,009)	15,914,235	66,457	
CVC CAPITAL PARTNERS VI	24,375,375	116,179		12,879,870	61,389	
DAG VENTURES II QP	3,237,664			359,731		
DAG VENTURES III QP	2,871,682			319,063		
DAG VENTURES IV QP	52,182,514			5,798,057		
DAG VENTURES V QP	26,749,566	20,000		23,405,864	17,500	
DB PRIVATE EQUITY	18,115,063	43,626	107,108	54,345,187	260,316	321,324
DCM VI LP	11,629,457			1,292,162		
ESSEX WOOD HLTH VIII	10,262,517	134,475		2,280,559	29,884	
GREEN EQTY INVST IV	73,746			8,194		
GREEN EQTY INVST V	35,650,619	3,669		3,961,177	408	
GREEN EQTY INVST VI	34,601,916	53,853		30,276,689	47,122	
GREEN EQUITY INV VII	19,887,993	29,568		19,887,992	29,568	
GTCR IX LP	171,595			19,054		
H & F SPOCK I, LP	5,351,028			2,006,635		
HARVEST PARTNERS V	4,550,205			505,578		(40,125)
HARVEST PARTNERS VI	14,391,843		246,545	5,878,364		100,701
HARVEST PARTNERS VII	17,653,601	35,067	36,823	17,653,601	35,067	36,823
HELLMAN FRIEDMAN VI	903,472		(57,744)	338,818		(15,560)
HIG BIOVENTURES II	11,997,427	43,257	599,446	10,220,031	36,849	510,638
HIG CAP PTNRS V	11,921,529	65,500	41,458	6,279,280	34,500	21,836
HIG VENTURE PTNR II	5,932,476		(22,430)	659,164		(2,492)
HORSLEY BRDG INTL V	79,047,562	196,876		8,783,062	10,937	
INST VEN PTRN XII	5,726,950			636,192		
JW CHILDS EQUITY III	693			79		
KAYNE ANDERSON	39,166,691	166,073	(1,146,510)	39,166,691	499,495	(950,286)
KCP IV CO-INVEST	5,034,885		11,634	3,455,645		7,985

KEYHAVEN CAPITAL III	19,305,860		(404)	2,145,094		(44)
KEYHAVEN CAPITAL IV	3,776,110		38,992	2,591,696		26,762
LEVINE LEICHTMAN CAP PTRNS V	39,071,687	140,630	(1,347,122)	20,385,229	149,121	146,277
LEVINE LEICHTMAN FUND VI	12,445,906	162,979		12,445,906	162,979	
MATLINPATTERSON II	1,326,461			147,381		
MATLINPATTERSON III	12,879,031	13,647		1,431,060	1,516	
MERIT MEZZ FD IV	577,514			64,168		
MHR INST PTNRS III				1,111,986	5,040	279,414
MIDDLE GROUND	10,563,099			5,281,553		
MILL ROAD CAPITAL	9,093,390			1,010,377		
NEW MTN PTNRS II LP	348,323		(2,933)	69,668		(587)
NEW MTN PTNRS III LP	25,875,128		791,787	5,750,024		175,953
NEW MTN PTRNS IV LP	23,819,613	34,364	1,358,955	12,490,770	18,020	712,623
OAK HILL CAP PT II	1,797,302	8,311	11,393	199,244	1,878	2,818
OAK HILL CAP PT III	6,316,599	37,033	(51,555)	2,339,481	13,716	(17,748)
OCM OPPTS FD VIIB				162,842	1,218	348
RIVERSIDE APPREC VI	26,085,610	105,732	(6,220)	13,750,035	161,524	562,026
STRATEGIC VALUE IV	14,591,548	73,069	420,798	7,312,635	36,619	210,885
SUN CAP PTRNS				275,635		
TCV VI				553,464		
TRITON FUND IV	14,341,485	149,631	747,763	7,559,708	78,874	394,162
VANTAGEPOINT 2006	7,252,032	36,076		828,314	4,008	
VANTAGEPOINT IV	2,431,049			243,105		
VISTA EQ PTNR FD III	4,549,707		(216,664)	505,523		(24,073)
VISTA EQ PTNR FD IV	19,201,321		(134,242)	16,356,679		(114,355)
VISTA EQ PTNR FD VI	28,825,032		292,908	28,825,032		292,908
WARBURG PINCUS PE IX	2,679,166	(1,100)		535,834	(220)	
WARBURG PINCUS PE X	16,325,188	22,155		3,159,710	4,287	
WAYZATA OPPTS FD II	1,008,331			112,037		
WAYZATA OPPTS FD III	6,254,162			3,296,649	16,456	
Total	\$ 1,153,844,068	\$ 2,448,737	\$ 5,070,080	\$ 554,094,931	\$ 2,139,366	\$ 3,293,821

