



KENTUCKY RETIREMENT SYSTEMS

David L. Eager, Executive Director

Perimeter Park West • 1260 Louisville Road • Frankfort, Kentucky 40601
kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822



MEMORANDUM

TO: State News Media

FROM: Kentucky Retirement Systems

DATE: January 26, 2021

SUBJECT: Notice of Meeting

The Kentucky Retirement Systems Board of Trustees Investment Committee quarterly meeting on Tuesday, February 2, 2021 at 9:00 a.m. (Eastern) has been **cancelled and recalled** as a special called meeting due to SB 150, signed into law by the Governor on March 30, 2020, and Executive Order 2020-215 declaring a State of Emergency effective March 6, 2020 due to COVID-19.

The Kentucky Retirement Systems Board of Trustees Investment Committee will hold a special called meeting on Tuesday, February 2, 2021 at 9:00 a.m. (Eastern) via live video teleconference for the purpose of conducting business set forth on the attached agenda. A portion of this meeting may be held in closed session.

If you would like to submit a public comment to be read during the meeting, please email your comment, full name and affiliation to Alane Foley at alane.foley@kyret.ky.gov no later than 8:00 a.m. on Tuesday, February 2, 2021. Comments received cannot exceed 3 (three) minutes.

KRS will livestream the meeting on our Facebook page. Watch the meeting by going to the KRS Facebook page on the date and time of the meeting.

cc: Board of Trustees
Media List

**KENTUCKY RETIREMENT SYSTEMS
SPECIAL CALLED
INVESTMENT COMMITTEE MEETING
Tuesday, February 2, 2021
9:00 a.m.
AGENDA**

- 9:00 A.M. Call to Order
- 9:01 A.M. Roll Call – Alane Foley
- 9:05 A.M. Public Comment – Prewitt Lane
- 9:07 A.M. Approval of Minutes*- November 4, 2020 and December 2, 2020 – Prewitt Lane
- 9:17 A.M. Investment Compliance Report – Jared Crawford
- 9:40 A.M. Performance Review – Steven Herbert
- 10:00 A.M. Standard Reports – Steven Herbert
- 10:15 A.M. Real Return Allocation – Steven Herbert
- 10:40 A.M. Personnel Update – David Eager
- 10:50 A.M. Adjourn

** Committee Action Required*

**MINUTES OF MEETING
KENTUCKY RETIREMENT SYSTEMS
SPECIAL CALLED INVESTMENT COMMITTEE
NOVEMBER 4, 2020, 9:00 A.M., E.T.
VIA LIVE VIDEO TELECONFERENCE DUE TO SB 150,
SIGNED INTO LAW BY THE GOVERNOR ON MARCH 30, 2020,
AND EXECUTIVE ORDER 2020-215 DECLARING A STATE OF
EMERGENCY EFFECTIVE MARCH 6, 2020 DUE TO COVID-19**

At the November 4, 2020 Special Called Investment Committee Meeting, the following Committee members were present: Prewitt Lane (Chair), Joseph Grossman, Kelly Downard, Keith Peercy, David Harris, Sherry Kremer, Matthew Monterio, John Cheshire, III and Betty Pendergrass. Trustees Jerry Powell and Joe Brothers were also present. Staff members present were David Eager, Victoria Hale, Kathy Rupinen, Rebecca Adkins, Erin Surratt, Anthony Chiu, Joseph Gilbert, Steve Willer, Ann Case, Jared Crawford, Alane Foley and Carol Johnson. Also in attendance were Chris Tessman, Craig Morton, Chris Shelby and David Lindberg from Wilshire.

Mr. Prewitt Lane called the meeting to order and Ms. Alane Foley called roll.

Mr. Prewitt Lane introduced agenda item *Approval of Minutes- August 25, 2020*. Mr. Kelly Downard moved and was seconded by Ms. Betty Pendergrass to approve the minutes as presented. The motion passed unanimously.

Mr. Prewitt Lane introduced agenda item *Public Comment*. Ms. Alane Foley stated that no public comments were submitted.

Mr. Prewitt Lane introduced agenda item *Standard Reports*. Mr. Prewitt Lane stated that the standard reports are included in Board Books as an addendum. Ms. Betty Pendergrass requested that the standard reports that are discussed in depth during the Investment Committee meeting be included under Standard Reports and not as an addendum. Ms. Pendergrass suggested that the Staff Monthly Update, Security Litigation Report, Internal Asset Transaction Report, Investment Compliance Report, Wilshire's Quarterly Board Summary and Management Fees by Asset Class be included under Standard Reports so that they can be referenced during the meeting. Mr. David Harris asked Ms. Betty Pendergrass to provide him with a list of the reports that she would like added to Standard Reports. Ms. Betty Pendergrass agreed. Mr. Prewitt Lane provided a brief overview of how the plans performed during the first quarter of the fiscal year for the Committee members. All reports were provided for informational purposes only.

Mr. Prewitt Lane introduced agenda item *Hedge Funds and Private Equity*. Mr. Anthony Chiu reviewed the Kentucky Retirement Systems' alternative assets liquidation update slides with the Committee members. Ms. Betty Pendergrass asked if a broad industry breakdown on our private equity portfolio and our high yield specialty credit portfolio could be provided to the Committee members. Mr. Anthony Chiu stated that he and Wilshire will compile that breakdown for the Committee members. Mr. David Harris also asked the Wilshire team for a report on the private equity market. Mr. David Lindberg stated that they have that report available and will be able to send the report electronically prior to the upcoming Board meeting. This was provided for informational purposes only.

Mr. Prewitt Lane introduced agenda item *Review and Approval of Proposed Investment Policy Statement and Asset Allocation Study*. Mr. David Lindberg reviewed the redlined changes that were made to the Investment Policy Statement. After a lengthy discussion among the Committee members, Mr. David Harris made a motion to accept the policies as presented by Wilshire. Ms. Betty Pendergrass wanted clarification on which of the three policies presented he was recommending. Mr. David Harris stated that he would motion to have the 5.25 discount rate policy that is shown on page 5 of Wilshire's Executive Summary and appearing in the last column to the right titled 5.25 return policy and the 6.25 return policy contained on page 6 of Wilshire's Executive Summary and appearing in the last column to the right titled 6.25 return policy. Mr. Joseph Grossman seconded the motion. A roll call vote was taken and the motion passed unanimously.

An additional discussion ensued regarding the language contained in the Investment Policy Statement. Ms. Victoria Hale stated that she recommended three material changes to the Statement of Investment Policy. The first is where we list the 6.25 and the 5.25 they are inappropriately titled because it says not including KERS, but KERS-Hazardous is actually under the 6.25; secondly, the Investment Policy Statement is titled Statement of Investment Policy and the terminology is used interchangeably throughout the document between Investment Policy Statement and Statement of Investment Policy. It was recommended that the document be title Investment Policy Statement (IPS) and that the terminology needs to be corrected accordingly throughout the entire document; thirdly, at the very end of the Statement of Investment Policy on page 22, A. through G. where it says these other policies are incorporated by reference, the dates are wrong and need to be corrected. It was recommended by Ms. Betty Pendergrass to update the language to remove

the dates and only reference the policies by name, as amended from time to time, are incorporated herein by reference. Ms. Victoria Hale agreed. Mr. David Harris then made a motion to approve the language of the Statement of Investment Policy with the three recommended changes as presented by Ms. Victoria Hale. John Cheshire, III seconded the motion. A roll call vote was taken and the motion passed unanimously.

Mr. David Harris asked that agenda item *Closed Session [Personnel KRS 61.810(1)(f)]* be moved to next week's Board meeting since several Committee members have other commitments since the meeting was lasting longer than scheduled. It was unanimously agreed to move the *Closed Session [Personnel KRS 61.810(1)(f)]* agenda item to next week's Board meeting.

There being no further business, Mr. Joseph Grossman moved and was seconded by Mr. David Harris to adjourn the meeting at 11:19 a.m. The next meeting of the Investment Committee is scheduled for 9:00 a.m. February 2, 2021. Copies of all documents presented are incorporated as part of the minutes of the Special Called Investment Committee meeting held November 4, 2020.

CERTIFICATION

I do certify that I was present at this meeting and I have recorded above the action of the Committee on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in connection with this meeting.

Recording Secretary

I, as Chair of the Investment Committee of the Board of Trustees of the Kentucky Retirement Systems, do certify that the Minutes of the meeting held on November 4, 2020 were approved by the Investment Committee on February 2, 2021.

Committee Chair

I have reviewed the Minutes of the Special Called Investment Committee Meeting on November 4, 2020 for form, content, and legality.

Office of Legal Services

**MINUTES OF MEETING
KENTUCKY RETIREMENT SYSTEMS
SPECIAL CALLED INVESTMENT COMMITTEE
DECEMBER 2, 2020, 2:00 P.M., E.T.
VIA LIVE VIDEO TELECONFERENCE DUE TO SB 150,
SIGNED INTO LAW BY THE GOVERNOR ON MARCH 30, 2020,
AND EXECUTIVE ORDER 2020-215 DECLARING A STATE OF
EMERGENCY EFFECTIVE MARCH 6, 2020 DUE TO COVID-19**

At the December 2, 2020 Special Called Investment Committee Meeting, the following Committee members were present: Prewitt Lane (Chair), Joseph Grossman, Kelly Downard, Keith Percy, David Harris, John Cheshire, III and Betty Pendergrass. Trustees Jerry Powell and John Chilton were also present. Staff members present were David Eager, Kathy Rupinen, Victoria Hale, Rebecca Adkins, Erin Surratt, Alane Foley and Carol Johnson.

Mr. Prewitt Lane called the meeting to order and Ms. Alane Foley called roll.

Mr. Prewitt Lane introduced agenda item *Public Comment*. Ms. Alane Foley stated that no public comments were submitted.

Mr. Prewitt Lane introduced agenda item *Closed Session [Personnel KRS 61.810(1)(f)]*. Ms. Betty Pendergrass moved and was seconded by Mr. Kelly Downard to go into closed session. The motion passed unanimously. Ms. Kathy Rupinen read the following statement and the meeting moved into closed session: A motion having been made in open session to move into closed session for a specific purpose, and such motion having carried by majority vote in open,

public session, the Board shall now enter closed session to consider the appointment and member account information of an employee, pursuant to KRS 61.810(1)(f) and KRS 61.810(1)(k). It is necessary to enter closed session because of the sensitive nature of the material to be considered regarding this employee, and the requirement of KRS 61.661(1) that each member's account be administered in a confidential manner.

Mr. Prewitt Lane made a motion to go back into open session and it was seconded by Mr. Joseph Grossman. The meeting was called back into open session. No action was taken.

There being no further business, Ms. Betty Pendergrass moved and was seconded by Mr. Kelly Downard to adjourn the meeting at 3:56 p.m. The next meeting of the Investment Committee is scheduled for 9:00 a.m. February 2, 2021. Copies of all documents presented are incorporated as part of the minutes of the Special Called Investment Committee meeting held December 2, 2020.

CERTIFICATION

I do certify that I was present at this meeting and I have recorded above the action of the Committee on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in connection with this meeting.

Recording Secretary

I, as Chair of the Investment Committee of the Board of Trustees of the Kentucky Retirement Systems, do certify that the Minutes of the meeting held on December 2, 2020 were approved by the Investment Committee on February 2, 2021.

Committee Chair

I have reviewed the Minutes of the Special Called Investment Committee Meeting on December 2, 2020 for form, content, and legality.

Office of Legal Services



KENTUCKY RETIREMENT SYSTEMS

David L. Eager, Executive Director

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MEMORANDUM

Date: February 2, 2020

To: Prewitt Lane, Chair
Investment Committee of the Board of Trustees

From: Jared Crawford
Assistant Director of Internal Audit Division and Investment Compliance Officer

Re: Quarterly Investment Compliance Report

The Pension Fund quarterly investment Pension compliance report for the quarter ended December 31, 2020, is attached. This report details the results of a review of the Fund's investment compliance with respect to the short-term and long-term fund return objectives; current asset allocation targets; and, total and individual portfolio guidelines. These reports also evaluate investment performance in the U.S. Equity, Non-U.S. Equity, Real Return, and Cash equivalent asset classes. Performance is benchmarked to indices, peer performance, and volatility.

cc:

John Cheshire, Member
Investment Committee of the Board of Trustees

Keith Peercy, Member
Investment Committee of the Board of Trustees

Kelly Downard, Member
Investment Committee of the Board of Trustees

Betty Pendergrass, Member
Investment Committee of the Board of Trustees

Joseph Grossman, Member
Investment Committee of the Board of Trustees

David L. Eager
Executive Director

Dave Harris, Member
Investment Committee of the Board of Trustees

Kathy Rupinen
Interim Executive Director, Office of Legal
Services

Sherry L. Kremer, Member
Investment Committee of the Board of Trustees

Matthew Monteiro, Member
Investment Committee of the Board of Trustees

Kentucky Retirement Systems (KRS)
 Fiscal Year 2021 Investment Policy Performance Review
 For the Quarter Ended December 31, 2020

Asset Allocations

The Investment Committee recognizes asset allocation as an investment strategy where apportioning resources across asset classes may temper volatility and risk. Portfolio diversification is important because risk tolerance is not the same for all plans. Therefore, each system has been studied and asset allocation guidelines have been established on a fund-by-fund basis. For example, KERS and SPRS are more risk averse because of funding levels compared to CERS, CERS-H, and KERS-H. The former are overweight in Fixed Income/Liquidity to balance the risks associated with the Growth strategy, which includes publicly traded equities, high yield credit, and private equity.

Figure 1: CERS, CERS-H, and KERS-H Target Asset Allocations

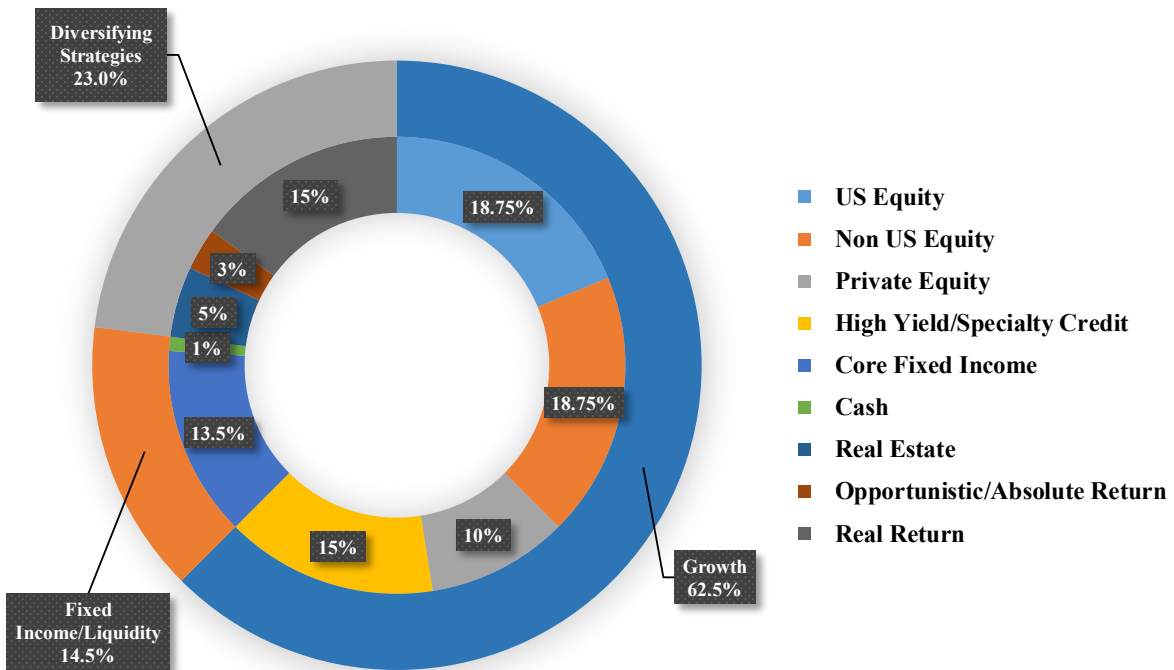
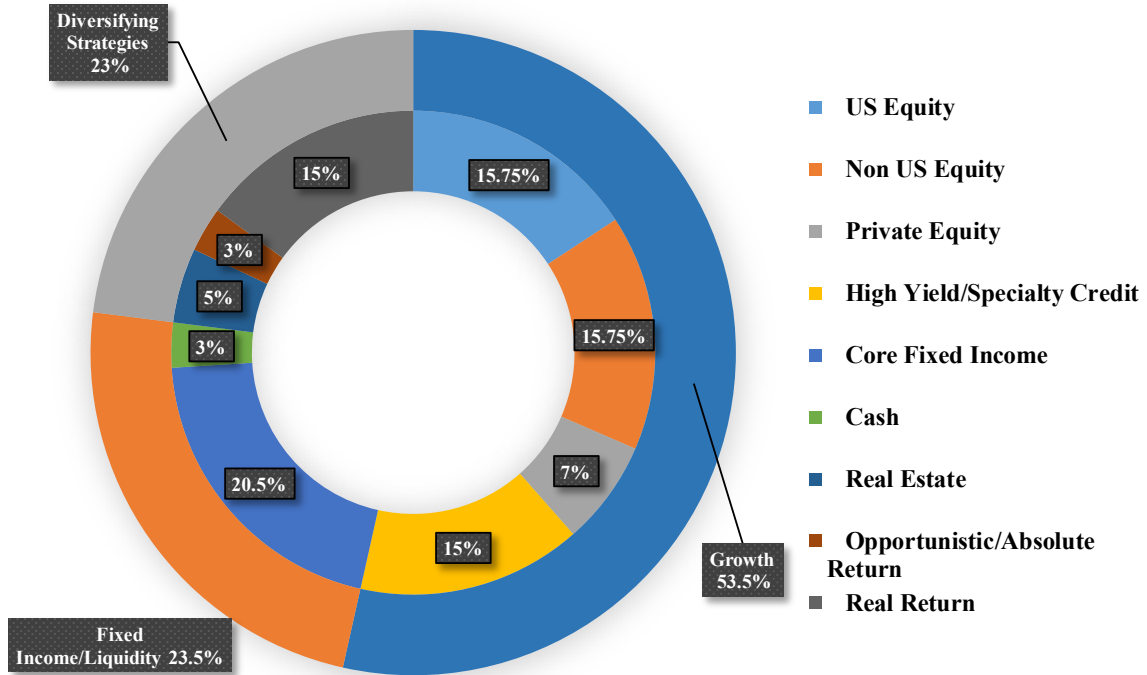


