

KENTUCKY RETIREMENT SYSTEMS
Management and Performance Fees
For the Fiscal Year ended September 30, 2020
Unaudited

PUBLIC EQUITY

US Public Equity

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ABEL NOSER	28,424			12,078		
INTERNAL MID CAP	129,252,157			58,583,899		
INVESCO	47,251					
NEXT CENTURY GROWTH	86,743,955	184,580		39,445,792	83,903	
NTGI STRUCTURED	183,118,987	69,479		80,828,241	30,678	
RIVER ROAD				601		
RIVER ROAD FAV	182,855,307	131,057		83,840,273	60,673	
S&P 500 INDEX	1,623,987,923			729,802,363		
SCIENTIFIC BETA	184,393,694			82,702,339		
SYSTEMATIC				2,587		
TRANSITION ACCOUNT	38,523			1,732		
WESTFIELD CAPITAL	193,213,950	187,209		93,611,969	90,905	
Subtotal	\$ 2,583,680,170	\$ 572,326	\$ -	\$ 1,168,831,874	\$ 266,158	\$ -

Non-US Public Equity

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERICAN CENTURY	399,194,139	420,661		177,501,598	186,725	
BLACKROCK ACWI-EX	747,510,221	100,786		336,612,367	45,010	
BLACKROCK ACWI-EX SC (Insurance ONLY)				36,815,142	12,271	
BOSTON CO				711		
FRANKLIN TEMPLETON	297,962,065	304,707		122,406,904	125,738	
LAZARD ASSET MGMT	416,949,355	332,811		181,866,957	148,412	
LSV ASSET MGMT	320,863,951	528,896		145,502,670	234,980	
NON-US TRANS ACCT	1,482,752			589,859		
NTGI INTL SM CAP (Pension ONLY)	82,607,316	8,985				
PYRAMIS	3,486			1,148		
Subtotal	\$ 2,266,573,285	\$ 1,696,846	\$ -	\$ 1,001,297,357	\$ 753,136	\$ -

Emerging Markets

Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
JP MORGAN EMERGING MARKETS	155,953,676	284,946		69,620,221	130,316	
PZENA EMERGING MARKETS	130,139,932	195,820		58,361,424	87,969	
Subtotal	\$ 286,093,609	\$ 480,766	\$ -	\$ 127,981,645	\$ 218,285	\$ -
Total	\$ 5,136,347,064	\$ 2,749,937	\$ -	\$ 2,298,110,875	\$ 1,237,579	\$ -

FIXED INCOME						
Core Fixed Income						
	Pension Fund			Insurance Fund		
Asset Manager	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BNY IG CREDIT FI UNIT						
IG CREDIT FI UNIT	6			9		
LOOMIS CORE FIXED INCOME	535,111,445	161,562		189,878,616	56,994	
LORD ABBETT	1,840,445,075	483,507		689,737,630	193,342	
NISA	192,216,842	77,443		129,687,333	52,185	
Subtotal	\$ 2,567,773,367	\$ 722,512	\$ -	\$ 1,009,303,589	\$ 302,521	\$ -
Specialty Fixed Income						
	Pension Fund			Insurance Fund		
Asset Manager	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ADAMS ST SPC II A1	12,173,804			5,217,345		
ADAMS ST SPC II B1	12,173,805			5,217,345		
BLUE TORCH	20,547,265			8,805,970		
BSP COINVEST	25,872,229			12,228,240		
BSP PRIVATE CREDIT FUND	79,723,214	171,556		39,861,606	85,778	
CAPITAL SPRINGS	41,915,070	135,461		17,923,921	58,055	39,681
CERBERUS KRS LP	125,171,337	796,936	541,177	53,644,858	341,544	231,932
COLUMBIA	487,798,202	412,042		199,288,488	172,478	
H/2 CREDIT PARTNER	73,055,691			28,410,546		
LOOMIS	37,398			37,896		
MANULIFE ASSET MGMT	343,734,956	244,224		144,002,804	118,039	
MARATHON BLUEGRASS	417,859,000	744,682	3,739,935	166,973,896	293,761	1,317,590
MESA WEST CORE LEND	59,719,900	118,775		40,317,885	78,669	
MESA WEST IV	21,854,687	72,502	(1,179)	8,496,173	28,195	(458)
SHENKMAN CAP	195,757,764	243,549		110,479,048	137,526	
WATERFALL	223,686,427	281,290		109,118,041	136,605	
WHITE OAK YIELD SPECTRUM FUND	155,809,492	344,314		73,327,866	162,031	
Subtotal	\$ 2,296,890,241	\$ 3,565,331	\$ 4,279,933	\$ 1,023,351,926	\$ 1,612,681	\$ 1,588,744
Total	\$ 4,864,663,608	\$ 4,287,844	\$ 4,279,933	\$ 2,032,655,515	\$ 1,915,202	\$ 1,588,744

OPPORTUNISTIC						
	Pension Fund			Insurance Fund		
Asset Manager	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ARROWMARK	348,630,970		649,415	177,525,037		330,687
Total	\$ 348,630,970	\$ -	\$ 649,415	\$ 177,525,037	\$ -	\$ 330,687