REAL ESTATE						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BARING REAL ESTATE	51,086,992			21,894,423		
DIVCOWEST IV	3,808,507	24,409	149,741	1,684,537	10,796	
FUNDAMENTAL PARTNERS III	40,066,147	262,500	1,378,908	17,171,208	112,500	590,961
GREENFIELD ACQ VI	1,905,919	62,439	(159,634)	837,715	27,444	(70,164)
GREENFIELD ACQ VII	18,903,450	99,385	381,488	8,295,760	43,615	167,416
HARRISON STREET	81,659,384	153,111		37,500,638	70,314	
L-A VII	28,719,606	67,212		12,603,567	29,496	
LUBERT ADLER RE VIIB	26,970,962	49,906	422,309	11,558,984	21,388	180,989

PATRON CAPITAL	16,632,302			6,468,319		
PROLOGIS TUSL	136,728,647		2,911,194	52,928,040		1,152,136
RUBENSTEIN PF II	18,022,367	106,368		7,971,431	47,048	
STOCKBRIDGE SMMKTS	89,198,631	189,916		40,950,956	87,190	
WALTON ST RE FD VI	13,586,368	36,186		1,509,597	4,021	
WALTON ST RE FD VII	13,057,144	181,961		5,739,047	79,977	
Total	\$ 540,346,427	\$ 1,233,393	\$ 5,084,005	\$ 227,114,222	\$ 533,789	\$ 2,021,339

REAL RETURN						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERRA AGRI FUND II	21,647,385	48,513		8,730,419	19,565	
AMERRA AGRI HOLDINGS	44,217,010	231,260		23,809,160	124,525	
BTG PACTUAL	23,572,456	103,981		10,590,524	46,716	
IFM INFRAST DEBT FUND	23,803,439	20,156		10,094,620		
INTERNAL TIPS	210,530,378			111,817,167		
MAGNETAR MTP EOF II	33,226,933	100,947	224,542	11,075,644	33,649	(74,847)
NUVEEN REAL ASSET INCOME	224,178,763	372,997		91,744,460	154,191	
OBERLAND CAPITAL	3,635,301	93,773		1,633,252	42,130	
PIMCO ALL ASSET	343,782,355			138,931,885		
TAURUS MINE FINANCE	35,556,058			15,688,816		
TORTOISE CAPITAL	141,673,384	102,140		44,948,861	32,421	
TPF II	776,526			86,283		
Total	\$ 1,106,599,987	\$ 1,073,768	\$ 224,542	\$ 469,151,091	\$ 453,197	\$ (74,847)

Total Assets and Fees under Management	\$ 12,406,294,250	\$ 10,940,069	\$ 12,968,911	\$ 5,419,534,975	\$ 5,805,844	\$ 6,366,572
Fees in Basis Points (Annualized for Mgmt. Fees)		0.35%	0.10%		0.43%	0.12%

NOTE:

Management Fee - Management Fees is a fee to compensate investment managers for their time and expertise used to invest KRS funds. The fees typically range from 1%-4% per annum with 2% being the standard.

Performance/Incentive fee - a fee charged by the manager for generating returns that exceed the expected rate of return. The standard fee is typically 20% of the amount exceeding the expected rate of return.

Carried Interest - a fee charged share of the profits of an investment fund in excess of the amount that the manager contributes to the partnership. The standard fee is typically around 20%

Fees reported for Private Equity and Real Estate may appear high depending on the investment stage. Management Fees are often charged on committed capital; therefore, during the early phase of raising capital, fees may appear to be high because all the capital has not been called for investment.