Figure 2: KERS and SPRS Target Asset Allocations



CERS

KRS Pension Fund Asset Allocation for CERS								
For the Quarter Ended December 31, 2020								
Asset Class	Target Allocation	FY2021 Q2	FY2021 Q1	FY2020 Q4	FY2020 Q3	FY2020 Q2	FY2020 Q1	FY2019 Q3
Growth	62.50%	66.29%	64.25%	65.27%	66.53%	65.05%	65.40%	64.76%
US Equity	18.75%	20.57%	19.98%	20.48%	20.31%	18.97%	18.90%	18.36%
Non US Equity	18.75%	20.68%	20.11%	20.72%	21.39%	20.45%	20.90%	20.85%
Private Equity	10.00%	8.98%	8.62%	8.88%	8.50%	9.08%	9.30%	9.38%
High Yield/Specialty Credit	15.00%	16.06%	15.54%	15.19%	16.33%	16.55%	16.30%	16.17%
Fixed Income / Liquidity	14.50%	18.93%	20.56%	18.11%	17.33%	19.03%	19.30%	19.66%
Core Fixed Income	13.50%	17.40%	18.16%	16.66%	16.32%	16.94%	17.00%	16.95%
Cash	1.00%	1.53%	2.40%	1.45%	1.01%	2.09%	2.30%	2.71%
Diversifying Strategies	23.00%	14.71%	15.13%	16.54%	16.15%	15.92%	15.40%	15.57%
Real Estate	5.00%	5.36%	5.52%	5.38%	4.33%	4.33%	3.80%	4.02%
Opportunistic/Absolute Return	3.00%	3.70%	3.85%	3.03%	2.93%	2.71%	2.70%	2.69%
Real Return	15.00%	5.65%	5.76%	8.13%	8.89%	8.88%	8.90%	8.86%

CERS-H

KRS Pension Fund Asset Allocation for CERS-H								
For the Quarter Ended December 31, 2020								
Asset Class	Target Allocation	FY2021 Q2	FY2021 Q1	FY2020 Q4	FY2020 Q3	FY2020 Q2	FY2020 Q1	FY2019 Q3
Growth	62.50%	66.42%	64.04%	65.18%	64.84%	66.05%	64.53%	64.58%
US Equity	18.75%	20.86%	20.35%	19.95%	20.30%	20.11%	18.80%	18.28%
Non US Equity	18.75%	20.27%	19.72%	19.84%	20.63%	21.30%	20.29%	20.78%
Private Equity	10.00%	8.93%	8.61%	9.96%	8.95%	8.61%	9.18%	9.56%
High Yield/Specialty Credit	15.00%	16.36%	15.36%	15.43%	14.96%	16.03%	16.26%	15.96%
Fixed Income / Liquidity	14.50%	19.25%	21.18%	19.67%	19.00%	18.04%	19.77%	20.00%
Core Fixed Income	13.50%	17.68%	18.49%	14.18%	16.89%	16.54%	17.18%	16.62%
Cash	1.00%	1.57%	2.69%	5.49%	2.11%	1.50%	2.59%	3.38%
Diversifying Strategies	23.00%	14.23%	14.66%	15.03%	16.15%	15.91%	15.71%	15.42%
Real Estate	5.00%	5.01%	5.17%	5.55%	5.03%	4.12%	4.12%	3.84%
Opportunistic/Absolute Return	3.00%	3.56%	3.71%	3.68%	2.91%	2.81%	2.60%	2.57%
Real Return	15.00%	5.66%	5.78%	5.80%	8.21%	8.98%	8.99%	9.01%

KERS

KRS Pension Fund Asset Allocation for KERS								
For the Quarter Ended December 31, 2020								
Asset Class	Target Allocation	FY2021 Q2	FY2021 Q1	FY2020 Q4	FY2020 Q3	FY2020 Q2	FY2020 Q1	FY2019 Q3
Growth	53.50%	57.95%	54.79%	58.25%	53.86%	54.48%	53.55%	54.93%
US Equity	15.75%	16.48%	16.43%	17.80%	16.99%	16.68%	15.61%	14.23%
Non US Equity	15.75%	16.05%	16.43%	16.89%	16.28%	16.66%	15.81%	17.01%
Private Equity	7.00%	8.00%	16.43%	8.86%	8.24%	7.91%	8.65%	9.83%
High Yield/Specialty Credit	15.00%	17.42%	16.43%	14.70%	12.35%	13.23%	13.48%	13.86%
Fixed Income / Liquidity	23.50%	28.03%	31.03%	28.30%	31.31%	31.25%	32.39%	30.71%
Core Fixed Income	20.50%	24.01%	24.81%	21.98%	27.52%	27.03%	21.94%	22.42%
Cash	3.00%	4.02%	6.22%	6.32%	3.79%	4.22%	10.45%	8.29%
Diversifying Strategies	23.00%	13.92%	14.08%	13.32%	14.71%	14.28%	14.06%	14.38%
Real Estate	5.00%	5.03%	5.17%	5.58%	5.23%	4.16%	4.10%	3.82%
Opportunistic/Absolute Return	3.00%	3.38%	3.55%	3.57%	2.93%	2.85%	2.66%	2.81%
Real Return	15.00%	5.51%	5.36%	4.17%	6.55%	7.27%	7.30%	7.75%

KERS-H

KRS Pension Fund Asset Allocation for KERS-H								
For the Quarter Ended December 31, 2020								
Asset Class	Target Allocation	FY2021 Q2	FY2021 Q1	FY2020 Q4	FY2020 Q3	FY2020 Q2	FY2020 Q1	FY2019 Q3
Growth	62.50%	66.18%	63.60%	65.30%	64.74%	65.11%	63.17%	63.34%
US Equity	18.75%	20.83%	20.50%	20.27%	20.32%	19.86%	18.69%	17.84%
Non US Equity	18.75%	20.03%	19.61%	20.07%	20.82%	21.27%	19.55%	20.23%
Private Equity	10.00%	8.31%	8.02%	9.32%	8.42%	8.07%	8.69%	9.15%
High Yield/Specialty Credit	15.00%	17.01%	15.47%	15.64%	15.18%	15.91%	16.24%	16.12%
Fixed Income / Liquidity	14.50%	19.95%	22.06%	20.17%	19.68%	19.70%	21.75%	21.73%
Core Fixed Income	13.50%	18.23%	19.20%	16.11%	18.59%	18.23%	19.04%	16.65%
Cash	1.00%	1.72%	2.86%	4.06%	1.09%	1.47%	2.71%	5.08%
Diversifying Strategies	23.00%	13.63%	14.06%	14.24%	15.32%	15.18%	15.07%	14.92%
Real Estate	5.00%	4.83%	5.02%	5.45%	4.98%	4.22%	4.25%	4.01%
Opportunistic/Absolute Return	3.00%	3.29%	3.44%	3.44%	2.74%	2.64%	2.45%	2.44%
Real Return	15.00%	5.51%	5.60%	5.35%	7.60%	8.32%	8.37%	8.47%

SPRS

KRS Pension Fund Asset Allocation for SPRS								
For the Quarter Ended December 31, 2020								
Asset Class	Target Allocation	FY2021 Q2	FY2021 Q1	FY2020 Q4	FY2020 Q3	FY2020 Q2	FY2020 Q1	FY2019 Q3
Growth	53.50%	55.95%	55.00%	57.26%	54.57%	54.94%	54.20%	55.30%
US Equity	15.75%	17.92%	17.73%	18.06%	17.16%	16.75%	15.63%	15.11%
Non US Equity	15.75%	16.08%	16.04%	17.13%	16.63%	17.00%	16.62%	17.41%
Private Equity	7.00%	6.28%	6.11%	6.92%	6.33%	5.98%	6.47%	7.18%
High Yield/Specialty Credit	15.00%	15.67%	15.12%	15.15%	14.45%	15.21%	15.48%	15.60%
Fixed Income / Liquidity	23.50%	30.16%	30.79%	28.43%	30.30%	30.19%	31.12%	29.98%
Core Fixed Income	20.50%	24.94%	25.70%	23.07%	27.74%	27.23%	24.75%	23.67%
Cash	3.00%	5.22%	5.09%	5.36%	2.56%	2.96%	6.37%	6.31%
Diversifying Strategies	23.00%	13.72%	14.05%	14.13%	15.13%	14.87%	14.69%	14.73%
Real Estate	5.00%	4.97%	5.13%	5.54%	5.11%	4.29%	4.28%	4.06%
Opportunistic/Absolute Return	3.00%	3.24%	3.38%	3.37%	2.70%	2.58%	2.38%	2.40%
Real Return	15.00%	5.51%	5.54%	5.22%	7.32%	8.00%	8.03%	8.27%

Investment Objectives and Rates of Return

KRS' returns are measured on a rolling basis and should exceed the return rates of comparable passive market indices. All allocations, ranges, and assumed rates of return are based on actuarial assumptions that went into effect July 12, 2017. The following definitions of short-term and long-term rates of return can be found in KRS' Investment Policy Statement.¹

Short-Term Rate of Return: defined as a period shorter than the defined long-term period, typically considered as a full market cycle lasting three years. For more information, see the individual portfolio information included in the monthly update.²

Long-Term Rate of Return: defined as a period exceeding twenty years. In the long-term, KRS' total assets should achieve a return which exceeds the actuarially required rate of return of each plan. In addition to exceeding the actuarially required rate of return, the total fund return should exceed the return achieved by its blended performance benchmark.

The table below displays the market value, percent ownership of the total market value, rate of return, and index for each plan for the second quarter of fiscal year 2021.

KRS Pension Fund Market Values and Returns					
For the Quarter Ended December 31, 2020					
	Market Value	% of Total	Index	Return	Performance
CERS	\$7,944,489,893	55.30%	9.19	9.13	Below Target
CERS-H	\$2,688,370,832	18.71%	9.19	9.12	Below Target
KERS	\$2,615,447,792	18.21%	8.05	7.70	Below Target
KERS-H	\$794,809,350	5.53%	9.19	9.02	Below Target
SPRS	\$321,758,565	2.24%	8.05	7.69	Below Target
TOTAL	\$14,364,876,432	100.00%			

¹Kentucky Retirement Systems, "Statement of Investment Policy." Adopted on February 20, 2020. Available at: <https://kyret.ky.gov/Investments/Investment%20Policies/2020%20Statement%20of%20Investment%20Policy.pdf>

² KRS Monthly Staff Performance Reports available at: <https://kyret.ky.gov/Investments/Investments-Library/Pages/Monthly%20Performance%20Updates.aspx>.

The table below shows 1-Year returns for each of KRS' plans and KRS in total.

KRS Pension Fund FY2020 Returns by Plan				
For the Quarter Ended December 31, 2020				
Fund	Benchmark	Index	Return	Performance
KRS 1-Year Return	KRS Pension Blended Index	9.05	9.39	Above Target
CERS 1-Year Return	CERS Pension Plan Tactical Index	9.27	9.27	On Target
CERS-H 1-Year Return	CERS-H Pension Plan Tactical Index	9.27	9.20	Below Target
KERS 1-Year Return	KERS Pension Plan Tactical Index	8.59	9.93	Above Target
KERS-H 1-Year Return	KERS-H Pension Plan Tactical Index	9.27	9.37	Above Target
SPRS 1-Year Return	SPRS Pension Plan Tactical Index	8.59	9.40	Above Target

The table below displays 10-Year and 30-Year returns for all plans.

KRS Pension Fund Long-Term Returns				
For the Quarter Ended December 31, 2020				
Fund	Benchmark	Index	Return	Performance
CERS 30-Year Return	KY Ret. CERS Plan Tactical	8.33	8.40	Above Target
CERS 10-Year Return	KY Ret. CERS Plan Tactical	7.49	7.47	Below Target
CERS-H 30-Year Return	KY Ret. CERS Haz Plan Tactical	8.33	8.40	Above Target
CERS-H 10-Year Return	KY Ret. CERS Haz Plan Tactical	7.49	7.47	Below Target
KERS 30-Year Return	KY Ret. KERS Plan Tactical	8.25	8.31	Above Target
KERS 10-Year Return	KY Ret. KERS Plan Tactical	7.25	7.21	Below Target
KERS-H 30-Year Return	KY Ret. KERS Haz Plan Tactical	8.33	8.40	Above Target
KERS-H 10-Year Return	KY Ret. KERS Haz Plan Tactical	7.49	7.46	Below Target
SPRS 30-Year Return	KY Ret. SPRS Plan Tactical	8.25	8.28	Above Target
SPRS 10-Year Return	KY Ret. SPRS Plan Tactical	7.24	7.09	Below Target

Returns by Asset Class

The following tables display KRS' 3-year, 5-year, and 10-year returns for the following asset classes: U.S. Equity, Non-U.S. Equity, Real Return, and Cash; these returns are compared to benchmarked indices. The 20-year returns have also been provided for U.S. Equity and Cash. For all periods, the U.S. Equity portfolio trailed its benchmark.

When applicable, portfolio performance is also examined using the standard deviation, Sharpe ratio, and median return. The standard deviation is a statistical measure of volatility where a higher standard deviation indicates greater volatility indicating higher risk. The Sharpe ratio measures risk as the average return in excess of a risk free investment, e.g. a U.S. Treasury bond. A higher Sharpe ratio exemplifies a higher return in excess of a risk free investment. Finally, distance from the median measures performance based on peer comparisons.

KRS U.S. Equity					
Standard Measurement		KRS	Index	Result	Times Out of Compliance (Past 4 Qtrs.)
Short-Term:					
For periods less than five years or a full market cycle, U.S. Equity should exceed the returns of the KRS Equity Blended Index.	3-Year	13.48	14.49	Below Target	4
Long-Term: (5 & 10 Years)					
U.S. Equity return should exceed the KRS Equity Blended Index.	5-Year	14.74	15.43	Below Target	4
	10-Year	13.06	13.78	Below Target	4
	20-Year	7.59	8.09	Below Target	4
Volatility, as measured by the standard deviation of monthly returns, should be comparable to that of the Index within a 10 percent range of the Index.	5-Year	15.96	15.89	Within Range	0
	10-Year	14.25	14.08	Within Range	0
U.S. Equity return should compare favorably to the KRS Equity Blended Index on a risk-adjusted basis, as measured by Sharpe ratio.	5-Year	0.87	0.92	Within Range	2
	10-Year	0.89	0.95	Below Target	4
U.S. Equity should generate returns that rank above the median return of a relevant peer group.	5-Year	14.84	15.43	Below Target	4
	10-Year	13.17	13.78	Below Target	4

KRS Non-U.S. Equity					
Standard Measurement		KRS	Index	Result	Times Out of Compliance (Past 4 Qtrs.)
Short-Term:					
For periods less than five years or a full market cycle, Non-U.S. Equity should exceed the returns of the KRS International Equity Blended Index	3-Year	7.01	4.83	Above Target	0
Long-Term: (5 & 10 Years)					
Non-U.S. Equity return should exceed the KRS International Equity Blended Index	5-Year	10.49	9.17	Above Target	0
	10-Year	5.69	5.28	Above Target	0
Volatility, as measured by the standard deviation of monthly returns, should be comparable to that of the Index within a 10 percent range of the Index.	5-Year	15.66	15.29	Within Range	0
	10-Year	15.15	14.32	Within Range	0
Non-U.S. Equity return should compare favorably to the KRS International Equity Blended Index on a risk-adjusted basis, as measured by Sharpe ratio.	5-Year	0.65	0.77	Below Target	2
	10-Year	0.40	0.64	Below Target	1
Non-U.S. Equity should generate returns that rank above the median return of a relevant peer group	5-Year	10.79	9.17	Above Target	0
	10-Year	5.94	5.28	Above Target	0

KRS Real Return					
Standard Measurement		KRS	Index	Result	Times Out of Compliance (Past 4 Qtrs.)
Short-Term:					
For periods less than five years or a full market cycle, Real Return should exceed the returns of the KRS Pension Real Return Custom Benchmark	3-Year	2.02	2.02	On Target	0
Long-Term					
Real Return returns should exceed the KRS Pension Real Return Custom Benchmark	5-Year	4.84	3.49	Above Target	0
	10-Year	N/A	N/A	N/A	N/A
Volatility, as measured by the standard deviation of monthly returns, should be comparable to that of the Index within a 10 percent range of the Index.	5-Year	9.47	9.22	Within Range	0
	10-Year	N/A	N/A	N/A	0
Total Real Return Allocation return should compare favorably to the KRS Pension Real Return Custom Benchmark on a risk-adjusted basis, as measured by Sharpe ratio.	5-Year	0.43	0.30	Above Target	0
	10-Year	N/A	N/A	N/A	0

KRS Cash					
Standard Measurement		KRS	Index	Result	Times Out of Compliance (Past 4 Qtrs.)
Short-Term:					
For periods less than five years or a full market cycle, return should exceed the Citi Group 3 Month -bill Index.	3-Year	1.77	1.56	Above Target	0
Long-Term: (5 & 10 Years)					
Return should exceed the Citi Group 3 Month -bill Index.	5-Year	1.51	1.56	Below Target	1
	10-Year	0.91	0.60	Above Target	0
	20-Year	1.85	1.43	Above Target	0
Volatility, as measured by the standard deviation of monthly returns, should be comparable to that of the Index within a 10 percent range.	5-Year	0.34	0.24	Outside Range	4
	10-Year	0.32	0.23	Outside Range	4

Portfolio Compliance Guidelines

- Securities issued by the state of Kentucky, its subsidiaries or affiliates are prohibited. In Compliance
- The amount of stock in the domestic or international equity allocation in any single corporation shall not exceed 5% of the aggregate market value of the System's assets. In Compliance
- The amount of stock held in domestic or international equity allocation shall not exceed 3% of the shares outstanding of any corporation. In Compliance
- The amount of stock in any one industry in the domestic equity allocation shall not exceed 10% of the aggregate market value of the System's assets. In Compliance
- Investment on "frontier" markets shall not exceed 10% of the System's international equity assets. In Compliance
- The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income Index by more than 25%. In Compliance
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of the System's Assets. In Compliance
- No public fixed income manager shall invest more than 5% of the total market value of assets held in any single issue short-term instruments, with the exception of U.S. Government issued, guaranteed or agency obligations. In Compliance
- 50% of the fixed income assets must have liquidity that is T+3 (trade date plus three days) settlement or better. In Compliance
- For the S&P 500 portfolio, securities must be in the S&P 500. **Not In Compliance**

As indicated above, there were Public Equities that did not comply with the policy that S&P securities must be held in the S&P 500. The exceptions were due to spin-offs, mergers, and loss of market capitalization.

