KENTUCKY JUDICIAL FORM RETIREMENT SYSTEM

Public Pension Oversight Board August 26, 2019

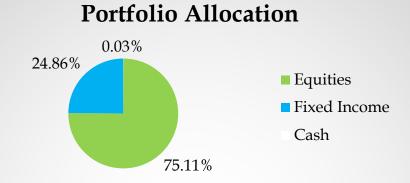
> John R. Grise, Chair Board of Trustees

Stephen F. LeLaurin, Chair Judicial Retirement Investment Committee

Joe Bowen, Chair Legislators Retirement Investment Committee

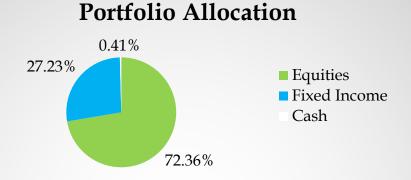
> Donna Early Executive Director

Judicial Defined Benefit Retirement Plan



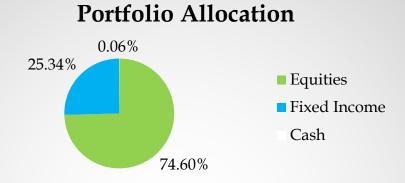
Performance Overview								
Ending June 2019	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years	20 Years	
Total Portfolio	\$429,719,315	5.83	12.88	11.81	9.81	12.60	7.07	
Total Portfolio - Net of Fees	\$429,719,315	5.81	12.81	11.74				
70% S&P 500; 30% Barclays Int Govt Cr		3.91	9.77	10.58	8.33	11.35	5.72	
Total Equity	\$322,765,309	7.17	14.95	15.27	12.49	16.76	7.49	
S&P 500 Index		4.30	10.42	14.19	10.71	14.70	5.90	
Total Fixed Income	\$106,841,086	1.91	6.87	2.19	2.42	3.00	4.14	
Barclays US Government/Credit Interm Bond		2.59	6.93	1.99	2.39	3.24	4.44	
Cash and Equivalents	\$112,920	1.30	2.97	1.62	0.78			
Barclays 3-Month Treasury Bill Index		0.59	2.33	1.44	0.91			

Judicial Hybrid Cash Balance Retirement Plan



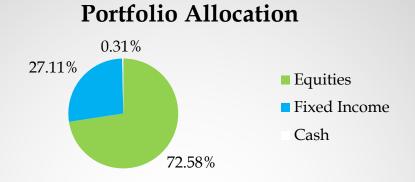
Performance Overview						
Ending June 2019	Market Value	3 Months	1 Year	3 Years	Since Inception 49 Months	
Total Portfolio	\$1,315,095	4.27	10.30	10.89	8.44	
Total Portfolio - Net of Fees	\$1,315,095	4.25	10.21	10.80	8.36	
70% S&P 500; 30% Barclays Int Govt Cr		3.91	9.77	10.58	8.38	
Total Equity	\$951,622	4.29	10.14	13.97	10.64	
S&P 500 Index		4.30	10.42	14.19	10.77	
Total Fixed Income	\$358,102	4.25	11.34	3.77	3.72	
Barclays US Government/Credit Interm Bond		2.59	6.93	1.99	2.37	
Cash and Equivalents	\$5,371	0.67	2.52	1.38	1.05	
3-Month Treaury Bill Rate		0.60	2.36	1.47	1.12	

Legislators Defined Benefit Retirement Plan



Performance Overview								
Ending June 2019	Market Value	3 Months	1 Year	3 Years	5 Years	10 Years	20 Years	
Total Portfolio	\$126,677,144	5.83	12.65	11.70	9.86	12.60	7.06	
Total Portfolio - Net of Fees	\$126,677,144	5.81	12.58	11.62				
70% S&P 500; 30% Barclays Int Govt Cr		3.91	9.77	10.58	8.33	11.35	5.72	
Total Equity	\$94,502,275	7.17	14.89	15.20	12.44	16.75	7.50	
S&P 500 Index		4.30	10.42	14.19	10.71	14.70	5.90	
Total Fixed Income	\$32,094,081	1.96	6.56	2.14	2.48	2.99	4.14	
Barclays US Government/Credit Interm Bond		2.59	6.93	1.99	2.39	3.24	4.44	
Cash and Equivalents	\$80,788	0.89	2.79	1.66				
Barclays 3-Month Treasury Bill Index		0.59	2.33	1.44				

