

KENTUCKY RETIREMENT SYSTEMS
Management and Performance Fees
For the Fiscal Year ended September 30, 2018
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	137,287,804			60,404,190		
INVESCO	657					
KRS INTERNAL EQUITY	301,523,541			133,329,430		
NTGI STRUCTURED	197,447,326	74,329		87,181,101	32,842	
RIVER ROAD	19,588,962	32,708		8,742,847	14,683	
RIVER ROAD FAV	132,298,145	35,506		59,618,933	12,369	
S&P 500 INDEX	1,049,195,410			465,401,449		
SYSTEMATIC	253,960,065	239,446		110,798,563	99,020	
TRANSITION ACCOUNT	50,412			6,758		
WESTFIELD CAPITAL	146,994,990	202,054		65,426,665	93,638	
Subtotal	\$ 2,238,347,312	\$ 584,042	\$ -	\$ 990,909,937	\$ 252,551	\$ -

Non-US Public Equity

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERICAN CENTURY	350,535,341	408,206		153,350,093	168,684	
BLACKROCK ACWI-EX	1,024,570,581	131,522		449,787,763	57,987	
BLACKROCK ACWI-EX SC (Insurance ONLY)				36,466,444	6,006	
BOSTON CO	751,365			136,777		
FRANKLIN TEMPLETON	260,685,107	289,271		112,066,843	145,668	
LAZARD ASSET MGMT	463,582,192	274,822		203,763,307	119,430	
LSV ASSET MGMT	408,227,721	635,701		177,893,422	276,898	
NON-US TRANS ACCT	1,084,776			367,871		
NTGI INTL SM CAP (Pension ONLY)	81,097,775	44,613				
PYRAMIS	2,159,463			750,357		
Subtotal	\$ 2,592,694,322	\$ 1,784,135	\$ -	\$ 1,134,582,877	\$ 774,672	\$ -
Total	\$ 4,831,041,634	\$ 2,368,176	\$ -	\$ 2,125,492,814	\$ 1,027,224	\$ -

FIXED INCOME

Core Fixed Income

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BNY IG CCREDIT FI UNIT	887,869,284			357,869,485		
IG CREDIT FI UNIT	3,825	52,496		6,291	23,192	
LOOMIS	55,773			43,118		
LORD ABBETT	541,345,589			209,132,911		

MANULIFE ASSET MGMT	456,052,462	319,569		192,151,593	133,172	
NISA	585,142,075	234,723		231,684,138	96,838	
PIMCO	208,420			-		
Subtotal	\$ 2,470,677,429	\$ 606,788	\$ -	\$ 990,887,535	\$ 253,201	\$ -
Specialty Fixed Income						
	Pension Fund			Insurance Fund		
Asset Manager	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BSP Private Credit Fund	49,158,945	79,517		24,579,472	39,759	
CERBERUS KRS LP	85,131,118	506,499	399,682	36,484,764	217,071	171,293
COLUMBIA	352,960,753	96,149		90,515,841	10,556	
H/2 CREDIT PARTNER	86,346,197			33,579,077		
MARATHON BLUEGRASS	323,642,641	671,937	1,833,216	127,480,744	264,538	722,405
MESA WEST CORE LEND	59,526,336	118,708		35,821,657	69,193	
MESA WEST IV	11,128,939	121,500		4,327,922	47,250	
SHENKMAN CAP	239,192,693	312,702		117,871,042	156,040	
WATERFALL	170,469,450	224,024		58,352,443	74,865	
WHITE OAK YIELD SPECTRUM FUND	44,677,095			22,338,548		
Subtotal	\$ 1,422,234,167	\$ 2,131,036	\$ 2,232,898	\$ 551,351,510	\$ 879,273	\$ 893,698
Total	\$ 3,892,911,595	\$ 2,737,824	\$ 2,232,898	\$ 1,542,239,045	\$ 1,132,474	\$ 893,698

ABOLUTE RETURN						
	Pension Fund			Insurance Fund		
Asset Manager	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ANCHORAGE CAPITAL	12,094,478	62,347	66,425	5,906,166	27,690	31,025
ARROWMARK	20,642,147			10,511,108		
BLACKSTONE STRAT OPP	7,030,668			2,414,865		
COATUE QUALIFIED PARTNERS	678,142			226,047		
CREDIT SUISSE	31,492,607	117,994	119,282	13,080,393	50,988	51,568
DAVIDSON-KEMPNER LP	4,940,099	61,522	82,773	1,944,001	24,210	32,572
GOTHAM NEUTRAL STRATEGIES	13,277,757	33,720		5,514,890	14,006	
GOVERNORS LANE ONSHORE FUND	22,057,057	83,084	15,489	9,161,355	34,509	6,433
KNIGHTHEAD	353,736	5,844	(605)	117,913	1,948	(201)
LIQUIDALTS H2O FORCE	16,349,166			6,868,603		
LUXOR CAPITAL	2,040,386			680,461		
MYRIAD OPPORTUNITIES	47,035,526	114,573		18,731,408	45,645	
PAAMCO	380,348			102,067		
PINE RIVER	486,999	1,343		162,333	448	
PRISMA CAPITAL	298,910,031	456,634	74,319	124,161,971	189,678	30,871
PRUDENTIAL FUND I	16,513,348		17,337	6,858,787		7,201
SENATOR LP PENSION	7,432,042	18,387	5,278	2,936,141	7,577	2,175
SRS PARTNERS US	7,449,926	25,207	(138,562)		9,934	(54,610)
SYSTEMATICA BLUE MATRIX	12,019,420	30,618	(29,408)	4,992,243	12,717	(12,215)
TIDE POINT PARTNERS	803,023			333,534		