ABOLUTE RETURN						
	Pension Fund			Insurance Fund		
Asset Manager	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BLACKSTONE STRAT OPP	1,839,278			724,886		

GOTHAM NEUTRAL STRATEGIES		30,427			12,638	
GOVERNORS LANE ONSHORE FUND	253,314			105,213		
LUXOR CAPITAL	1,055,408			351,803		
MYRIAD OPPORTUNITIES	42,700,443	98,915		17,002,523	39,388	
PAAMCO	7,095			1,910		
PINE RIVER	105,602	140		35,201	47	
PRISMA CAPITAL	98,127,055			40,764,743		
SRS PARTNERS US	8,942,151	26,223		3,524,252	10,335	
TRICADIA SELECT	3,564,792			1,404,944		
Total	\$ 156,595,138	\$ 155,705	\$ -	\$ 63,915,474	\$ 62,407	\$ -

PRIVATE EQUITY						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
ARBOR INVST II	70,185	(18)		7,799		
ARCANO FUND	20,048,052	44,345		2,227,562	4,927	
ARES SSF IV	23,512,215	55,320		12,435,563	29,164	
BAY HILLS EM PTNR I	8,262,916		(58,027)	918,102		(6,447)
BAY HILLS EM PTNR II	77,133,455	10,671	(324,279)	8,570,384	1,186	(36,031)
BAY HILLS EM PTNR III	53,593,020	109,840	(387,130)	45,848,798	93,819	(330,664)
BAY HILLS II B	63,482,349	12,750	(122,295)	7,053,594	1,417	(13,588)
BDCM OPPT FD IV	37,758,523	126,985		25,915,214	87,154	
BLACKSTONE CAP V	2,064,397		309,898	542,961		81,552
BLACKSTONE CAP VI	32,243,383		1,541,449	21,495,592		1,027,632
CM GROWTH I	9,867,214			1,096,356		
COLUMBIA CAP EQ IV	3,521,779			391,310		
CRESTVIEW PTNRS II	30,193,431	67,118	2,882,344	3,354,817	7,458	320,260
CRESTVIEW PTNRS III	21,115,493	123,170		11,369,858	66,321	
CVC CAPITAL PARTNERS VI	26,906,941	44,535		14,217,565	23,532	
DAG VENTURES II QP	1,699,367			188,810		
DAG VENTURES III QP	482,017			53,545		
DAG VENTURES IV QP	73,485,592			8,165,066		
DAG VENTURES V QP	6,058,805	15,000		5,301,447	13,125	52,340
DB PRIVATE EQUITY	12,978,910	43,507	(93,236)	38,936,731	130,520	(279,708)
DCM VI LP	11,561,487			1,284,609		
ESSEX WOOD HLTH VIII	9,764,359	20,637		2,169,857	4,586	
GREEN EQTY INVST V	32,108,783	(14,224)		3,567,643	(1,580)	
GREEN EQTY INVST VI	33,524,825	41,720	334,434	28,155,698	22,576	1,142,501
GREEN EQUITY INV VII	23,766,705			26,067,299		
H & F SPOCK I, LP (KRONOS)	6,734,318			2,525,366		
HARVEST PARTNERS V	132,770			14,752		
HARVEST PARTNERS VI	11,175,120			4,564,487		(82,682)
HARVEST PARTNERS VII	21,963,511			21,963,511		
HELLMAN FRIEDMAN VI	250,382		32,660	93,911		12,247