This is presented for informational purposes only.

No action is required of the Committee.

December
2020

KRS MONTHLY PERFORMANCE UPDATE

What's going on in the marketplace?

On the back of November's jump, global equity markets continued their climb. Hopes driven by new Covid-19 vaccines seemed to underpin the idea of a return to normal economic activity might be just around the corner in 2021. Additional fiscal stimulus combined with continued low rates supported markets. U.S. stock markets hit record highs, despite international markets outperforming them during the month. Global bonds increased while U.S. fixed markets provided modest returns.

The KRS investment portfolio returned 3.3% versus the benchmark of 3.0%.

Relative outperformance in the Real Estate, Specialty Credit, U.S. Equity, and Core Fixed Income asset classes bolstered the overall portfolio performance from a selection perspective. From an allocation perspective, the overweight to both the Non-U.S. and U.S. Equity asset classes provided a tailwind to the overall portfolio. Offsetting some of the relative underperformance was the relative weakness in the Absolute Return portfolio and the underweight to the Private Equity space as this was one of the strongest performing asset classes during the period.

The fiscal year return to date now stands at 14.1% versus a benchmark return of 14.2%

In general, the portfolio has benefitted from its overweight to the public equity markets, as these have been the strongest performing asset classes for the period. Further, strong absolute performance within the private equity, leveraged loan, and real return portions of the portfolio have been beneficial.

U.S. Equities

U.S. markets gained 4.5% during the month per the Russell 3000. The strong market performance was led by small caps, followed by mid-caps, and then the large cap market segment (SC: 8.7% vs MC: 6.5% vs LC: 3.8%). Reversing a short-lived trend, growth outperformed value during the month (R3000G: 4.9% vs R3000V: 4.1%).

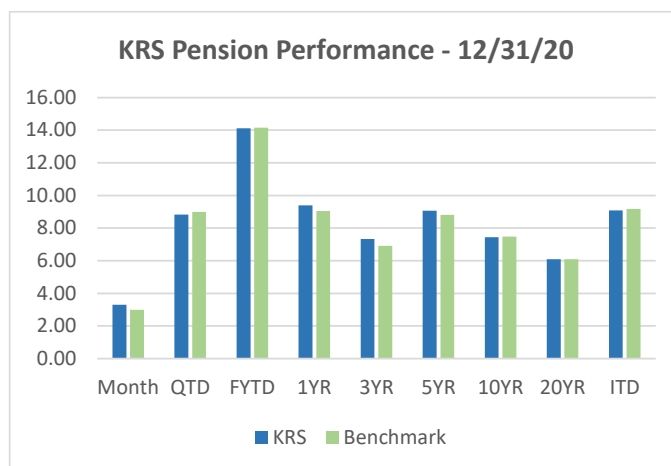
During the month, the KRS U.S. Equity portfolio outpaced its benchmark by 30 bps, returning 4.8% versus the Russell 3000 Index return of 4.5%. The portfolio was mixed in terms of stock selection; however, the all cap value and micro-cap strategies provided solid relative outperformance. In addition, the smaller market cap positioning was beneficial during the period.

For the first six months of the fiscal year, the portfolio returned 25.0% versus the benchmark return of 25.2%. Stock selection was mixed, though the net result was a slight drag on relative performance. Allocation from a style perspective hurt the portfolio as the slight value tilt served as a headwind (R3000G: 26.9% vs R3000V: 23.6%). However, the portfolio's smaller positioning offset a good portion of the stock selection and style issues. Small caps, followed by mid-caps, outpaced their large cap counterparts (SC: 37.9% vs MC: 30.3% vs LC: 22.2%).

Non-U.S. Equities

Non-U.S. equity markets provided a strong 5.6% return during the month per the MSCI ACWI-Ex US Index. Emerging markets significantly outpaced their Developed market counterparts (MSCI EM: 8.6% vs MSCI World Ex-US: 4.6%). Unlike the U.S. markets, value outpaced growth in the international markets.

The KRS Non-U.S. Equity portfolio gained 5.6% during the month, essentially matching its benchmark, trailing by just 4 bps. KRS' external MSCI ACWI Ex-US mandates were mixed in terms of relative performance, and both of the external MSCI EM mandates outpaced their benchmarks.



The value tilt within the MSCI ACWI-Ex US mandates was beneficial; however, the growth tilt within the emerging market portion of the portfolio hampered relative performance.

During the first half of the fiscal year, the KRS Non-U.S. Equity portfolio has returned 25.8%, outpacing the index by 57 bps. Individual strategy results have been good, with only the deep value ACWI Ex-U.S. significantly trailing the core index. This is expected due to the out of favor style bias of the portfolio.

Fixed Income

Fixed Income markets produced positive performance during the month with the higher yielding segments (those with more significant credit risk) outperforming those segments that are traditionally considered safer. The high yield and leveraged loan markets gained 1.9% and 1.4%, respectively. The intermediate bond market gained approximately 0.5%, followed by the U.S. Aggregate Index, which gained 14 bps.

The KRS Specialty Credit allocation returned 2.2%, outpacing its benchmark by 62 bps during the month. This can be attributed to the relative strength in the leveraged loan portion of the allocation. The KRS Core Fixed Income portfolio gained 51 bps, outpacing the Bloomberg Barclays Aggregate (0.5% vs 0.1%). Relative performance amongst the individual mandates was good, as all strategies outperformed their respective indices.

The KRS Specialty Credit allocation returned 8.9% during the fiscal year to date trailing its benchmark return of 9.7%. Individual strategy relative performance has been mixed, with the corporate high yield allocations providing the strongest returns generally. The liquidity portion of the credit allocation returned 2.4% for the six-month period, with the short-term corporate strategy providing the bulk of performance.

Alternative Assets

The diversifying strategy group returned 2.1% during the month, with all four major portfolio segments providing positive returns during the period. The Real Estate portfolio returned 3.1%, the Real Return portfolio gained 1.8%, the Opportunistic portfolio returned 1.4%, and the Absolute Return portfolio added 106 bps. The Private Equity portion of the portfolio returned 5.0% on the month.

Overall, the alternative asset group has provided solid absolute performance for the fiscal year to date. The Private Equity, Opportunistic, and Real Return portfolios all provided double-digit returns as follows: 14.8%, 12.9%, and 11.7%, respectively. The Absolute Return and Real Estate Portfolios gained 3.9% and 3.35, respectively.

Cash

The Cash portfolio performed in line with the 3-month T-Bill, returning 1 basis point. This brought the fiscal year return to 6 bps.

NOTES:

- 1) Returns displayed are “net”. For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager level returns are net of fees beginning with July 2011, and gross of fees for prior data.
- 2) Individual plan allocation and performance (pgs.4&5).
- 3) Prior to January 1, 2014, the inception date for the Private Equity asset class was stated as 10/1/1990 for Pension Fund and 6/1/2001 for Insurance Fund. Prior to 07/01/02, the characteristics of the allocation, and the benchmark itself, were more closely aligned with Real Estate. As such, it is not appropriate to report this portion of the return stream within the Private Equity allocation, whose true inception date has been determined to be 07/01/02 based on funding the Systems’ first private equity mandate. The portion of the original return streams that are no longer reported within the Private Equity allocation (Pension from 10/1/90 to 06/30/02; Insurance 06/01/01 to 06/30/02) are reported within the Fund Level performance figures.
- 4) Private Equity Composite (Pension) Private Equity Composite (Insurance)
 Inception (07/01/02) to 06/30/11 Inception (07/01/02) to 06/30/11
 60.00% S&P 1500 Composite Index 80.00% S&P 1500 Composite Index

40.00% Barclays US Corporate High Yield Index 07/01/11 to 12/31/15 100.00% Russell 3000 Index + 4% (Qtr Lag) 01/01/16 to Present 100.00% Russell 3000 Index + 3% (Qtr Lag)	20.00% Barclays US Corporate High Yield Index 07/01/11 to 12/31/15 100.00% Russell 3000 Index + 4% (Qtr Lag) 01/01/16 to Present 100.00% Russell 3000 Index + 3% (Qtr Lag)
5) The Private Equity & Real Return Benchmarks, from one month returns up until five year returns, is equal to the performance of the associated KRS allocations. Given there is not appropriate benchmark to use for short term performance evaluation, this will allow greater focus on longer term returns, which is more appropriate given the long term nature of these investments.	
<u>Pension Benchmark Composite 01/01/16 to 08/31/17</u> US Equity: Russell 3000 (25.6%) Non US Equity: MSCI AXCI Ex-US IMI (25.2%) Global Fixed Income: Barclays Universal Index (6.8%) Credit Fixed Income: Barclays US High Yield (7.2%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return: Allocation Specific (8.0%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.2%) <u>Pension Benchmark Composite 09/01/17 to 05/31/18 - Transition Period w/Sliding Targets</u> US Equity: Russell 3000 (23.6%) Non US Equity: MSCI AXCI Ex-US IMI (23.2%) Global Fixed Income: Barclays Universal Index (9.0%) Credit Fixed Income: Barclays US High Yield (9.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return<5yrs: Actual Performance Real Return>5yrs: CPI+3% (8%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.2%) <u>Pension Benchmark Composite 06/01/18 to 07/31/18</u> US Equity: Russell 3000 (17.0%) Non US Equity: MSCI AXCI Ex-US IMI (21.0%) Global Fixed Income: Barclays Universal Index (13.0%) Credit Fixed Income: Barclays US High Yield (12.4%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return<5yrs: Actual Performance Real Return>5yrs: CPI+3% (10.0%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (9.4%) Cash: Cit Grp 3-mos Treasury Bill (2.2%) <u>Pension Benchmark Composite 07/31/18 to Present</u> US Equity: Russell 3000 (18.2%) Non US Equity: MSCI AXCI Ex-US IMI (18.2%) Core Fixed Income: Barclays US Aggregate (14.8%) Specialty Credit/High Yield FI: Custom Benchmark (15.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (3.0%) Real Return<5yrs: Actual Performance	<u>Insurance Benchmark Composite 01/01/16 to 08/31/17</u> US Equity: Russell 3000 (26.5%) Non US Equity: MSCI AXCI Ex-US IMI (26.5%) Global Fixed Income: Barclays Universal Index (6.0%) Credit Fixed Income: Barclays US High Yield (6.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return: Allocation Specific (8.0%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.0%) <u>Insurance Benchmark Composite 09/01/17 to 05/31/18 - Transition Period w/Sliding Targets</u> US Equity: Russell 3000 (24.5%) Non US Equity: MSCI AXCI Ex-US IMI (24.5%) Global Fixed Income: Barclays Universal Index (8.0%) Credit Fixed Income: Barclays US High Yield (8.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return<5yrs: Actual Performance Real Return>5yrs: CPI+3% (8%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.0%) <u>Insurance Benchmark Composite 06/01/18 to 07/31/18</u> US Equity: Russell 3000 (17.9%) Non US Equity: MSCI AXCI Ex-US IMI (21.9%) Global Fixed Income: Barclays Universal Index (13.0%) Credit Fixed Income: Barclays US High Yield (11.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return<5yrs: Actual Performance Real Return>5yrs: CPI+3% (10.0%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (9.2%) Cash: Cit Grp 3-mos Treasury Bill (2.0%) <u>Insurance Benchmark Composite 07/31/18 to Present</u> US Equity: Russell 3000 (18.75%) Non US Equity: MSCI AXCI Ex-US IMI (18.75%) Core Fixed Income: Barclays US Aggregate (5.0%) Specialty Credit/High Yield FI: Custom Benchmark (13.5%) Real Estate: NCREIF ODCE (10.0%) Absolute Return: HFRI Diversified FOF (3.0%) Real Return<5yrs: Actual Performance

Real Return>5yrs: CPI+3% (15.0%)
Private Equity<5Yrs: Actual Performance
Private Equity>5Yrs: Russell 3000 Index+3% (9.4%)
Cash: Cit Grp 3-mos Treasury Bill (1.4%)

Real Return>5yrs: CPI+3% (15.0%)
Private Equity<5Yrs: Actual Performance
Private Equity>5Yrs: Russell 3000 Index+3% (15.0%)
Cash: Cit Grp 3-mos Treasury Bill (1.0%)

**Fund composite benchmark is a roll-up of individual plans, which may differ from one another.

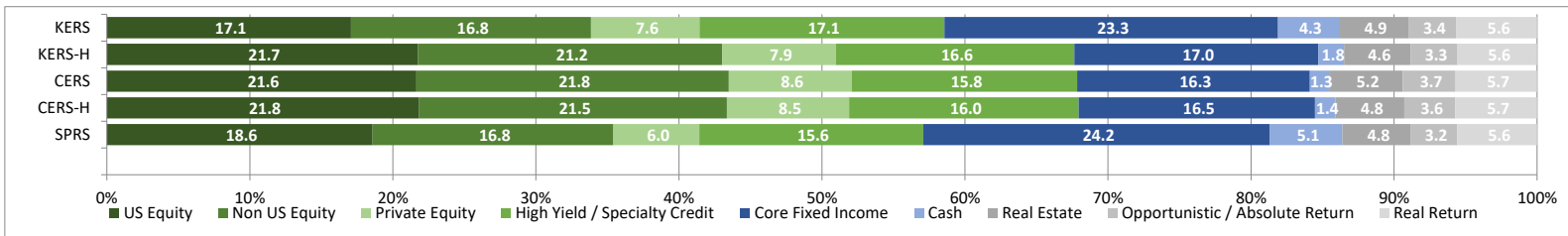
Special Called Investment Committee Meeting - Standard Reports

KENTUCKY RETIREMENT SYSTEMS - PENSION FUND - NET RETURNS - 12/31/20

Structure	Inception	Market Value	% of Total	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD
TOTAL FUND	4/1/1984	14,364,876,432.33	100.00	3.31	8.82	14.11	9.39	7.33	9.06	7.44	6.09	9.09
KY Ret. Blended Index				2.99	9.00	14.15	9.05	6.92	8.81	7.48	6.10	9.17
GROWTH	7/1/2018	9,870,657,514.34	68.71	4.41	11.82	19.52	12.26					10.19
PUBLIC EQUITY	4/1/1984	6,295,655,904.88	43.83	5.19	16.22	25.39	16.64	10.04	12.51	9.14	6.12	10.68
Global Equity Blended Index				5.05	15.94	25.23	16.01	9.67	12.36	9.12	6.12	10.52
US PUBLIC	4/1/1984	3,149,136,370.74	21.92	4.80	15.22	25.01	19.02	13.48	14.74	13.06	7.59	11.59
KY Domestic Equity Blend				4.50	14.68	25.24	20.89	14.49	15.43	13.78	8.09	11.71
EQUITY NON US	7/1/2000	3,146,519,534.14	21.90	5.58	17.24	25.76	14.02	7.01	10.49	5.69	5.10	3.97
KY Ret.Int'l Eq. Blended Index				5.62	17.22	25.19	11.12	4.83	9.17	5.28	5.11	4.00
PRIVATE EQUITY	7/1/2002	1,139,236,934.34	7.93	5.01	6.95	14.76	8.06	10.82	11.01	12.21		11.08
Russell 3000 + 3%(Qtr Lag)				5.01	6.95	14.76	8.06	10.82	11.01	15.47		11.78
HIGH YIELD / SPECIALTY CREDIT	7/1/2017	2,435,764,675.12	16.96	2.23	4.42	8.91	4.22	5.31				5.72
High Yield Custom Benchmark				1.61	5.13	9.73	5.12	5.13				5.07
FIXED INCOME / LIQUIDITY	7/1/2018	2,550,245,346.93	17.75	0.46	1.30	2.43	4.75					5.16
CORE FIXED INCOME	7/1/2013	2,282,848,162.94	15.89	0.51	1.44	2.77	6.10	4.75	4.17			3.72
Bloomberg Barclays US Aggregate				0.14	0.67	1.29	7.51	5.34	4.44			3.87
CASH	1/1/1988	267,397,183.99	1.86	0.01	0.03	0.06	0.59	1.77	1.51	0.91	1.85	3.45
Citigroup Treasury Bill-3 Month				0.01	0.02	0.06	0.58	1.56	1.16	0.60	1.43	3.02
DIVERSIFYING STRATEGIES	7/1/2018	1,944,696,617.26	13.54	2.07	6.24	8.60	1.78					4.23
REAL ESTATE	7/1/1984	584,165,093.28	4.07	3.08	3.59	3.30	6.09	9.06	9.60	9.83	6.96	6.28
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^				0.27	0.27	-1.49	0.52	4.25	5.69	9.26	6.63	6.25
ABSOLUTE RETURN	4/1/2010	142,519,761.66	0.99	1.06	1.75	3.92	-1.32	0.38	1.23			3.08
HFRI Diversified				3.52	7.38	11.65	10.47	4.92	4.33			3.66
OPPORTUNISTIC	7/1/2018	370,905,923.50	2.58	1.44	12.91	4.52						8.09
S&P LSTA Leveraged Loan Index				1.35	8.11	3.12						3.86
REAL RETURN	7/1/2011	847,105,838.82	5.90	1.81	9.25	11.73	-1.07	2.02	4.84			3.40
Pension Real Return Custom Benchmark				1.81	9.25	11.73	-1.07	2.02	4.84			2.52

KENTUCKY RETIREMENT SYSTEMS - PENSION FUND - PLAN NET RETURNS - 12/31/20

Plan	Inception	Market Value	% of Total	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD
KERS		2,615,447,792.32	100.00	2.80	7.70	12.78	9.93	7.21	8.38	7.21	5.97	9.02
KY Ret. KERS Plan Index				2.62	8.05	12.59	8.59	6.71	8.35	7.25	5.99	9.11
KERS- H		794,809,349.66	100.00	3.36	9.02	14.35	9.37	7.27	9.11	7.46	6.10	9.09
KY Ret. KERS Haz Plan Index				3.06	9.19	14.51	9.27	7.04	8.97	7.49	6.11	9.17
CERS		7,944,489,892.87	100.00	3.44	9.13	14.47	9.27	7.31	9.18	7.47	6.10	9.09
KY Ret. CERS Plan Index				3.06	9.19	14.51	9.27	7.04	8.99	7.49	6.11	9.17
CERS- H		2,688,370,832.32	100.00	3.44	9.12	14.46	9.20	7.29	9.16	7.47	6.10	9.09
KY Ret. CERS Haz Plan Index				3.06	9.19	14.51	9.27	7.04	8.98	7.49	6.11	9.17
SPRS		321,758,565.32	100.00	2.78	7.69	12.50	9.40	7.04	8.44	7.09	5.91	8.99
KY Ret. SPRS Plan Index				2.62	8.05	12.59	8.59	6.65	8.48	7.24	5.98	9.10



Note: The above chart displays the average monthly allocation.