Legislators Hybrid Cash Balance Retirement Plan



Performance Overview						
Ending June 2019	Market Value	3 Months	1 Year	3 Years	Since Inception 49 Months	
Total Portfolio	\$341,231	4.28	10.35	10.92	8.48	
Total Portfolio - Net of Fees	\$341,231	4.26	10.27	10.83	8.40	
70% S&P 500; 30% Barclays Int Govt Cr		3.91	9.77	10.58	8.38	
Total Equity	\$247,676	4.29	10.17	13.99	10.68	
S&P 500 Index		4.30	10.42	14.19	10.77	
Total Fixed Income	\$92,487	4.21	11.32	3.75	3.69	
Barclays US Government/Credit Interm Bond	\$7 _,1 07	2.59				
Cash and Equivalents	\$1,068	0.78	2.31	1.32	1.00	
3-Month Treaury Bill Rate		0.60	2.36	1.47	1.12	

Judicial Retirement Plan Cash Flow

Ending June 30	FY 2018	FY 2019	
		Subject to Audit	
Cash Inflows			
Member Contributions	\$2,195,624.00	\$1,592,479.00	
Employer Contributions/Appropriations	\$14,373,375.00	\$9,566,400.00	
Investment Income (Net of Investment Exp)	\$8,070,817.00	\$9,135,495.00	
Total Cash Inflows	\$24,639,816.00	\$20,294,374.00	
Cash Outflows			
Benefit Payments/Refunds	\$25,155,283.00	\$26,229,716.00	
Adm. Expense	\$567,900.00	\$812,095.00	
Other/Misc Expense		\$22,005.00	
Total Cash Outflows	\$25,723,183.00	\$27,063,816.00	
NET Cash Flow Before Asset Gain/(Losses)	-\$1,083,367.00	-\$6,769,442.00	
Realized/Unrealized Investment Gains or (Losses)	\$26,815,882.00	\$40,368,489.00	
Net Plan Assets	\$25,732,515.00	\$33,599,047.00	
Beginning of Period	\$371,827,756.00	\$397,560,271.00	
End of Period	\$397,560,271.00	\$431,159,318.00	

Legislators Retirement Plan Cash Flow

Ending June 30	FY 2018	FY 2019	
		Subject to Audit	
Cash Inflows			
Member Contributions	\$242,235.00	\$211,105.00	
Employer Contributions/Appropriations	\$2,606,400.00	\$310,687.00	
Investment Income (Net of Investment Exp)	\$2,470,244.00	\$2,621,583.00	
Total Cash Inflows	\$5,318,879.00	\$3,143,375.00	
Cash Outflows			
Benefit Payments/Refunds	\$5,285,983.00	\$5,495,456.00	
Adm. Expense	\$229,305.00	\$138,740.00	
Other/Misc Expense			
Total Cash Outflows	\$5,515,288.00	\$5,634,196.00	
NET Cash Flow Before Asset Gain/(Losses)	-\$196,409.00	-\$2,490,821.00	
Realized/Unrealized Investment Gains or (Losses)	\$7,736,192.00	\$11,725,724.00	
Net Plan Assets	\$7,539,783.00	\$9,234,903.00	
Beginning of Period	\$110,470,443.00	\$118,010,226.00	
End of Period	\$118,010,226.00	\$127,245,129.00	

KJFRS Funding Data

Actuarial Assumptions	2018-2020 Biennium	2020-2022 Biennium
Long-Term Interest Rate, Defined Benefit Plans	6.50%	Same
Long-Term Interest Rate, Hybrid Cash Balance Plans	4.00%	Same
Salary Increase	Rolling 1.00% next five years, 3.50% thereafter	Same
Mortality	RP-2000 tables, with "white collar" adjustment	Same
Turnover/Terminations	Very Light Turnover	Same
Retirement	Rates of retirement for 5 years prior to NRA and 100% at NRA; extra 20% increase in retirement rate in 27th year for DB Plans only	
Marital Status	80% married	Same
COLA	None	Same
Load for future non-legislative salary LRP only	40% of retirees eligible for reciprocity will have 40% higher salary	Same
Health Care Trend Rates	Grade down from 8% to 5% over 12 years	Same, except that the Getzen Model and the 2013 SOA Yamamoto study will be incorporated.

Annual Required Contribution	2018-2020 Biennium			2020-2022 Biennium		
	Requested	AppropriatedPercentage of Payroll		Preliminary Projection	Percentage of Payroll	
Judicial Retirement						
Defined Benefit Plan	\$8,637,500.00	\$8,637,500.00	31.31%	\$6,300,000.00	25.00%	
Hybrid Cash Balance Plan	\$94,800.00	\$94,800.00	3.51%	\$170,000.00	3.40%	
Legislators Retirement						
Defined Benefit Plan	\$1,042,582.00	\$0.00	29.75%	\$400,000.00	16.00%	
Hybrid Cash Balance Plan	\$4,335.00	\$0.00	4.83%	\$90,000.00	5.29%	