TOURBILLON GLOBAL EQ	7,718,545	33,935		2,572,848	11,312	
TRICADIA SELECT	4,635,177	7,040		1,826,801	2,775	
Total	\$ 534,340,629	\$ 1,052,247	\$ 212,329	\$ 219,103,933	\$ 433,435	\$ 94,821

PRIVATE EQUITY						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ARBOR INVST II	4,261,149			473,461		
ARCANO FUND	28,280,455	43,908	10,572	3,142,274	4,879	1,175
ARES SSF IV	17,745,958	49,104		9,355,381	25,887	
BAY HILLS EM PTNR I	20,126,913		55,692	2,236,324		6,188
BAY HILLS EM PTNR II	66,475,393	13,802	76,156	7,386,155	1,534	8,462
BAY HILLS EM PTNR III	49,019,170	95,496	70,414	41,942,085	81,567	60,144
BAY HILLS II B	53,830,670	42,204	(22,802)	5,981,186	4,689	(2,534)
BDCM OPPT FD IV	29,063,792	155,236		19,947,663	106,545	
BLACKSTONE CAP V	5,491,670		147,182	1,444,961		38,744
BLACKSTONE CAP VI	59,819,627	68,212	809,331	39,879,749	45,471	539,554
CM GROWTH I	10,699,131			1,188,791		
COLUMBIA CAP EQ IV	4,067,988			452,000		
CRESTVIEW PTNRS II	45,229,954	74,711	(806,096)	5,025,539	8,301	(89,566)
CRESTVIEW PTNRS III	20,533,846	(4,076)	795,862	11,056,685	(2,192)	428,539
CVC CAPITAL PARTNERS VI	22,698,551	48,498	485,785	11,993,857	25,625	256,688
DAG VENTURES II QP	5,637,294			626,357		
DAG VENTURES III QP	3,001,224		193,905	333,456		21,545
DAG VENTURES IV QP	64,967,269	102,947		7,218,585	11,439	
DAG VENTURES V QP	25,701,023	20,000	194,448	22,488,395	17,500	170,142
DB PRIVATE EQUITY	18,302,260	59,212	79,603	54,906,780	177,637	238,810
DCM VI LP	13,183,658			1,464,851		
ESSEX WOOD HLTH VIII	12,090,455	45,247		2,686,768	10,055	
GREEN EQTY INVST IV	3,124,334	(12,843)	(40,676)	347,148	(1,428)	
GREEN EQTY INVST V	57,832,837	(21,284)		6,425,910	(2,365)	
GREEN EQTY INVST VI	33,212,824	59,429	(198,332)	29,061,221	52,001	(173,540)
GREEN EQUITY INV VII	11,262,733	(15,407)		11,262,733	(15,407)	
GTCR IX LP	1	8,228		1	915	
H & F SPOCK I, LP	3,582,934			1,343,600		
HARVEST PARTNERS V	8,359,592		16,304	928,842		1,812
HARVEST PARTNERS VI	12,705,760		697,823	5,189,682		285,025
HARVEST PARTNERS VII	11,547,162	27,449		11,547,162	27,449	
HELLMAN FRIEDMAN VI	1,524,142		(18,794)	571,565		(7,047)
HIG BIOVENTURES II	9,989,903	34,695	(28,927)	8,509,915	29,555	(24,641)
HIG CAP PTNRS V	9,452,061	65,500	340,899	4,978,566	34,500	179,558
HIG VENTURE PTNR II	11,031,408		592,720	1,225,712		65,858
HORSLEY BRDG INTL V	74,277,387	98,438		8,253,038	10,937	