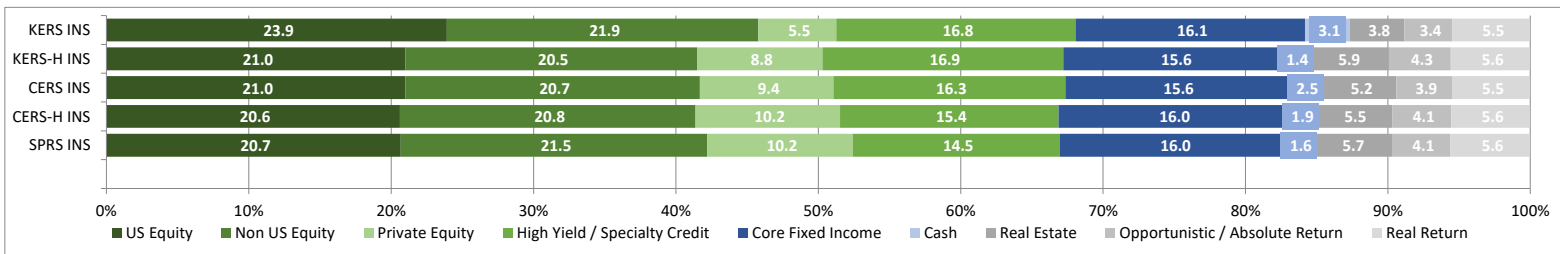
Special Called Investment Committee Meeting - Standard Reports

KENTUCKY RETIREMENT SYSTEMS - INSURANCE FUND - NET RETURNS - 12/31/20

Structure	Inception	Market Value	% of Total	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD
				KRS	KRS	KRS	KRS	KRS	KRS	KRS	KRS	KRS
TOTAL FUND	4/1/1987	6,310,886,603.02	100.00	3.45	9.01	14.29	8.84	7.17	9.14	7.13	5.49	7.51
KY Ret. Blended Index				3.20	9.28	14.35	8.87	6.92	8.95	7.64	5.69	7.84
GROWTH	7/1/2018	4,473,986,226.84	70.89	4.55	11.93	19.27	11.00					9.52
Growth Custom Benchmark				2.96	12.79	23.45	15.18					11.88
PUBLIC EQUITY	7/1/1992	2,840,620,346.69	45.01	5.15	16.17	25.39	16.58	9.95	12.54	9.10	6.23	9.04
Global Equity Blended Index				5.06	15.95	25.23	15.97	9.63	12.33	9.12	5.80	8.82
US PUBLIC	7/1/1992	1,433,102,338.71	22.71	4.80	15.20	25.02	18.94	13.43	14.83	13.05	7.67	10.18
KY Domestic Equity Blend				4.50	14.68	25.24	20.89	14.49	15.43	13.79	7.75	10.17
EQUITY NON US	4/1/2000	1,407,518,007.98	22.30	5.52	17.18	25.77	13.94	6.86	10.39	5.54	5.46	3.93
KY Ret.Int'l Eq. Blended Index				5.62	17.22	25.19	11.12	4.83	9.17	5.32	4.77	3.24
PRIVATE EQUITY	7/1/2002	548,052,248.02	8.68	6.36	8.50	13.54	1.95	8.99	10.67	12.69		9.82
Russell 3000 + 3%(Qtr Lag)				6.36	8.50	13.54	1.95	8.99	10.67	15.50		11.27
HIGH YIELD / SPECIALTY CREDIT	7/1/2017	1,085,313,632.13	17.20	2.17	4.24	8.72	3.91	5.07				5.39
Bloomberg Barclays US High Yield				1.61	5.13	9.73	5.12	5.13				5.07
FIXED INCOME / LIQUIDITY	7/1/2018	982,043,364.41	15.56	0.42	1.25	2.39	4.63					5.07
CORE FIXED INCOME	7/1/2013	873,074,121.81	13.83	0.48	1.43	2.74	5.67	4.59	4.11			3.39
Bloomberg Barclays US Aggregate				0.14	0.67	1.29	7.51	5.34	4.44			3.87
CASH	7/1/1992	108,969,242.60	1.73	0.01	0.03	0.06	0.49	1.54	1.24	0.76	1.63	2.54
Citigroup Treasury Bill-3 Month				0.01	0.02	0.06	0.58	1.56	1.16	0.60	1.43	2.42
DIVERSIFYING STRATEGIES	7/1/2018	855,328,274.67	13.55	1.98	5.94	8.74	2.87					4.76
REAL ESTATE	5/1/2009	246,753,396.14	3.91	2.90	3.39	3.37	6.22	9.18	9.76	9.90		9.17
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^				0.27	0.27	-1.49	0.52	4.25	5.69	9.26		5.45
ABSOLUTE RETURN	4/1/2010	58,349,008.11	0.92	1.06	1.74	3.86	-1.33	0.40	1.24			3.03
HFRI Diversified				3.52	7.38	11.65	10.47	4.92	4.33			3.66
OPPORTUNISTIC	7/1/2018	188,867,579.50	2.99	1.44	12.91	4.52						8.09
S&P LSTA Leveraged Loan Index				1.35	8.11	3.12						3.86
REAL RETURN	7/1/2011	361,358,290.92	5.73	1.78	8.66	11.62	0.91	2.75	5.02			3.42
Pension Real Return Custom Benchmark				1.78	8.66	11.62	0.91	2.75	5.02			2.81

KENTUCKY RETIREMENT SYSTEMS - INSURANCE FUND - PLAN NET RETURNS - 12/31/20

Plan	Inception	Market Value	% of Total	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD
KERS INS		1,175,348,541.49	100.00	3.38	9.18	14.73	9.98	7.01	8.93	6.91	5.38	7.44
KY Ins. KERS Plan Index				3.19	9.26	14.35	8.97	6.93	9.03	7.54	5.63	7.81
KERS - H INS		578,787,559.09	100.00	3.46	8.90	14.16	8.49	6.97	9.00	7.07	5.46	7.49
KY Ins. KERS Haz Plan Index				3.19	9.26	14.35	8.97	6.99	9.03	7.57	5.65	7.82
CERS INS		2,854,409,134.88	100.00	3.44	8.97	14.17	8.60	7.15	9.13	7.15	5.50	7.52
KY Ins. CERS Plan Index				3.19	9.26	14.35	8.97	6.98	9.02	7.59	5.66	7.82
CERS - H INS		1,476,229,059.37	100.00	3.49	8.99	14.19	8.49	7.17	9.17	7.18	5.51	7.52
KY Ins. CERS Haz Plan Index				3.19	9.26	14.35	8.97	6.98	9.01	7.59	5.66	7.82
SPRS INS		226,112,309.23	100.00	3.55	9.13	14.41	9.15	7.35	9.27	7.22	5.54	7.54
KY Ins. SPRS Plan Index				3.19	9.26	14.35	8.97	6.98	9.01	7.59	5.66	7.82



Note: The above chart displays the average monthly allocation.

Kentucky Retirement Systems

Domestic and Global Commissions Report

Quarter Ending: December 31, 2020

Special Called Investment Committee Meeting - Standard Reports

Kentucky Retirement Systems					
Domestic Equity - Common Stock Commissions					
Quarter Ended December 31, 2020					
Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
B RILEY AND CO LLC, NEW YORK	48,233	1,929	1,013,505	0.0400	0.1904%
BAIRD, ROBERT W & CO INC, MILWAUKEE	7,650	306	2,918,195	0.0400	0.0105%
BARCLAYS	207,690	2,736	5,975,785	0.0132	0.0458%
BERNSTEIN SANFORD C & CO, NEW YORK	214,367	7,852	7,448,931	0.0366	0.1054%
BTIG LLC, NEW YORK	303,020	6,060	6,561,624	0.0200	0.0924%
CANTOR FITZGERALD & CO INC, NEW YORK	425,218	8,504	35,289,148	0.0200	0.0241%
CITIGROUP	124,235	1,549	1,833,540	0.0125	0.0845%
COWEN AND CO LLC, NEW YORK	172,264	5,486	3,165,200	0.0318	0.1733%
CREDIT SUISSE	326,713	4,977	22,025,382	0.0152	0.0226%
DOUGHERTY & COMPANY LLC, MINNEAPOLIS	38,303	1,242	604,953	0.0324	0.2053%
GOLDMAN SACHS	144,841	2,960	6,350,801	0.0204	0.0466%
GUGGENHEIM CAPITAL MARKETS LLC, NEW YORK	176,244	7,050	7,685,994	0.0400	0.0917%
INSTINET CORP	715,849	11,272	31,978,739	0.0157	0.0352%
INVESTMENT TECH GROUP INC, NEW YORK	119,305	3,127	13,348,998	0.0262	0.0234%
ISI GROUP	326,334	5,002	14,515,936	0.0153	0.0345%
ITG INC, NEW YORK	598,480	6,986	19,946,005	0.0117	0.0350%
J.P MORGAN SECURITIES INC, NEW YORK	406,482	5,601	21,174,667	0.0138	0.0265%
JEFFERIES & CO INC, NEW YORK	202,144	2,039	26,364,464	0.0101	0.0077%
JMP SECURITIES, SAN FRANCISCO	91,073	3,643	899,424	0.0400	0.4050%
JONESTRADING INST SVCS LLC, NEW YORK	36,957	1,109	2,462,810	0.0300	0.0450%
KEEFE BRUYETTE + WOODS INC, NEW YORK	54,160	2,166	3,054,354	0.0400	0.0709%
KEYBANC CAPITAL MARKETS INC, NEW YORK	62,897	2,516	1,206,243	0.0400	0.2086%
LIQUIDNET INC, NEW YORK	857,465	11,469	36,825,578	0.0134	0.0311%
LUMINEX TRADING AND ANALYTICS, BOSTON	72,352	1,855	5,739,792	0.0256	0.0323%
MERRILL LYNCH	48,257	968	2,387,110	0.0201	0.0405%
MORGAN STANLEY	62,050	2,482	2,258,911	0.0400	0.1099%
NATIONAL FINL SVCS CORP, NEW YORK	226,240	7,392	3,740,646	0.0327	0.1976%
NEEDHAM AND CO LLC, NEW YORK	16,202	648	1,163,466	0.0400	0.0557%
NORTHLAND SECURITIES INC., NEW YORK	21,071	843	929,777	0.0400	0.0906%
O NEIL WILLIAM CO INC BCC CLRG, NEW YORK	14,720	589	1,749,777	0.0400	0.0337%
PICKERING ENERGY PARTNERS, HOUSTON	22,924	458	359,730	0.0200	0.1275%
PIPER JAFFRAY & CO., JERSEY CITY	368,613	9,889	10,444,209	0.0268	0.0947%
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	131,801	3,046	7,259,696	0.0231	0.0420%
RBC CAPITAL MARKETS	178,803	1,840	2,419,942	0.0103	0.0760%
ROTH CAPITAL PARTNERS LLC, NEW YORK	51,308	2,052	1,074,743	0.0400	0.1910%
SCOTIA CAPITAL (USA) INC, NEW YORK	16,930	127	337,799	0.0075	0.0376%
STIFEL NICOLAUS	9,723	389	447,231	0.0400	0.0870%
TOURMALINE PARTNERS LLC, NEW YORK	54,831	1,097	3,345,325	0.0200	0.0328%
UBS	2,189,548	22,391	228,824,976	0.0102	0.0098%
VIRTU AMERICAS LLC, NEW YORK	1,085	8	32,451	0.0075	0.0251%
WEDBUSH MORGAN SECS INC, LOS ANGELES	85,912	3,377	7,250,596	0.0393	0.0466%
WILLIAM BLAIR & CO, CHICAGO	239,716	7,785	4,906,123	0.0325	0.1587%
WOLFE TRAHAN SECURITIES, NEW YORK	38,134	1,525	6,346,693	0.0400	0.0240%
TOTAL DOMESTIC	9,510,144	174,343	563,669,269	0.0183	0.0309%

Special Called Investment Committee Meeting - Standard Reports

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
DAG VENTURES V QP	14,465	145	177,471	0.0100	0.0815%
NEXT CENTURY GROWTH	1,966,313	51,324	51,088,686	0.0261	0.1005%
NTGI STRUCTURED	399,303	2,998	9,585,375	0.0075	0.0313%
RIVER ROAD FAV	2,168,657	40,328	121,841,481	0.0186	0.0331%
S&P 500 INDEX	2,150,706	21,507	227,996,055	0.0100	0.0094%
TORTOISE CAP	1,174,109	9,920	19,969,958	0.0084	0.0497%
WATERFALL	6,836	205	148,075	0.0300	0.1385%
WESTFIELD CAPITAL	1,629,755	47,916	132,862,168	0.0294	0.0361%
TOTAL DOMESTIC	9,510,144	174,343	563,669,269	0.0183	0.0309%

Kentucky Retirement Systems
Global Equity - Common Stock Commissions
Quarter Ended December 31, 2020

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
AMBIT CAPITAL PRIVATE LTD, MUMBAI	93,069	1,052	733,064	0.0113	0.1435%
BANCO ITAU, SAO PAULO	900	4	4,641	0.0041	0.0802%
BANCO SANTANDER, NEW YORK	45,937	153	191,107	0.0033	0.0800%
BARCLAYS	1,213,254	6,677	23,833,255	0.0055	0.0280%
BATLIVALA & KARANI SECS (INDIA) PVT	3,575	28	27,447	0.0077	0.1002%
BERNSTEIN SANFORD C & CO, NEW YORK	3,749,445	9,553	22,207,148	0.0025	0.0430%
BNP PARIBUS	48,600	507	803,800	0.0104	0.0631%
BNY MELLON CLEARING	457,115	6,194	9,723,166	0.0136	0.0637%
BOFA SECURITIES, INC, NEW YORK	65,587	510	2,332,989	0.0078	0.0219%
BRADESCO S.A. CTVM, SAO PAULO	300,000	265	265,599	0.0009	0.0999%
BRASIL PLURAL CCTVM SA, SAO PAULO	500,000	464	464,471	0.0009	0.0999%
CANADIAN IMPERIAL BK OF COMMERCE, NY	78,200	472	786,857	0.0060	0.0600%
CITATION GROUP BCC CLRG, NEW YORK	16,329	163	2,499,256	0.0100	0.0065%
CITIGROUP	5,797,087	27,921	50,354,058	0.0048	0.0554%
CLSA INDIA LTD, MUMBAI	69,843	497	495,591	0.0071	0.1002%
CREDIT LYONNAIS SEC, SEOUL	12,521	671	892,182	0.0536	0.0752%
CREDIT LYONNAIS SECS (ASIA), HONG KONG	45,000	166	221,222	0.0037	0.0749%
CREDIT LYONNAIS SECS ASIA LTD, TAIPEI	526,000	746	1,138,635	0.0014	0.0655%
CREDIT SUISSE	3,347,656	31,184	68,827,720	0.0093	0.0453%
D CARNEGIE AB, STOCKHOLM	131,740	798	1,597,317	0.0061	0.0500%
DAIWA SECURITIES	581,038	11,740	23,197,658	0.0202	0.0506%
DEN NORISKE CREDITBANK, OSLO	41,525	294	588,382	0.0071	0.0500%
DEPOSITORY TR CO (DTC), TORONTO (DTCC)	11,736	184	162,091	0.0157	0.1134%
EXANE, PARIS (EXANFRPP)	1,027,683	5,224	13,066,106	0.0051	0.0400%
FUBON SECS CO LTD (HEAD OFFICE), TAIPEI	35,000	126	632,248	0.0036	0.0200%
GOLDMAN SACHS	1,472,725	21,933	30,934,504	0.0149	0.0709%
HANWHA SECS CO LTD, SEOUL	3,832	79	134,726	0.0206	0.0586%
HSBC	1,148,901	14,569	9,199,424	0.0127	0.1584%
ICICI BROKERAGE SERVICES LTD, MUMBAI	968	3	8,552	0.0027	0.0301%
INSTINET CORP	212,100	967	2,553,723	0.0046	0.0379%
INVESTMENT TECHNOLOGY GROUP LTD, DUBLIN	1,749,920	4,003	12,090,968	0.0023	0.0331%
ITG AUSTRALIA LTD, MELBOURNE	7,180	109	136,629	0.0152	0.0801%
J.P MORGAN SECURITIES INC, NEW YORK	237,955	2,506	5,418,071	0.0105	0.0462%
JEFFERIES & CO INC, NEW YORK	33,061	336	3,369,457	0.0102	0.0100%
JEFFERIES & CO LTD, LONDON	91,154	1,721	4,799,620	0.0189	0.0358%
JEFFERIES HONG KONG LIMITED, HONG KONG	4,799,200	2,841	7,000,926	0.0006	0.0406%
JM FIN INSTL SEC PRIVATE LTD, MUMBAI	811	75	74,577	0.0922	0.1002%