HIG BIOVENTURES II	15,363,689	53,209	(70,845)	13,087,588	45,327	(60,349)
HIG CAP PTNRS V	13,494,460	41,013	111,474	7,107,771	21,603	58,715
HIG VENTURE PTNR II	5,434,737		(61,750)	603,860		(6,861)
HORSLEY BRDG INTL V	90,198,387	196,876		10,022,043	10,937	
INST VEN PTRN XII	1,120,590			124,374		
JW CHILDS EQUITY III	20,778			2,311		
KAYNE ANDERSON	12,958,625	165,820		12,958,625	165,820	
KCP IV CO-INVEST	5,279,323		2,164	3,623,414		1,486
KEYHAVEN CAPITAL III	17,453,688			1,939,298		
KEYHAVEN CAPITAL IV	5,917,665		(836)	4,061,526		(574)
LEVINE LEICHTMAN CAP PTRNS V	41,649,409	249,287	(69,132)	21,730,127	130,063	(36,069)
LEVINE LEICHTMAN FUND VI	18,599,888	325,662	(322,947)	18,599,888	325,662	(322,947)
MATLINPATTERSON II	1,475,548			163,950		
MATLINPATTERSON III	7,398,427			822,107		
MERIT MEZZ FD IV	250,670			27,852		
MHR INST PTNRS III				1,190,024	3,608	
MIDDLE GROUND	30,330,339	109,405		15,165,175	54,700	
MILL ROAD CAPITAL	6,599,002			733,223		
NEW MTN PTNRS II LP	419,527		7,461	83,910		1,492
NEW MTN PTNRS III LP	18,978,707		1,024,368	4,217,485		227,638
NEW MTN PTRNS IV LP	27,077,568	37,430	455,025	14,199,212	19,628	238,610
OAK HILL CAP PT II	830,388		(203)	94,385		(23)
OAK HILL CAP PT III	4,819,014	12,329	(62,395)	1,899,592	6,675	(23,109)
OCM OPFS FD VIIB				13,515		(30,413)
RIVERSIDE APPREC VI	18,843,091	95,234	250,460	9,932,400	50,199	132,020
STRATEGIC VALUE IV	31,302,721	112,415	325,862	15,687,520	56,336	163,307
SUN CAP PTRNS				224,725		
TCV VI				146,199		
TRITON FUND IV	14,221,471	136,405	(1,527,349)	7,496,446	71,902	(805,099)
VANTAGEPOINT 2006	5,744,753	28,796		638,308	3,200	
VANTAGEPOINT IV	2,290,550			254,506		
VISTA EQ PTNR FD III	3,876,288	7,797	64,634	430,707	(834)	7,182
VISTA EQ PTNR FD IV	17,145,389	88,195	358,663	14,605,334		305,527
VISTA EQ PTNR FD VI	32,441,486	61,611	2,519,624	32,441,486	123,222	2,519,624
WARBURG PINCUS PE IX	1,663,595			332,719		
WARBURG PINCUS PE X	4,428,340	4,914		857,063	951	
WAYZATA OPFS FD II	1,151,399			127,934		
WAYZATA OPFS FD III	6,069,584	27,670		3,199,355	14,585	
Total	\$ 1,120,309,401	\$ 2,455,423	\$ 7,120,097	\$ 517,344,161	\$ 1,587,789	\$ 4,257,570

REAL ESTATE						
	Pension Fund			Insurance Fund		
Asset Manager	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
BARING REAL ESTATE	64,523,201			27,652,798		

DIVCOWEST IV	2,724,492	20,078	(64,368)	1,205,069	5,920	(42,743)
FUNDAMENTAL PARTNERS III	56,905,137	197,158	706,665	24,387,919	84,496	302,857
GREENFIELD ACQ VI	448,166	10,790		196,983	4,742	
GREENFIELD ACQ VII	19,123,160	90,064	13,123	8,392,182	39,524	
HARRISON STREET	83,434,487	312,417		40,269,374	150,120	
L-A VII	24,968,141	67,622		10,957,240	29,676	
LUBERT ADLER RE VIIB	30,612,205	66,741	(586,160)	13,119,517	28,603	(251,211)
PATRON CAPITAL	19,985,445			7,772,324		
PROLOGIS TUSL ¹	140,409,011	94,788	(3,088,969)	54,384,936	37,513	(1,214,314)
RUBENSTEIN PF II	17,125,854	49,994		7,574,896	22,113	
STOCKBRIDGE SM/MKTS	87,881,442	185,458		41,983,875	88,599	
WALTON ST RE FD VI	11,328,276	32,840		1,258,697	3,649	
WALTON ST RE FD VII	8,550,446	66,621		3,758,204	29,282	
Total	\$ 568,019,462	\$ 1,194,571	\$ (3,019,709)	\$ 242,914,014	\$ 524,238	\$ (1,205,411)

¹Performance and Manager fee error found in 8/2020. Adjustments done for FY19 & FY20.

REAL RETURN						
Asset Manager	Pension Fund			Insurance Fund		
	AUM	Management Fees	Performance Fees	AUM	Management Fees	Performance Fees
AMERRA AGRI FUND II	24,654,441	94,913	26,635	9,943,169	19,489	
AMERRA AGRI HOLDINGS	47,760,902	238,726		25,717,412	128,545	
BTG PACTUAL	22,535,220	108,921		10,124,519	48,935	
IFM INFRAST DEBT FUND	44,756,011			19,181,147		
INTERNAL TIPS	127,938			271,617		
MAGNETAR MTP EOF II	31,241,962	105,315		10,413,992	35,105	
NUVEEN REAL ASSET INCOME	213,815	52,666		79,628	3,362	
OBERLAND CAPITAL	7,615,342	33,981		3,421,388	15,267	(641)
PUTNAM	509,400,988	215,182		224,729,077	94,853	
TAURUS MINE FINANCE	22,611,621	58,567		9,977,189	25,842	
TORTOISE CAPITAL	78,105,058	49,720		24,704,522	15,730	
TPF II	773,812			85,982		
Total	\$ 789,797,111	\$ 957,992	\$ 26,635	\$ 338,649,643	\$ 387,129	\$ (641)

Total Assets and Fees under Management	\$ 12,984,362,754	\$ 11,801,471	\$ 9,056,371	\$ 5,671,114,719	\$ 5,714,345	\$ 4,970,949
Fees in Basis Points (Annualized for Mgmt. Fees)		0.36%	0.07%		0.40%	0.09%

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.