INST VEN PTRN XII	7,554,372			839,250		
JW CHILDS EQUITY III	1,951			219		
KAYNE ANDERSON	45,697,680		570,451	45,697,680		
KCP IV CO-INVEST	6,565,601		3,089	4,506,237		2,121
KEYHAVEN CAPITAL III	24,660,207			2,740,022		
KEYHAVEN CAPITAL IV	7,990,988		2,291	5,484,540		1,573
LEVINE LEICHTMAN CAP PTRNS V	43,106,078	145,999		4,506,237	76,174	
LEVINE LEICHTMAN FUND VI	8,078,236	165,885		8,078,236	165,885	
MATLINPATTERSON II	1,374,395			152,707		
MATLINPATTERSON III	12,704,258			1,411,642		
MERIT MEZZ FD IV	8,253,962			917,107		
MHR INST PTNRS III				1,773,844	3,981	(174,550)
MILL ROAD CAPITAL	14,682,054			1,631,338		
NEW MTN PTNRS II LP	886,975		25,886	177,399		5,177
NEW MTN PTNRS III LP	21,901,286		(189,635)	4,866,943		(42,141)
NEW MTN PTRNS IV LP	30,869,205		403,731	16,187,511		211,714
OAK HILL CAP PT II	2,445,751	8,070	(35,559)	271,751	896	
OAK HILL CAP PT III	17,195,403	28,526		6,368,667	10,565	32,392
OCM OPFS FD VIIB				396,499	2,209	5,663
RIVERSIDE APPREC VI	29,421,891	147,728	(991,366)	15,508,646	77,869	(522,562)
STRATEGIC VALUE IV	6,449,758	68,171		3,232,326	34,164	
SUN CAP PTRNS				443,150		
TCV VI				601,849		(18,670)
TRITON FUND IV	19,827,868	121,515	158,357	10,451,699	64,053	83,473
VANTAGEPOINT 2006	6,959,435			773,270		
VANTAGEPOINT IV	2,688,558			298,729		
VISTA EQ PTNR FD III	12,771,798		50,962	1,419,088		5,662
VISTA EQ PTNR FD IV	22,396,437		135,822	19,078,440		115,701
VISTA EQ PTNR FD VI	24,316,034		426,954	24,316,034		426,954
WARBURG PINCUS PE IX	4,222,000	5,505	(70,080)	844,401	1,101	(14,016)
WARBURG PINCUS PE X	18,366,333	18,519	(225,922)	3,554,795	3,584	(43,727)
WAYZATA OPFS FD I	323,926			36,015		
WAYZATA OPFS FD II	2,685,835			298,426		
WAYZATA OPFS FD III	7,568,673			3,989,543		
Total	\$ 1,240,097,473	\$ 1,768,624	\$ 3,716,051	\$ 531,730,637	\$ 1,095,575	\$ 2,079,680

REAL ESTATE						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
DIVCOWEST IV	4,591,613	12,777	202,822	2,030,909	5,651	89,710
FUNDAMENTAL PARTNERS III	33,508,963	236,665		14,360,985	101,428	
GREENFIELD ACQ VI	6,296,725	70,923	(203,026)	2,767,620	31,173	(89,237)
GREENFIELD ACQ VII	27,965,571	104,250	272,720	12,272,660	45,750	119,683

HARRISON STREET	81,628,836	301,701		35,868,105	133,150	
L-A VII	28,783,475	73,323		12,631,596	32,178	
LUBERT ADLER RE VIIB	15,573,215	19,867		6,674,235	8,515	
PATRON CAPITAL	13,606,658			5,291,641		
PROLOGIS TUSL	77,472,351		1,848,575	30,660,521		731,594
RUBENSTEIN PF II	15,987,639	57,069		7,071,455	25,242	
STOCKBRIDGE SM/MKTS	85,279,315	183,321		37,550,587	79,961	
WALTON ST RE FD VI	14,787,733	39,680		1,643,081	4,409	
WALTON ST RE FD VII	21,106,776	110,928		9,277,126	48,757	
Total	\$ 426,588,869	\$ 1,210,505	\$ 2,121,091	\$ 178,100,520	\$ 516,213	\$ 851,750

REAL RETURN						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERRA AGRI FUND II	23,695,229	74,441	(317,192)	9,556,317	30,022	(127,924)
AMERRA AGRI HOLDINGS	42,776,307	229,038		23,033,396	123,328	
BTG PACTUAL	17,530,001	94,177		7,875,798	42,312	
INTERNAL TIPS	225,796,373			114,215,587		
MAGNETAR MTP						
MAGNETAR MTP EOF II	21,248,829		531,633	7,082,943	22,417	177,211
NUVEEN REAL ASSET INCOME	211,452,253	348,407		86,521,413	142,204	
OBERLAND CAPITAL	958,045	301,876	(112,979)	430,427	135,626	(50,759)
PIMCO ALL ASSET	344,362,785			140,375,333		
TAURUS MINE FINANCE	20,742,833	140,938	381,123	9,152,602	62,188	168,167
TORTOISE CAPITAL	153,606,720	318,892		48,729,597	102,545	
TPF II	681,578	1,334		75,732	148	
Total	\$ 1,062,850,954	\$ 1,509,102	\$ 482,585	\$ 447,049,147	\$ 660,790	\$ 166,695

Portfolio Total	\$ 11,987,831,155	\$ 10,646,478	\$ 8,764,953	\$ 5,043,716,096	\$ 4,865,711	\$ 4,086,644
Fees in Basis Points (Annualized for Mgmt. Fees)		0.09%	0.07%		0.10%	0.08%

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.