Special Called Investment Committee Meeting - Standard Reports

JP MORGAN SECURITIES	3,441,433	21,738	75,194,730	0.0063	0.0289%
JPMORGAN SECURITIES INC, NEW YORK	313,785	4,085	20,467,668	0.0130	0.0200%
KEB SALOMON SMITH BARNEY SECS, SEOUL	4,500	321	1,070,222	0.0713	0.0300%
KEPLER EQUITIES, PARIS	43,120	1,289	2,155,547	0.0299	0.0598%
KOTAK SECURITIES,MUMBAI	110,433	387	385,925	0.0035	0.1002%
LIQUIDNET ASIA LTD, HONG KONG	64,000	125	125,611	0.0020	0.0998%
LIQUIDNET CANADA INC, TORONTO	11,725	135	667,167	0.0115	0.0202%
LIQUIDNET EUROPE LIMITED, LONDON	272,883	2,914	6,529,080	0.0107	0.0446%
LIQUIDNET INC, NEW YORK	5,191	26	28,656	0.0050	0.0906%
MACQUARIE SECURITIES	44,300	1,498	4,115,880	0.0338	0.0364%
MERRILL LYNCH	2,021,308	6,191	12,047,035	0.0031	0.0514%
MIZUHO SECURITIES USA INC. NEW YORK	9,100	67	133,716	0.0073	0.0499%
MIZUHO SECURITIES USA, INC., NEW YORK	25,323	886	788,949	0.0350	0.1123%
MORGAN STANLEY	5,862,974	47,739	81,514,073	0.0081	0.0586%
MOTILAL OSWAL, INDIA	166,580	492	490,858	0.0030	0.1002%
NATIONAL FINL SVCS CORP, NEW YORK	14,946	255	4,544,574	0.0171	0.0056%
NATL FINL SVCS CORP/PRIME BRK/CNS, NY	50,306	1,761	724,437	0.0350	0.2430%
NBCN INC, TORONTO (NBCS)	30,839	687	607,455	0.0223	0.1130%
NOMURA SECURITIES	6,653	296	570,791	0.0445	0.0519%
NUMIS SECURITIES LTD, LONDON	4,000	37	53,313	0.0093	0.0701%
OPPENHEIMER & CO INC, NEW YORK	49,720	1,492	775,423	0.0300	0.1924%
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	51,816	1,814	745,823	0.0350	0.2432%
RBC CAPITAL MARKETS	1,634,910	8,079	18,951,485	0.0049	0.0426%
REDBURN PARTNERS LLP, LONDON	24,040	1,972	3,298,060	0.0820	0.0598%
RENAISSANCE CAPITAL LTD, LONDON	48,629	274	282,549	0.0056	0.0969%
SANFORD C BERNSTEIN & CO INC, LONDON	201,471	1,086	4,154,270	0.0054	0.0261%
SMBC SECURITIES, INC NEW YORK	2,900	275	549,902	0.0948	0.0500%
STIFEL NICOLAUS	56,346	1,690	709,413	0.0300	0.2383%
TD WATERHOUSE SEC, TORONTO (GIST)	49,624	1,166	688,858	0.0235	0.1692%
UBS	635,817	11,042	23,838,686	0.0174	0.0463%
UNICREDIT BANK AUSTRIA AG, VIENNA	727,882	1,387	394,958	0.0019	0.3512%
UNION BANK SWITZERLAND SECS, LONDON	791,000	1,223	3,444,788	0.0015	0.0355%
WALL STREET ACCESS, JERSEY CITY	6,200	62	570,555	0.0100	0.0109%
WARBURG DILLON READ SEC, MUMBAI	117,464	376	1,251,656	0.0032	0.0300%
WILLIAM BLAIR & CO, CHICAGO	38,990	1,170	1,565,641	0.0300	0.0747%
XP INVESTIMENTOS CCTVM SA,RIO DE JANEIRO	734,300	1,734	1,715,928	0.0024	0.1010%
TOTAL GLOBAL	45,631,155	280,503	575,920,869	0.0061	0.0487%

Broker/Account	Shares Traded	Commission	Value of Trade	Per Share	% Cost of Trade
AMERICAN CENTURY	10,690,610	125,476	272,644,833	0.0117	0.0460%
FRANKIN TEMPLETON	6,360,877	40,030	97,488,663	0.0063	0.0411%
JP MORGAN EMERG MKTS	5,188,051	18,855	26,918,135	0.0036	0.0700%
LAZARD ASSET MGMT	6,102,845	45,361	101,187,953	0.0074	0.0448%
LSV ASSET MANAGEMENT	6,392,772	12,899	29,012,011	0.0020	0.0445%
LSV ASSET MGMT	2,993,765	5,464	12,178,688	0.0018	0.0449%
MANULIFE ASSET MGMT	471,034	14,020	16,092,670	0.0298	0.0871%
PZENA EMERGING MKTS	7,431,201	18,398	20,397,916	0.0025	0.0902%
TOTAL GLOBAL	45,631,155	280,503	575,920,869	0.0061	0.0487%

Kentucky Retirement Systems

Internal Asset Holdings Report & Internal Asset Transaction Report

Quarter Ending: December 31, 2020

Reports can be found:

<https://kyret.ky.gov/Investments/Investments-Library/Pages/Investment-Committee-Meeting-Materials.aspx>

Kentucky Retirement Systems

Security Litigation Report

Quarter Ending: December 31, 2020

Claims Filed during the Quarter (pg 3):

13


Proceeds Received during the Quarter (pg 4):

\$66,906.45


Kentucky Retirement Systems	
Quarterly Securities Litigation Report	
Quarter Ended 12/31/20	
Total Claims Filed	
No Claim on File	9
Fiscal Year 1997	1
Fiscal Year 1998	2
Fiscal Year 1999	5
Fiscal Year 2000	9
Fiscal Year 2001	8
Fiscal Year 2002	33
Fiscal Year 2003	45
Fiscal Year 2004	38
Fiscal Year 2005	89
Fiscal Year 2006	150
Fiscal Year 2007	70
Fiscal Year 2008	73
Fiscal Year 2009	85
Fiscal Year 2010	65
Fiscal Year 2011	69
Fiscal Year 2012	54
Fiscal Year 2013	48
Fiscal Year 2014	65
Fiscal Year 2015	80
Fiscal Year 2016	224
Fiscal Year 2017	140
Fiscal Year 2018	74
Fiscal Year 2019	55
Fiscal Year 2020	42
Fiscal Year 2021	22
Total Filed	1,555
Proceeds Received	
Fiscal Year 1998	\$67,682
Fiscal Year 1999	\$233,370
Fiscal Year 2000	\$303,918
Fiscal Year 2001	\$415,502
Fiscal Year 2002	\$387,318
Fiscal Year 2003	\$519,059
Fiscal Year 2004	\$1,080,920
Fiscal Year 2005	\$1,645,440
Fiscal Year 2006	\$797,535
Fiscal Year 2007	\$5,398,363
Fiscal Year 2008	\$5,402,336
Fiscal Year 2009	\$3,504,682
Fiscal Year 2010	\$2,776,544
Fiscal Year 2011	\$1,292,484
Fiscal Year 2012	\$468,657
Fiscal Year 2013	\$1,070,427
Fiscal Year 2014	\$308,704
Fiscal Year 2015	\$23,639,565
Fiscal Year 2016	\$2,417,957
Fiscal Year 2017	\$1,886,532
Fiscal Year 2018	\$2,247,966
Fiscal Year 2019	\$1,702,272
Fiscal Year 2020	\$1,743,474
Fiscal Year 2021	\$136,258
Total Proceeds	\$59,446,967

Special Called Investment Committee Meeting - Standard Reports


Class Action Name	TNT Status Code	Status as of Date	Class Period Start Date	Class Period End Date	Class Account Id	Claimed Account Name
ALLIED NEVADA GOLD CORP. (D. NEV.)	FILED	10/07/20	01/17/13	11/01/13	2602408	ZZ*KRS PEN NTGI STRUCTURED SM-
ALLIED NEVADA GOLD CORP. (D. NEV.)	FILED	10/07/20	01/17/13	11/01/13	2688058	ZZKRS INS NTGI STRUCTURED SM
Allied Nevada Gold Corp. (D. Nev.)	FILED	10/30/20	01/18/13	08/05/13	KR3F1002002	NTGI STRUCTURED
Allied Nevada Gold Corp. (D. Nev.)	FILED	10/30/20	01/18/13	08/05/13	KR2F1002002	NTGI STRUCTURED
APPLIED OPTOELECTRONICS, INC. (2017) (S.D. TEX.)	FILED	11/19/20	02/23/17	02/21/18	956765	KRS INS NTGI STRUCTURED
APPLIED OPTOELECTRONICS, INC. (2017) (S.D. TEX.)	FILED	11/19/20	02/23/17	02/21/18	956588	KRS NTGI STRUCTURED
Apyx Medical Corporation fka BovieMedical Corporation	FILED	12/06/20	12/21/18	04/01/19	956588	KRS NTGI STRUCTURED
Apyx Medical Corporation fka BovieMedical Corporation	FILED	12/06/20	12/21/18	04/01/19	956765	KRS INS NTGI STRUCTURED
Centene Corporation (2016)	FILED	10/07/20	05/24/16	07/25/16	KR2F1011002	KRS INTERNAL EQUITY
Centene Corporation (2016)	FILED	10/07/20	05/24/16	07/25/16	KR3F1011002	KRS INTERNAL EQUITY
DAIMLER AG	FILED	11/20/20	02/21/12	07/20/16	KEN02	KRS TRANSITION
DAIMLER AG	FILED	11/20/20	02/21/12	07/20/16	KEN04	KRS PEN BOSTON CO NON-US VALUE
DAIMLER AG	FILED	11/20/20	02/21/12	07/20/16	KEN07	KRS INS ARTIO GLOBAL
DAIMLER AG	FILED	11/20/20	02/21/12	07/20/16	KEN08	KRS PEN ARTIO GLB EQ
DAIMLER AG	FILED	11/20/20	02/21/12	07/20/16	KEN05	KRS INSURANCE TRANSITION AC
DAIMLER AG	FILED	11/20/20	02/21/12	07/20/16	KEN06	KRS INS BOSTON CO NON-US VALUE
ICONIX BRAND GROUP, INC.	FILED	12/30/19	02/21/12	02/03/16	2602408	ZZ*KRS PEN NTGI STRUCTURED SM-
ICONIX BRAND GROUP, INC.	FILED	12/30/19	02/21/12	02/03/16	2688058	ZZKRS INS NTGI STRUCTURED SM
IMPINJ, INC. (W.D. WASH.)	FILED	11/16/20	07/21/16	02/15/18	956588	KRS NTGI STRUCTURED
IMPINJ, INC. (W.D. WASH.)	FILED	11/16/20	07/21/16	02/15/18	956765	KRS INS NTGI STRUCTURED
INSYS THERAPEUTICS, INC. (2016) (DEFENDANT BABICH)	FILED	10/20/20	03/03/15	01/25/16	KR2F1002002	NTGI STRUCTURED
INSYS THERAPEUTICS, INC. (2016) (DEFENDANT BABICH)	FILED	10/20/20	03/03/15	01/25/16	KR3F1002002	NTGI STRUCTURED
Insys Therapeutics, Inc. (2016) (Defendant Kapoor)	FILED	09/29/20	03/03/15	01/25/16	KR3F1002002	NTGI STRUCTURED
Insys Therapeutics, Inc. (2016) (Defendant Kapoor)	FILED	09/29/20	03/03/15	01/25/16	KR2F1002002	NTGI STRUCTURED
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	KEN14	KRS PEN PIMCO
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2606490	ZZKRS PEN 11 NEUBERGER FI-SL
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2611399	ZZKRS PEN WATERFALL TRANSITI
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2611405	ZZKRS PEN PIMCO TRANSITION-SL
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2653568	ZZKRS PENSION PIMC
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2660366	ZZKRS PEN WATERFALL -SL
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2662847	ZZ*KRS PEN PYRAMIS CORE BOND-
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2662848	ZZ*KRS PEN BAIRD CORE BOND-SL
LIBOR-BASED FNCL INSTR USD ANTITR BONDHO	FILED	12/23/20	07/31/07	05/31/10	2684781	ZZKRS PEN NISA INVT ADV -SL
MOLINA HEALTHCARE, INC. (2018)	FILED	10/12/20	10/31/14	08/02/17	956765	KRS INS NTGI STRUCTURED
MOLINA HEALTHCARE, INC. (2018)	FILED	10/12/20	10/31/14	08/02/17	956588	KRS NTGI STRUCTURED
MRV COMMUNICATIONS, INC. (2017) (CALIFORNIA SUPERIOR COURT)	FILED	11/02/20	07/02/17	08/11/17	956765	KRS INS NTGI STRUCTURED
MRV COMMUNICATIONS, INC. (2017) (CALIFORNIA SUPERIOR COURT)	FILED	11/02/20	07/02/17	08/11/17	956588	KRS NTGI STRUCTURED
QUORUM HEALTH CORPORATION	FILED	11/16/20	05/02/16	08/10/16	KR2F1009002	INVESCO
SPECTRUM BRANDS HOLDINGS, INC.	FILED	09/30/20	07/16/18	04/09/19	956588	KRS NTGI STRUCTURED
SPECTRUM BRANDS HOLDINGS, INC.	FILED	10/01/20	07/16/18	04/09/19	956765	KRS INS NTGI STRUCTURED

 TOTAL FUND - KR2G0000000	Transaction Detail Reported By Transaction Category 9/30/2020 - 12/31/2020	Report ID : IACS0008 Base Currency : USD Status : PRELIMINARY
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Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security ID	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
Transaction No./Client Ref No.			Reported Date				
CLASS ACTIONS							
CASH & CASH EQUIVALENTS							
U.S. DOLLAR							
CD	0.000	3-16-CV-05479-JSTWELLS FARGO & COMPANY (2016) Distribution 1	10/5/2020	0.000000	20,651.76	20,651.76	20,651.76
	NA9123459	20201005S000090 / 000000000010	10/5/2020	0.000000	20,651.76	20,651.76	20,651.76
		KR2F19020002: S&P 500 INDEX					Gain/Loss Local Amounts: 20,651.76 Long Gain/Loss Base Amounts: 20,651.76 Long
CD	0.000	4-17-cv-03021TRANSGENOMIC, INC Distribution 1ST DISTRIBUTION	10/19/2020	0.000000	173.89	173.89	173.89
	NA9123459	20201019S000100 / 000000000000	10/19/2020	0.000000	173.89	173.89	173.89
		KR2F10020002: NTGI STRUCTURED					Gain/Loss Local Amounts: 173.89 Long Gain/Loss Base Amounts: 173.89 Long
CD	0.000	05-2367 (SRC) (CLW)MERCK & CO INC. SECURITIES, DERIVATIVE &	11/6/2020	0.000000	613.34	613.34	613.34
	NA9123459	20201106S000080 / 000000000945	11/6/2020	0.000000	613.34	613.34	613.34
		KR2F19020002: S&P 500 INDEX					Gain/Loss Local Amounts: 613.34 Long Gain/Loss Base Amounts: 613.34 Long
CD	0.000	11 Civ.4665 (PGG)AVON PRODUCTS , INC. (2011) Distribution 2ND	11/12/2020	0.000000	28.24	28.24	28.24
	NA9123459	20201112S000250 / 000000000011	11/12/2020	0.000000	28.24	28.24	28.24
		KR2F19020002: S&P 500 INDEX					Gain/Loss Local Amounts: 28.24 Long Gain/Loss Base Amounts: 28.24 Long
CD	0.000	315-cv-05447-WHAMARVELL TECHNO LOGY GROUP, LTD. (2015) Distri	11/16/2020	0.000000	18.66	18.66	18.66
	NA9123459	20201116S000010 / 000000000000	11/16/2020	0.000000	18.66	18.66	18.66
		KR2F10090002: INVESCO					Gain/Loss Local Amounts: 18.66 Long Gain/Loss Base Amounts: 18.66 Long
CD	0.000	JP MORGAN RMBS SEC LIT	11/9/2020	0.000000	13.99	13.99	13.99
	NA9123459	20201116S000310 / 35980190	11/9/2020	0.000000	13.99	13.99	13.99
		KR2F90010002: CASH ACCOUNT KR2					Gain/Loss Local Amounts: 13.99 Long Gain/Loss Base Amounts: 13.99 Long

 TOTAL FUND - KR2G00000000	Transaction Detail Reported By Transaction Category 9/30/2020 - 12/31/2020	Report ID : IACS0008 Base Currency : USD Status : PRELIMINARY
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Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security ID	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
Transaction No./Client Ref No.			Reported Date				
CD	0.000	04-cv-9866 (LTS)(HBP)Pfizer, I	11/19/2020	0.000000	14,413.04	14,413.04	14,413.04
	NA9123459	nc. (2004) Distribution 2ND DI		0.000000	14,413.04	14,413.04	14,413.04
		20201119S000170 / 000000000011	11/19/2020				Gain/Loss Local Amounts: 14,413.04 Long
		KR2F19020002: S&P 500 INDEX					Gain/Loss Base Amounts: 14,413.04 Long
CD	0.000	CV 07-2536 PSG (PLAx)AMGEN INC	12/2/2020	0.000000	2,217.91	2,217.91	2,217.91
	NA9123459	. (2007) Distribution 2ND DIST		0.000000	2,217.91	2,217.91	2,217.91
		20201202S000020 / 000000000012	12/2/2020				Gain/Loss Local Amounts: 2,217.91 Long
		KR2F10090002: INVESCO					Gain/Loss Base Amounts: 2,217.91 Long
CD	0.000	CV 07-2536 PSG (PLAx)AMGEN INC	12/2/2020	0.000000	267.50	267.50	267.50
	NA9123459	. (2007) Distribution 2ND DIST		0.000000	267.50	267.50	267.50
		20201202S000100 / 000000000012	12/2/2020				Gain/Loss Local Amounts: 267.50 Long
		KR2F19020002: S&P 500 INDEX					Gain/Loss Base Amounts: 267.50 Long
CD	0.000	JPMORGAN ACCEPTANCE CORP	12/8/2020	0.000000	2,863.10	2,863.10	2,863.10
	NA9123459	20201211S000030 / 36097971		0.000000	2,863.10	2,863.10	2,863.10
		KR2F90010002: CASH ACCOUNT KR2	12/8/2020				Gain/Loss Local Amounts: 2,863.10 Long
							Gain/Loss Base Amounts: 2,863.10 Long
CD	0.000	MERCK & CO	12/8/2020	0.000000	16.28	16.28	16.28
	NA9123459	20201211S000130 / 36097971		0.000000	16.28	16.28	16.28
		KR2F19020002: S&P 500 INDEX	12/8/2020				Gain/Loss Local Amounts: 16.28 Long
							Gain/Loss Base Amounts: 16.28 Long
CD	0.000	PFIZER INC (2004)	12/8/2020	0.000000	15,919.66	15,919.66	15,919.66
	NA9123459	20201211S000140 / 36097971		0.000000	15,919.66	15,919.66	15,919.66
		KR2F19020002: S&P 500 INDEX	12/8/2020				Gain/Loss Local Amounts: 15,919.66 Long
							Gain/Loss Base Amounts: 15,919.66 Long
CD	0.000	1-15-md-02631-CM (SDA)ALIBABA	12/14/2020	0.000000	803.79	803.79	803.79
	NA9123459	GROUP HOLDING LIMITED (S.D.N.Y		0.000000	803.79	803.79	803.79
		20201214S000010 / 000000000008	12/14/2020				Gain/Loss Local Amounts: 803.79 Long
		KR2F20010002: KRS NONUS ACWI-EX					Gain/Loss Base Amounts: 803.79 Long

 TOTAL FUND - KR2G0000000	Transaction Detail Reported By Transaction Category 9/30/2020 - 12/31/2020			Report ID : IACS0008 Base Currency : USD Status : PRELIMINARY		
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Trans Code Link Ref	Shares/Par Security ID	Description Broker Transaction No./Client Ref No.	Trade Date C. Settle Date Reported Date	Price Local/Base	Cost Local/Base	Amount Local/Base	Net Gain/Loss Local/Base
CD	0.000	CV 10-06256-CASCVB FINANCIAL C	12/23/2020	0.000000	242.06	242.06	242.06
	NA9123459	ORP Distribution 2ND DISTRIBUT		0.000000	242.06	242.06	242.06
	20201223S000210	/ 0000000000003	12/23/2020				Gain/Loss Local Amounts: 242.06 Long
	KR2F10020002	NTGI STRUCTURED					Gain/Loss Base Amounts: 242.06 Long
TOTAL U.S. DOLLAR CASH & CASH EQUIVALENTS:					58,243.22	58,243.22	58,243.22
TOTAL CASH & CASH EQUIVALENTS CLASS ACTIONS:					58,243.22	58,243.22	58,243.22
CONVERTIBLE OR EXCHANGEABLE SECURITIES							
U.S. DOLLAR							
CD	0.000	COUNTRYWIDE FINANCIAL CORP(201	11/9/2020	0.000000	105.02	105.02	105.02
	222372203	0) MBS SEC LIT		0.000000	105.02	105.02	105.02
	20201116S000300	/ 35980190	11/9/2020				Gain/Loss Local Amounts: 105.02 Long
	KR2F90010002	CASH ACCOUNT KR2					Gain/Loss Base Amounts: 105.02 Long
EQUITY							
U.S. DOLLAR							
CD	0.000	BP P.L.C (2010) SD TEX 2ND	10/15/2020	0.000000	246.85	246.85	246.85
	055622104	CLASS ACTION PROCEEDS		0.000000	246.85	246.85	246.85
	20201116A000060		10/15/2020				Gain/Loss Local Amounts: 246.85 Long
	KR2F20070002	LSV ASSET					Gain/Loss Base Amounts: 246.85 Long
TOTAL CLASS ACTIONS:					58,595.09	58,595.09	58,595.09
TOTAL TRANSACTIONS BASE:					58,595.09	58,595.09	58,595.09

 TOTAL FUND - KR3G0000000	Transaction Detail	Report ID : IACS0008
	Reported By Transaction Category	Base Currency : USD
	9/30/2020 - 12/31/2020	Status : PRELIMINARY

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security ID	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
CLASS ACTIONS							
CASH & CASH EQUIVALENTS							
U.S. DOLLAR							
CD	0.000	4-17-cv-03021TRANSGENOMIC, INC	10/19/2020	0.000000	77.60	77.60	77.60
	NA9123459	Distribution 1ST DISTRIBUTION		0.000000	77.60	77.60	77.60
		20201019S000090 / 000000000000	10/19/2020				Gain/Loss Local Amounts: 77.60 Long
		KR3F10020002: NTGI STRUCTURED					Gain/Loss Base Amounts: 77.60 Long
CD	0.000	3-14-CV-00682-JAGGENWORTH FINA	10/26/2020	0.000000	108.94	108.94	108.94
	NA9123459	NCIAL, INC. (2014) (E.D.VA.) D		0.000000	108.94	108.94	108.94
		20201026S000010 / 000000000012	10/26/2020				Gain/Loss Local Amounts: 108.94 Long
		KR3F10030002: SYSTEMATIC					Gain/Loss Base Amounts: 108.94 Long
CD	0.000	05-2367 (SRC) (CLW)MERCK & CO	11/6/2020	0.000000	216.17	216.17	216.17
	NA9123459	INC. SECURITIES, DERIVATIVE &		0.000000	216.17	216.17	216.17
		20201106S000080 / 000000000945	11/6/2020				Gain/Loss Local Amounts: 216.17 Long
		KR3F19020002: S&P 500 INDEX					Gain/Loss Base Amounts: 216.17 Long
CD	0.000	04-cv-9866 (LTS)(HBP)Pfizer, I	11/19/2020	0.000000	94.92	94.92	94.92
	NA9123459	nc. (2004) Distribution 2ND DI		0.000000	94.92	94.92	94.92
		20201119S000020 / 000000000011	11/19/2020				Gain/Loss Local Amounts: 94.92 Long
		KR3F90010002: CASH ACCOUNT KR3					Gain/Loss Base Amounts: 94.92 Long
CD	0.000	04-cv-9866 (LTS)(HBP)Pfizer, I	11/19/2020	0.000000	4,793.37	4,793.37	4,793.37
	NA9123459	nc. (2004) Distribution 2ND DI		0.000000	4,793.37	4,793.37	4,793.37
		20201119S000170 / 000000000011	11/19/2020				Gain/Loss Local Amounts: 4,793.37 Long
		KR3F19020002: S&P 500 INDEX					Gain/Loss Base Amounts: 4,793.37 Long
CD	0.000	CV 07-2536 PSG (PLAx)AMGEN INC	12/2/2020	0.000000	79.89	79.89	79.89
	NA9123459	. (2007) Distribution 2ND DIST		0.000000	79.89	79.89	79.89
		20201202S000100 / 000000000012	12/2/2020				Gain/Loss Local Amounts: 79.89 Long
		KR3F19020002: S&P 500 INDEX					Gain/Loss Base Amounts: 79.89 Long

 TOTAL FUND - KR3G0000000	Transaction Detail Reported By Transaction Category 9/30/2020 - 12/31/2020	Report ID : IACS0008 Base Currency : USD Status : PRELIMINARY
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Trans Code Link Ref	Shares/Par Security ID	Description Broker Transaction No./Client Ref No.	Trade Date C. Settle Date Reported Date	Price Local/Base	Cost Local/Base	Amount Local/Base	Net Gain/Loss Local/Base
CD	0.000	MERCK & CO	12/8/2020	0.000000	53.78	53.78	53.78
	NA9123459	20201211S000120 / 36097971		0.000000	53.78	53.78	53.78
		KR3F19020002: S&P 500 INDEX	12/8/2020				
							Gain/Loss Local Amounts: 53.78 Long Gain/Loss Base Amounts: 53.78 Long
CD	0.000	PFIZER INC (2004)	12/8/2020	0.000000	2,889.53	2,889.53	2,889.53
	NA9123459	20201211S000130 / 36097971		0.000000	2,889.53	2,889.53	2,889.53
		KR3F19020002: S&P 500 INDEX	12/8/2020				
							Gain/Loss Local Amounts: 2,889.53 Long Gain/Loss Base Amounts: 2,889.53 Long
TOTAL U.S. DOLLAR CASH & CASH EQUIVALENTS:					8,314.20	8,314.20	8,314.20
					8,314.20	8,314.20	8,314.20
TOTAL CASH & CASH EQUIVALENTS CLASS ACTIONS:					8,314.20	8,314.20	8,314.20
					8,314.20	8,314.20	8,314.20
TOTAL CLASS ACTIONS:					8,314.20	8,314.20	8,314.20
					8,314.20	8,314.20	8,314.20
CORPORATE ACTIONS							
CASH & CASH EQUIVALENTS							
U.S. DOLLAR							
CW	0.000	04-cv-9866 (LTS)(HBP)Pfizer, I	11/19/2020	0.000000	-2.84	-2.84	-2.84
	NA9123459	nc. (2004) Distribution 2ND DI		0.000000	-2.84	-2.84	-2.84
		20201119S000060 / 000000000011	11/19/2020				
		KR3F90010002: CASH ACCOUNT KR3					
							Gain/Loss Local Amounts: -2.84 Long Gain/Loss Base Amounts: -2.84 Long
TOTAL TRANSACTIONS BASE:					8,311.36	8,311.36	8,311.36
					8,311.36	8,311.36	8,311.36

ADJUSTED ENDING VALUE POINT TO POINT (10/1/2020 - 12/31/2020)

All Portfolio Investments

Base Currency: USD

Investment	Commitment	Beginning Valuation	Adjustments	Beginning Adjusted Valuation	Period Contributions	Period Distributions	Ending Valuation	Adjustments	Ending Adjusted Valuation	IRR ¹	Unann. IRR
Kentucky Retirement Systems - Pension Fund											
Adams Street SPC II A1	175,000,000	13,329,935	0	13,329,935	24,318,827	0	13,329,935	24,318,827	37,648,762	0.00	0.00
Adams Street SPC II B1	175,000,000	13,504,881	0	13,504,881	24,318,825	0	13,504,881	24,318,825	37,823,706	0.00	0.00
AMERRA Agri Fund II, LP	40,100,000	24,731,532	0	24,731,532	0	314,614	24,731,532	-314,614	24,416,918	0.00	0.00
AMERRA-KRS Agri Holding Company, LP	65,000,000	47,949,867	0	47,949,867	0	1,955,315	47,949,867	-1,955,315	45,994,552	0.00	0.00
Arbor Capital II, L.P.	22,500,000	70,202	0	70,202	0	0	70,202	0	70,202	0.00	0.00
Arcano KRS Fund I, L.P.	36,000,000	21,643,529	0	21,643,529	0	1,394,651	21,643,529	-1,394,651	20,248,877	0.00	0.00
Ares Special Situations Fund IV, L.P.	26,192,000	24,414,388	0	24,414,388	0	2,333,941	24,414,388	-2,333,941	22,080,447	0.00	0.00
Barings Euro Real Estate II	182,003,063	N/A	0	0	669,116	0	N/A	685,188	685,188	2.40	2.40
Barings Real Estate European Value Add I SCSp	128,472,750	68,621,683	0	68,621,683	3,042,756	0	68,621,683	6,128,173	74,749,855	4.39	4.39
Bay Hills Capital I, L.P.	67,500,000	7,821,091	0	7,821,091	91,174	2,003,674	7,821,091	-1,912,488	5,908,603	0.00	0.00
Bay Hills Capital III, L.P.	51,250,000	71,845,087	0	71,845,087	302,027	4,347,027	71,845,087	-4,045,000	67,800,087	0.00	0.00
Bay Hills Emerging Partners II LP	45,000,000	85,937,271	0	85,937,271	0	7,645,500	85,937,271	-7,645,500	78,291,771	0.00	0.00
Bay Hills Emerging Partners II-B LP	45,000,000	69,834,182	0	69,834,182	225,000	11,749,500	69,834,182	-11,524,500	58,309,682	0.00	0.00
BDCM Opportunity Fund IV, L.P.	35,580,000	38,705,175	0	38,705,175	330,776	194,049	38,705,175	136,727	38,841,902	0.00	0.00
Blackstone Capital Partners V, L.P.	47,174,735	2,036,869	0	2,036,869	0	303,459	2,036,869	-303,459	1,733,410	0.00	0.00
Blackstone Capital Partners VI, L.P.	60,000,000	39,131,953	0	39,131,953	43,445	3,999,337	39,131,953	-3,999,337	35,132,616	-0.12	-0.12
Blue Torch Credit Opportunities Fund II LP	140,000,000	20,807,390	0	20,807,390	0	0	20,807,390	0	20,807,390	0.00	0.00
BSP Co-Invest Vehicle K LP	0	26,139,952	0	26,139,952	0	213,782	26,139,952	-213,782	25,926,170	0.00	0.00
BSP Private Credit Fund	100,000,000	83,495,597	0	83,495,597	3,300,330	1,762,187	83,495,597	1,538,143	85,033,740	0.00	0.00
BTG Pactual Brazil Timberland Fund I	34,500,000	22,922,539	0	22,922,539	0	681,085	22,922,539	-681,085	22,241,454	0.00	0.00
Camelot Opportunities Fund, L.P.	23,400,000	9,735,800	0	9,735,800	0	0	9,735,800	0	9,735,800	0.00	0.00
Cerberus KRS Levered Loan Opportunities Fund, L.P.	140,000,000	126,299,062	0	126,299,062	0	0	128,942,700	0	128,942,700	2.09	2.09
Columbia Capital Equity Partners IV, L.P.	27,000,000	3,502,118	0	3,502,118	0	0	3,502,118	0	3,502,118	0.00	0.00
Crestview Partners II, L.P.	67,500,000	31,997,246	0	31,997,246	0	0	31,997,246	0	31,997,246	0.00	0.00
Crestview Partners III, L.P.	39,000,000	22,446,298	0	22,446,298	707,677	203,712	22,446,298	503,965	22,950,263	0.00	0.00
CS Adjacent Investment Partners Parallel LP	140,000,000	44,346,997	0	44,346,997	0	9,928,095	44,346,997	-9,928,095	34,418,902	0.00	0.00
CVC European Equity Partners VI, L.P.	26,821,158	26,733,116	0	26,733,116	710,653	364,818	26,733,116	1,515,009	28,248,124	4.32	4.32
DAG Ventures II, L.P.	27,000,000	1,698,635	0	1,698,635	0	0	1,698,635	0	1,698,635	0.00	0.00
DAG Ventures III, L.P.	27,000,000	452,319	0	452,319	0	59,154	452,319	-59,154	393,165	0.00	0.00
DAG Ventures IV, L.P.	90,000,000	63,490,973	0	63,490,973	0	8,963,030	63,490,973	-8,963,030	54,527,942	0.00	0.00
DAG Ventures V, L.P.	8,000,000	5,999,628	0	5,999,628	0	230,508	5,999,628	-230,508	5,769,120	0.00	0.00
DCM VI, L.P.	13,500,000	13,489,319	0	13,489,319	0	0	13,489,319	0	13,489,319	0.00	0.00
DivcoWest Fund IV	20,800,000	3,013,510	0	3,013,510	0	0	3,013,510	0	3,013,510	0.00	0.00
Essex Woodlands Fund VIII, L.P.	22,500,000	10,074,887	0	10,074,887	0	626,897	10,074,887	-626,897	9,447,990	0.00	0.00

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ADJUSTED ENDING VALUE POINT TO POINT (10/1/2020 - 12/31/2020)

All Portfolio Investments

Base Currency: USD

Investment	Commitment	Beginning Valuation	Adjustments	Beginning Adjusted Valuation	Period Contributions	Period Distributions	Ending Valuation	Adjustments	Ending Adjusted Valuation	IRR ¹	Unann. IRR
Kentucky Retirement Systems - Pension Fund											
Fundamental Partners III LP	70,000,000	58,118,478	0	58,118,478	0	2,819,738	58,118,478	-2,819,738	55,298,740	0.00	0.00
Green Equity Investors IV, L.P.	67,500,000	0	-40,373	-40,373	0	0	0	-40,373	-40,373	0.00	0.00
Green Equity Investors V, L.P.	90,000,000	37,453,244	0	37,453,244	0	1,411,242	37,453,244	-1,411,242	36,042,002	0.00	0.00
Green Equity Investors VI, L.P.	32,000,000	36,083,835	0	36,083,835	0	1,449,640	36,083,835	-1,449,640	34,634,195	0.00	0.00
Green Equity Investors VII LP	25,000,000	29,254,325	0	29,254,325	823,318	2,151,672	29,254,325	-1,328,354	27,925,971	0.00	0.00
Greenfield Acquisition Partners VI, L.P.	38,100,000	465,652	0	465,652	0	23,756	465,652	-23,756	441,896	0.00	0.00
Greenfield Acquisition Partners VII, L.P.	27,800,000	19,337,327	0	19,337,327	0	7,112,701	19,337,327	-7,112,701	12,224,626	0.00	0.00
GTCR Fund IX-A, L.P.	63,000,000	0	0	0	0	0	0	0	0	N/A	N/A
H.I.G. BioVentures II, L.P.	13,500,000	15,674,530	0	15,674,530	0	738,187	15,674,530	-738,187	14,936,343	0.00	0.00
H.I.G. Capital Partner V, L.P.	13,100,000	14,690,614	0	14,690,614	0	0	14,690,614	0	14,690,614	0.00	0.00
H.I.G. Ventures II, L.P.	18,000,000	4,340,717	0	4,340,717	0	0	4,340,717	0	4,340,717	0.00	0.00
H&F Spock I LP	3,250,153	7,213,240	0	7,213,240	0	0	7,213,240	0	7,213,240	0.00	0.00
Harvest Partners V, L.P.	36,000,000	130,677	0	130,677	0	0	130,677	0	130,677	0.00	0.00
Harvest Partners VI, L.P.	28,400,000	11,490,159	0	11,490,159	0	2,837,652	11,490,159	-2,837,652	8,652,507	0.00	0.00
Harvest Partners VII LP	20,000,000	23,464,500	0	23,464,500	49,345	0	23,464,500	49,345	23,513,845	0.00	0.00
Hellman and Friedman Capital Partners VI, L.P.	20,000,000	327,670	0	327,670	0	0	327,670	0	327,670	0.00	0.00
Horsley Bridge International Fund V, L.P.	45,000,000	97,148,440	0	97,148,440	0	3,863,931	97,148,440	-3,863,931	93,284,509	0.00	0.00
IFM US Infrastructure Debt Fund	70,000,000	45,475,988	0	45,475,988	0	772,259	45,475,988	-772,259	44,703,728	0.00	0.00
Institutional Venture Partners XI, L.P.	0	0	0	0	0	0	0	0	0	N/A	N/A
Institutional Venture Partners XII, L.P.	27,000,000	1,427,103	0	1,427,103	0	0	1,427,103	0	1,427,103	0.00	0.00
JW Childs Equity Partners III, L.P.	36,000,000	20,869	0	20,869	0	0	20,869	0	20,869	0.00	0.00
Kayne Anderson Energy Fund VII LP	50,000,000	13,743,820	0	13,743,820	2,000,000	0	13,743,820	2,000,000	15,743,820	0.00	0.00
KCP IV Co-Invest	14,511,303	5,242,184	0	5,242,184	0	0	5,242,184	227,542	5,469,726	4.34	4.34
Keyhaven Capital Partners Fund III, L.P.	30,872,847	17,361,080	0	17,361,080	18,554	1,005,867	17,361,080	-256,524	17,104,556	4.29	4.29
Keyhaven Capital Partners IV LP	14,511,303	5,873,297	0	5,873,297	227,042	0	5,873,297	486,992	6,360,289	4.35	4.35
Levine Leichtman Capital Partners V, L.P.	46,000,000	45,180,803	0	45,180,803	363,729	1,675,417	45,180,803	-1,311,688	43,869,115	0.00	0.00
Levine Leichtman Capital Partners VI LP	37,500,000	19,426,359	0	19,426,359	3,446,001	707,585	19,426,359	2,738,416	22,164,775	0.00	0.00
Lubert Adler VII	34,750,000	24,189,419	0	24,189,419	0	0	24,189,419	0	24,189,419	0.00	0.00
Lubert-Adler Real Estate Fund VII-B LP	36,750,000	31,887,529	0	31,887,529	0	2,383,282	31,887,529	-2,383,282	29,504,247	0.00	0.00
Magentar MTP Energy Opportunities Fund II LLC	37,500,000	31,786,233	0	31,786,233	0	5,027,277	31,786,233	-5,027,277	26,758,956	0.00	0.00
MatlinPatterson Global Opportunities Partners	45,000,000	0	0	0	0	0	0	0	0	N/A	N/A
MatlinPatterson Global Opportunities Partners II	45,000,000	1,439,766	0	1,439,766	0	0	1,439,766	0	1,439,766	0.00	0.00

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ADJUSTED ENDING VALUE POINT TO POINT (10/1/2020 - 12/31/2020)

All Portfolio Investments

Base Currency: USD

Investment	Commitment	Beginning Valuation	Adjustments	Beginning Adjusted Valuation	Period Contributions	Period Distributions	Ending Valuation	Adjustments	Ending Adjusted Valuation	IRR ¹	Unann. IRR
Kentucky Retirement Systems - Pension Fund											
MatlinPatterson Global Opportunities Partners III	45,000,000	7,269,096	0	7,269,096	0	6,702,083	7,269,096	-6,702,083	567,013	0.00	0.00
Merit Mezzanine Fund IV, L.P.	27,000,000	250,825	0	250,825	0	0	250,825	0	250,825	0.00	0.00
Mesa West Core Lending Fund, LP	57,500,000	59,741,593	0	59,741,593	0	0	59,741,593	0	59,741,593	0.00	0.00
Mesa West Real Estate Income Fund II	9,999,999	0	0	0	0	0	0	0	0	N/A	N/A
Mesa West Real Estate Income Fund IV LP	36,000,000	22,154,107	0	22,154,107	0	0	22,154,107	0	22,154,107	0.00	0.00
MHR Institutional Partners III, L.P.	0	0	0	0	0	0	0	0	0	N/A	N/A
MiddleGround Partners I LP	50,000,000	33,147,859	0	33,147,859	11,671,476	399,009	33,147,859	11,272,467	44,420,326	0.00	0.00
Mill Road Capital I, L.P.	27,000,000	3,558,561	0	3,558,561	0	0	3,558,561	0	3,558,561	0.00	0.00
New Mountain Partners II, L.P.	25,000,000	367,288	0	367,288	0	0	367,288	0	367,288	0.00	0.00
New Mountain Partners III, L.P.	33,750,000	21,894,464	0	21,894,464	18,169	4,701,528	21,894,464	-4,683,359	17,211,105	0.00	0.00
New Mountain Partners IV, L.P.	32,800,000	31,596,331	0	31,596,331	0	1,535,715	31,596,331	-1,536,002	30,060,329	0.00	0.00
Oak Hill Capital Partners II, L.P.	67,500,000	929,639	0	929,639	0	0	929,639	0	929,639	0.00	0.00
Oak Hill Capital Partners III, L.P.	33,750,000	7,220,830	0	7,220,830	0	0	7,220,830	0	7,220,830	0.00	0.00
Oberland Capital Healthcare LP	34,500,000	7,743,973	0	7,743,973	0	0	7,743,973	0	7,743,973	0.00	0.00
OCM Opportunities Fund VIIb, L.P.	0	0	0	0	0	0	0	0	0	N/A	N/A
Patron Capital V LP	44,047,800	20,394,318	0	20,394,318	0	342,987	20,394,318	528,650	20,922,968	4.34	4.34
Riverside Capital Appreciation Fund VI, L.P.	35,500,000	20,911,786	0	20,911,786	763,488	5,423,712	20,911,786	-4,660,224	16,251,562	0.00	0.00
Rubenstein Properties Fund II	20,800,000	16,595,376	0	16,595,376	0	0	16,595,376	0	16,595,376	0.00	0.00
Secondary Opportunities Fund III, L.P.	25,000,000	12,739,076	0	12,739,076	0	226,693	12,739,076	-226,755	12,512,321	0.00	0.00
Strategic Value Special Situations Fund IV LP	43,300,000	33,851,367	0	33,851,367	8,660,000	54,962	33,851,367	8,605,038	42,456,405	0.00	0.00
Sun Capital Partners IV	0	0	0	0	0	0	0	0	0	N/A	N/A
Taurus Mining Finance Fund LLC	45,100,000	22,139,242	0	22,139,242	0	2,628,743	22,139,242	-2,628,743	19,510,499	0.00	0.00
TCV VI, L.P.	0	0	0	0	0	0	0	0	0	N/A	N/A
Tenaska Power Fund II, L.P.	27,000,000	773,085	0	773,085	0	0	773,085	0	773,085	0.00	0.00
Triton Fund IV, L.P.	30,783,200	14,560,307	0	14,560,307	0	0	14,560,307	632,004	15,192,311	4.34	4.34
VantagePoint Venture Partners 2006, L.P.	27,000,000	8,588,630	0	8,588,630	0	0	8,588,630	0	8,588,630	0.00	0.00
VantagePoint Venture Partners IV, L.P.	36,000,000	2,347,130	0	2,347,130	0	1,879,327	2,347,130	-1,879,327	467,803	0.00	0.00
Vista Equity Partners III, L.P.	45,000,000	3,805,001	0	3,805,001	5,710	0	3,805,001	5,710	3,810,711	0.00	0.00
Vista Equity Partners IV, L.P.	27,000,000	17,077,180	0	17,077,180	0	0	17,077,180	0	17,077,180	0.00	0.00
Vista Equity Partners VI LP	25,000,000	37,111,280	0	37,111,280	129,861	5,271,869	37,111,280	-5,142,008	31,969,272	0.00	0.00
Walton Street Real Estate Fund VI, LP	36,000,000	11,357,123	0	11,357,123	0	0	11,357,123	0	11,357,123	0.00	0.00
Walton Street Real Estate Fund VII, LP	38,120,000	8,406,316	0	8,406,316	0	0	8,406,316	0	8,406,316	0.00	0.00
Warburg, Pincus Private Equity IX, L.P.	50,000,000	1,643,219	0	1,643,219	0	0	1,643,219	0	1,643,219	0.00	0.00
Warburg, Pincus Private Equity X, L.P.	38,750,000	5,589,175	0	5,589,175	0	1,699,352	5,589,175	-1,699,352	3,889,823	0.00	0.00
Wayzata Opportunities Fund II, L.P.	67,500,000	1,299,855	0	1,299,855	0	0	1,299,855	0	1,299,855	0.00	0.00

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ADJUSTED ENDING VALUE POINT TO POINT (10/1/2020 - 12/31/2020)

All Portfolio Investments

Base Currency: USD

Investment	Commitment	Beginning Valuation	Adjustments	Beginning Adjusted Valuation	Period Contributions	Period Distributions	Ending Valuation	Adjustments	Ending Adjusted Valuation	IRR ¹	Unann. IRR
Kentucky Retirement Systems - Pension Fund											
Wayzata Opportunities Fund III, L.P.	35,500,000	6,131,835	0	6,131,835	0	0	6,131,835	0	6,131,835	0.00	0.00
Wayzata Opportunities Fund, L.P.	67,500,000	0	0	0	0	0	0	0	0	N/A	N/A
White Oak Yield Spectrum Parallel Fund LP	100,000,000	158,309,300	0	158,309,300	6,119,755	2,570,297	158,309,300	3,549,458	161,858,758	0.00	0.00
Total: Kentucky Retirement Systems - Pensi	4,629,540,310	2,243,976,054	-40,373	2,243,935,681	92,357,054	126,690,818	2,246,619,692	-27,425,335	2,219,194,357	0.43	0.43
Total Investments: 104	4,629,540,310	2,243,976,054	-40,373	2,243,935,681	92,357,054	126,690,818	2,246,619,692	-27,425,335	2,219,194,357	0.43	0.43

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Kentucky Retirement Systems - Insurance Fund											
Adams Street SPC II A1	75,000,000	5,712,830	0	5,712,830	10,422,354	0	5,712,830	10,422,354	16,135,184	0.00	0.00
Adams Street SPC II B1	75,000,000	5,787,806	0	5,787,806	10,422,355	0	5,787,806	10,422,355	16,210,161	0.00	0.00
AMERRA Agri Fund II, LP	16,200,000	9,968,814	0	9,968,814	0	126,884	9,968,814	-126,884	9,841,930	0.00	0.00
AMERRA-KRS Agri Holding Company, LP	35,000,000	25,819,160	0	25,819,160	0	1,052,862	25,819,160	-1,052,862	24,766,298	0.00	0.00
Arbor Capital II, L.P.	2,500,000	7,800	0	7,800	0	0	7,800	0	7,800	0.00	0.00
Arcano KRS Fund I, L.P.	4,000,000	2,404,837	0	2,404,837	0	154,961	2,404,837	-154,961	2,249,876	0.00	0.00
Ares Special Situations Fund IV, L.P.	13,808,000	12,870,872	0	12,870,872	0	1,230,416	12,870,872	-1,230,416	11,640,456	0.00	0.00
Avenue Special Situations Fund V, L.P.	7,500,000	0	-10,266	-10,266	0	0	0	-10,266	-10,266	0.00	0.00
Barings Euro Real Estate II	78,001,313	N/A	0	0	286,764	0	N/A	293,652	293,652	2.40	2.40
Barings Real Estate European Value Add I SCSp	55,059,750	29,409,293	0	29,409,293	1,304,038	0	29,409,293	2,626,360	32,035,652	4.39	4.39
Bay Hills Capital I, L.P.	7,500,000	869,011	0	869,011	10,130	222,630	869,011	-212,499	656,512	0.00	0.00
Bay Hills Capital III, L.P.	48,750,000	61,438,635	0	61,438,635	257,973	3,712,973	61,438,635	-3,455,000	57,983,635	0.00	0.00
Bay Hills Emerging Partners II LP	5,000,000	9,548,586	0	9,548,586	0	849,500	9,548,586	-849,500	8,699,086	0.00	0.00
Bay Hills Emerging Partners II-B LP	5,000,000	7,759,353	0	7,759,353	25,000	1,305,500	7,759,353	-1,280,500	6,478,853	0.00	0.00
BDCM Opportunity Fund IV, L.P.	24,420,000	26,564,939	0	26,564,939	227,024	133,184	26,564,939	93,840	26,658,779	0.00	0.00
Blackstone Capital Partners V, L.P.	12,414,403	535,719	0	535,719	0	79,857	535,719	-79,857	455,862	0.00	0.00
Blackstone Capital Partners VI, L.P.	40,000,000	26,087,971	0	26,087,971	28,964	2,666,225	26,087,971	-2,666,225	23,421,746	-0.12	-0.12
Blue Torch Credit Opportunities Fund II LP	60,000,000	8,917,452	0	8,917,452	0	0	8,917,452	0	8,917,452	0.00	0.00
BSP Co-Invest Vehicle K LP	0	12,360,922	0	12,360,922	0	111,610	12,360,922	-111,610	12,249,312	0.00	0.00
BSP Private Credit Fund	50,000,000	41,747,797	0	41,747,797	1,650,165	881,093	41,747,797	769,072	42,516,869	0.00	0.00
BTG Pactual Brazil Timberland Fund I	15,500,000	10,298,532	0	10,298,532	0	305,995	10,298,532	-305,995	9,992,537	0.00	0.00
Camelot Opportunities Fund, L.P.	2,600,000	1,081,755	0	1,081,755	0	0	1,081,755	0	1,081,755	0.00	0.00
Cerberus KRS Levered Loan Opportunities Fund, L.P.	60,000,000	54,128,169	0	54,128,169	0	0	55,261,157	0	55,261,157	2.09	2.09
Columbia Captal Equity Partners IV, L.P.	3,000,000	389,125	0	389,125	0	0	389,125	0	389,125	0.00	0.00
Crestview Partners II, L.P.	7,500,000	3,555,240	0	3,555,240	0	0	3,555,240	0	3,555,240	0.00	0.00
Crestview Partners III, L.P.	21,000,000	12,086,455	0	12,086,455	381,056	109,692	12,086,455	271,364	12,357,819	0.00	0.00
CS Adjacent Investment Partners Parallel LP	60,000,000	18,763,759	0	18,763,759	0	4,254,898	18,763,759	-4,254,898	14,508,861	0.00	0.00
CVC European Equity Partners VI, L.P.	14,805,200	14,125,716	0	14,125,716	375,508	192,769	14,125,716	800,527	14,926,243	4.32	4.32
DAG Ventures II, L.P.	3,000,000	188,728	0	188,728	0	0	188,728	0	188,728	0.00	0.00
DAG Ventures III, L.P.	3,000,000	50,245	0	50,245	0	6,573	50,245	-6,573	43,672	0.00	0.00
DAG Ventures IV, L.P.	10,000,000	7,054,553	0	7,054,553	0	995,892	7,054,553	-995,892	6,058,660	0.00	0.00
DAG Ventures V, L.P.	7,000,000	5,249,668	0	5,249,668	0	201,696	5,249,668	-201,696	5,047,972	0.00	0.00
DCM VI, L.P.	1,500,000	1,498,813	0	1,498,813	0	0	1,498,813	0	1,498,813	0.00	0.00
DivcoWest Fund IV	9,200,000	1,332,902	0	1,332,902	0	0	1,332,902	0	1,332,902	0.00	0.00

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Kentucky Retirement Systems - Insurance Fund											
Essex Woodlands Fund VIII, L.P.	5,000,000	2,238,863	0	2,238,863	0	139,310	2,238,863	-139,310	2,099,553	0.00	0.00
Fundamental Partners III LP	30,000,000	24,907,922	0	24,907,922	0	1,208,459	24,907,922	-1,208,459	23,699,463	0.00	0.00
Green Equity Investors IV, L.P.	7,500,000	0	-4,486	-4,486	0	0	0	-4,486	-4,486	0.00	0.00
Green Equity Investors V, L.P.	10,000,000	4,161,472	0	4,161,472	0	156,804	4,161,472	-156,804	4,004,668	0.00	0.00
Green Equity Investors VI, L.P.	28,000,000	31,573,371	0	31,573,371	0	1,268,437	31,573,371	-1,268,437	30,304,934	0.00	0.00
Green Equity Investors VII LP	25,000,000	29,254,325	0	29,254,325	823,318	2,151,672	29,254,325	-1,328,354	27,925,971	0.00	0.00
Greenfield Acquisition Partners VI, L.P.	16,700,000	204,670	0	204,670	0	10,441	204,670	-10,441	194,229	0.00	0.00
Greenfield Acquisition Partners VII, L.P.	12,200,000	8,486,170	0	8,486,170	0	3,121,403	8,486,170	-3,121,403	5,364,767	0.00	0.00
GTCR Fund IX-A, L.P.	7,000,000	0	0	0	0	0	0	0	0	N/A	N/A
H.I.G. BioVentures II, L.P.	11,500,000	13,352,376	0	13,352,376	0	628,826	13,352,376	-628,826	12,723,550	0.00	0.00
H.I.G. Capital Partner V, L.P.	6,900,000	7,737,805	0	7,737,805	0	0	7,737,805	0	7,737,805	0.00	0.00
H.I.G. Ventures II, L.P.	2,000,000	482,302	0	482,302	0	0	482,302	0	482,302	0.00	0.00
H&F Spock I LP	1,794,672	2,704,961	0	2,704,961	0	0	2,704,961	0	2,704,961	0.00	0.00
Harvest Partners V, L.P.	4,000,000	14,520	0	14,520	0	0	14,520	0	14,520	0.00	0.00
Harvest Partners VI, L.P.	11,600,000	4,693,165	0	4,693,165	0	1,159,040	4,693,165	-1,159,040	3,534,125	0.00	0.00
Harvest Partners VII LP	20,000,000	23,464,500	0	23,464,500	49,345	0	23,464,500	49,345	23,513,845	0.00	0.00
Hellman and Friedman Capital Partners VI, L.P.	7,500,000	122,894	0	122,894	0	0	122,894	0	122,894	0.00	0.00
Horsley Bridge International Fund V, L.P.	5,000,000	10,794,272	0	10,794,272	0	429,326	10,794,272	-429,326	10,364,946	0.00	0.00
IFM US Infrastructure Debt Fund	30,000,000	19,489,709	0	19,489,709	0	330,968	19,489,709	-330,968	19,158,740	0.00	0.00
Institutional Venture Partners XI, L.P.	1,500,000	0	0	0	0	0	0	0	0	N/A	N/A
Institutional Venture Partners XII, L.P.	3,000,000	158,432	0	158,432	0	0	158,432	0	158,432	0.00	0.00
JW Childs Equity Partners III, L.P.	4,000,000	2,319	0	2,319	0	0	2,319	0	2,319	0.00	0.00
Kayne Anderson Energy Fund VII LP	50,000,000	13,743,820	0	13,743,820	2,000,000	0	13,743,820	2,000,000	15,743,820	0.00	0.00
KCP IV Co-Invest	9,959,697	5,242,184	0	5,242,184	0	0	5,242,184	227,542	5,469,726	4.34	4.34
Keyhaven Capital Partners Fund III, L.P.	3,425,940	1,929,008	0	1,929,008	2,062	111,763	1,929,008	-28,503	1,900,505	4.29	4.29
Keyhaven Capital Partners IV LP	9,959,697	4,031,082	0	4,031,082	155,828	0	4,031,082	334,242	4,365,324	4.35	4.35
Levine Leichtman Capital Partners V, L.P.	24,000,000	23,572,593	0	23,572,593	189,772	874,071	23,572,593	-684,299	22,888,294	0.00	0.00
Levine Leichtman Capital Partners VI LP	37,500,000	19,426,359	0	19,426,359	3,446,001	707,585	19,426,359	2,738,416	22,164,775	0.00	0.00
Lubert Adler VII	15,250,000	10,615,499	0	10,615,499	0	0	10,615,499	0	10,615,499	0.00	0.00
Lubert-Adler Real Estate Fund VII-B LP	15,750,000	13,666,084	0	13,666,084	0	1,021,406	13,666,084	-1,021,406	12,644,678	0.00	0.00
Magentar MTP Energy Opportunities Fund II LLC	12,500,000	10,595,411	0	10,595,411	0	1,675,759	10,595,411	-1,675,759	8,919,652	0.00	0.00
MatlinPatterson Global Opportunities Partners	5,000,000	0	0	0	0	0	0	0	0	N/A	N/A
MatlinPatterson Global Opportunities Partners II	5,000,000	159,974	0	159,974	0	0	159,974	0	159,974	0.00	0.00

¹ Calculation follows the "Nominalize Short Term IRR Values" preference

ADJUSTED ENDING VALUE POINT TO POINT (10/1/2020 - 12/31/2020)

All Portfolio Investments

Base Currency: USD

Investment	Commitment	Beginning Valuation	Adjustments	Beginning Adjusted Valuation	Period Contributions	Period Distributions	Ending Valuation	Adjustments	Ending Adjusted Valuation	IRR ¹	Unann. IRR
Kentucky Retirement Systems - Insurance Fund											
MatlinPatterson Global Opportunities Partners III	5,000,000	807,737	0	807,737	0	744,715	807,737	-744,715	63,022	0.00	0.00
Merit Mezzanine Fund IV, L.P.	3,000,000	27,869	0	27,869	0	0	27,869	0	27,869	0.00	0.00
Mesa West Core Lending Fund, LP	29,600,000	40,327,585	0	40,327,585	581,927	0	40,327,585	581,927	40,909,512	0.00	0.00
Mesa West Real Estate Income Fund II	9,999,999	0	0	0	0	0	0	0	0	N/A	N/A
Mesa West Real Estate Income Fund IV LP	14,000,000	8,612,614	0	8,612,614	0	0	8,612,614	0	8,612,614	0.00	0.00
MHR Institutional Partners III, L.P.	4,000,000	1,355,686	0	1,355,686	0	0	1,488,008	0	1,488,008	9.76	9.76
MiddleGround Partners I LP	25,000,000	16,573,932	0	16,573,932	5,835,738	199,505	16,573,932	5,636,233	22,210,165	0.00	0.00
Mill Road Capital I, L.P.	3,000,000	395,395	0	395,395	0	0	395,395	0	395,395	0.00	0.00
New Mountain Partners II, L.P.	5,000,000	73,462	0	73,462	0	0	73,462	0	73,462	0.00	0.00
New Mountain Partners III, L.P.	7,500,000	4,865,434	0	4,865,434	4,038	1,044,784	4,865,434	-1,040,746	3,824,688	0.00	0.00
New Mountain Partners IV, L.P.	17,200,000	16,568,808	0	16,568,808	0	805,314	16,568,808	-805,465	15,763,343	0.00	0.00
Oak Hill Capital Partners II, L.P.	7,500,000	103,294	0	103,294	0	0	103,294	0	103,294	0.00	0.00
Oak Hill Capital Partners III, L.P.	12,500,000	2,674,382	0	2,674,382	0	0	2,674,382	0	2,674,382	0.00	0.00
Oberland Capital Healthcare LP	15,500,000	3,479,178	0	3,479,178	0	0	3,479,178	0	3,479,178	0.00	0.00
OCM Opportunities Fund VIIb, L.P.	7,500,000	14,359	0	14,359	0	0	14,359	0	14,359	0.00	0.00
Patron Capital V LP	17,129,700	7,830,008	0	7,830,008	0	31,983	7,830,008	306,918	8,136,926	4.34	4.34
Riverside Capital Appreciation Fund VI, L.P.	18,712,500	11,022,835	0	11,022,835	402,446	2,858,918	11,022,835	-2,456,472	8,566,363	0.00	0.00
Rubenstein Properties Fund II	9,200,000	7,340,262	0	7,340,262	0	0	7,340,262	0	7,340,262	0.00	0.00
Secondary Opportunities Fund III, L.P.	75,000,000	38,217,228	0	38,217,228	0	680,077	38,217,228	-680,264	37,536,964	0.00	0.00
Strategic Value Special Situations Fund IV LP	21,700,000	16,964,785	0	16,964,785	4,340,000	27,542	16,964,785	4,312,458	21,277,243	0.00	0.00
Sun Capital Partners IV	2,000,000	251,720	0	251,720	0	0	251,720	0	251,720	0.00	0.00
Taurus Mining Finance Fund LLC	19,900,000	9,768,756	0	9,768,756	0	1,159,911	9,768,756	-1,159,911	8,608,845	0.00	0.00
TCV VI, L.P.	2,500,000	41,703	0	41,703	0	0	41,703	0	41,703	0.00	0.00
Tenaska Power Fund II, L.P.	3,000,000	85,901	0	85,901	0	0	85,901	0	85,901	0.00	0.00
Triton Fund IV, L.P.	15,837,631	7,675,054	0	7,675,054	0	0	7,675,054	333,143	8,008,197	4.34	4.34
VantagePoint Venture Partners 2006, L.P.	3,000,000	954,293	0	954,293	0	0	954,293	0	954,293	0.00	0.00
VantagePoint Venture Partners IV, L.P.	4,000,000	260,792	0	260,792	0	0	260,792	0	260,792	0.00	0.00
Vista Equity Partners III, L.P.	5,000,000	422,787	0	422,787	634	0	422,787	634	423,421	0.00	0.00
Vista Equity Partners IV, L.P.	23,000,000	14,547,229	0	14,547,229	0	0	14,547,229	0	14,547,229	0.00	0.00
Vista Equity Partners VI LP	25,000,000	37,111,280	0	37,111,280	129,861	5,271,869	37,111,280	-5,142,008	31,969,272	0.00	0.00
Walton Street Real Estate Fund VI, LP	4,000,000	1,261,902	0	1,261,902	0	0	1,261,902	0	1,261,902	0.00	0.00
Walton Street Real Estate Fund VII, LP	16,755,000	3,694,855	0	3,694,855	0	0	3,694,855	0	3,694,855	0.00	0.00
Warburg, Pincus Private Equity IX, L.P.	10,000,000	328,644	0	328,644	0	0	328,644	0	328,644	0.00	0.00
Warburg, Pincus Private Equity X, L.P.	7,500,000	1,081,735	0	1,081,735	0	328,907	1,081,735	-328,907	752,828	0.00	0.00
Wayzata Opportunities Fund II, L.P.	7,500,000	144,429	0	144,429	0	0	144,429	0	144,429	0.00	0.00

¹ Calculation follows the "Nominalize Short Term IRR Values" preference

ADJUSTED ENDING VALUE POINT TO POINT (10/1/2020 - 12/31/2020)

All Portfolio Investments

Base Currency: USD

Investment	Commitment	Beginning Valuation	Adjustments	Beginning Adjusted Valuation	Period Contributions	Period Distributions	Ending Valuation	Adjustments	Ending Adjusted Valuation	IRR ¹	Unann. IRR
Kentucky Retirement Systems - Insurance Fund											
Wayzata Opportunities Fund III, L.P.	18,712,500	3,232,168	0	3,232,168	0	0	3,232,168	0	3,232,168	0.00	0.00
Wayzata Opportunities Fund, L.P.	7,500,000	0	0	0	0	0	0	0	0	N/A	N/A
White Oak Yield Spectrum Parallel Fund LP	50,000,000	74,504,247	0	74,504,247	2,879,885	1,209,552	74,504,247	1,670,333	76,174,580	0.00	0.00
Total: Kentucky Retirement Systems - Insur	1,805,046,001	1,037,063,866	-14,752	1,037,049,114	46,232,185	47,953,557	1,038,329,176	1,340,773	1,039,669,948	0.42	0.42
Total Investments: 105	1,805,046,001	1,037,063,866	-14,752	1,037,049,114	46,232,185	47,953,557	1,038,329,176	1,340,773	1,039,669,948	0.42	0.42

¹ Calculation follows the "Nominalize Short Term IRR Values" preference

Special Called Investment Committee Meeting - Standard Reports

Investment Fees and Expenses						
For the Year Ended December 31, 2020						
Pension						
	2021			2020		
	FYTD Fees	% of MV	Market Value	FYTD Fees	% of MV	Market Value
Absolute Return	\$ 262,462	0.18%	\$ 142,519,762	\$ 609,353	0.30%	\$ 200,149,411
Investment Advisory Fees	262,462			468,151		
Performance Fees				141,203		
Miscellaneous Fees and Expenses						
Core Fixed Income	1,401,242	0.06%	2,282,848,163	1,426,256	0.06%	2,489,660,840
Investment Advisory Fees	1,375,451			1,414,220		
Performance Fees						
Miscellaneous Fees and Expenses	25,791			12,036		
Opportunistic	1,132,942	0.31%	370,905,924	1,096,338	0.60%	183,538,333
Investment Advisory Fees				1,096,338		
Performance Fees	1,132,942					
Miscellaneous Fees and Expenses						
Private Equity	24,365,092	2.14%	1,139,236,934	11,345,800	1.02%	1,116,015,335
Investment Advisory Fees	4,294,168			4,548,674		
Performance Fees	17,523,541			2,514,234		
Miscellaneous Fees and Expenses	2,547,383			4,282,892		
Public Equity	5,850,570	0.09%	6,295,655,905	4,600,941	0.09%	5,348,945,522
Investment Advisory Fees	5,712,166			4,450,788		
Miscellaneous Fees and Expenses	138,403			150,153		
Real Estate	980,197	0.17%	584,165,093	7,309,036	1.28%	569,563,597
Investment Advisory Fees	2,324,269			2,882,854		
Performance Fees	(2,070,445)			3,675,094		
Miscellaneous Fees and Expenses	726,374			751,088		
Real Return	3,216,441	0.38%	847,105,839	4,639,762	0.40%	1,147,108,341
Investment Advisory Fees	1,985,069			2,348,097		
Performance Fees	1,259,862			1,490,417		
Miscellaneous Fees and Expenses	(28,490)			801,248		
Specialty Credit Fixed Income	17,264,718	0.71%	2,435,764,675	7,315,201	0.35%	2,098,791,332
Investment Advisory Fees	7,320,545			6,069,795		
Performance Fees	8,459,198			1,074,069		
Miscellaneous Fees and Expenses	1,484,975			171,337		
Cash	1,435,169	0.54%	266,674,138	1,499,465	0.65%	231,805,380
Consulting				237,415		
Trustee	64,035			620,641		
Miscellaneous Fees and Expenses	1,371,135			641,409		
Both FY20 and FY21 Real Estate fees reflect the Prologis adjustment made in June 2020						
Total Investment Mgmt Fees	\$ 55,908,833	0.39%	14,364,876,432	\$ 39,842,153	0.30%	13,385,578,092

KENTUCKY RETIREMENT SYSTEMS						
Investment Fees and Expenses						
For the Year Ended December 31, 2020						
Insurance						
	2021			2020		
	FYTD Fees	% of MV	Market Value	FYTD Fees	% of MV	Market Value
Absolute Return	\$ 105,411	0.18%	\$ 58,349,008	\$ 240,901	0.29%	\$ 82,009,137
Investment Advisory Fees	105,411			184,952		
Performance Fees				55,949		
Miscellaneous Fees and Expenses						
Core Fixed Income	568,510	0.07%	873,074,122	571,870	0.06%	998,806,814
Investment Advisory Fees	558,897			566,748		
Performance Fees						
Miscellaneous Fees and Expenses	9,613			5,122		
Opportunistic	576,902	0.31%	188,867,580	558,262	0.60%	93,458,849
Investment Advisory Fees						
Performance Fees	576,902			558,262		
Miscellaneous Fees and Expenses						
Private Equity	16,438,473	3.00%	548,052,248	5,416,330	1.00%	543,956,015
Investment Advisory Fees	2,892,530			3,492,904		
Performance Fees	12,027,941			688,085		
Miscellaneous Fees and Expenses	1,518,003			1,235,341		
Public Equity	2,616,659	0.09%	2,840,620,347	2,034,560	0.09%	2,383,165,173
Investment Advisory Fees	2,557,467			1,968,856		
Miscellaneous Fees and Expenses	59,192			65,704		
Real Estate	536,259	0.22%	246,753,396	3,077,261	1.30%	237,234,843
Investment Advisory Fees	1,015,005			1,222,340		
Performance Fees	(795,199)			1,472,075		
Miscellaneous Fees and Expenses	316,453			382,847		
Real Return	1,245,054	0.34%	361,358,291	1,928,672	0.40%	487,974,976
Investment Advisory Fees	842,984			995,970		
Performance Fees	419,601			595,981		
Miscellaneous Fees and Expenses	(17,531)			336,720		
Specialty Credit Fixed Income	7,239,534	0.67%	1,085,313,632	3,369,385	0.39%	869,583,845
Investment Advisory Fees	3,373,550			2,612,739		
Performance Fees	3,344,830			670,980		
Miscellaneous Fees and Expenses	521,154			85,666		
Cash	842,635	0.78%	108,497,980	798,277	1.35%	59,130,447
Consulting				101,247		
Trustee	77,042			423,646		
Miscellaneous Fees and Expenses	765,593			273,383		
Both FY20 and FY21 Real Estate fees reflect the Prologis adjustment made in June 2020						
Total Investment Mgmt Fees	\$ 30,169,437	0.48%	6,310,886,603	\$ 17,995,518	0.31%	5,755,320,099



KENTUCKY RETIREMENT SYSTEMS

David L. Eager, Executive Director

Perimeter Park West • 1260 Louisville Road • Frankfort, Kentucky 40601
kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822



MEMORANDUM

TO: Investment Committee Board Members
Kentucky Retirement Systems

FROM: Carol Johnson, Administrative Secretary
Kentucky Retirement Systems

DATE: January 19, 2021

RE: Manager Meetings

Please be advised that no manager meetings took place this past quarter due to the COVID-19 restrictions that were in place. Therefore, you will not find a meetings report for this past quarter in Board Books.