INVESTMENT MANAGEMENT AGREEMENT

(1) Kentucky Retirement Systems (2) Kentucky Retirement Systems Insurance Trust Fund

(Names of Accounts)

(1) Kentucky Retirement Systems and (2) Kentucky Retirement Systems Insurance Trust Fund (each, the "Client") hereby employ Loomis, Sayles & Company, L.P. ("Loomis Sayles") as investment manager for the assets (and all additions, accumulations and earnings thereon) in the above named accounts (each, the "Account") on the terms and conditions set forth in this Investment Management Agreement ("Agreement").

1. AUTHORITY:

(Please check one)

Discretionary. Subject to the terms and conditions in this Agreement, Loomis Sayles shall have full authority and complete discretion in the investment and reinvestment of the Account in accordance with the provisions of this Agreement, including any special investment guidelines provided by the Client, and shall determine what securities, assets or other property (each an "Investment") shall be acquired, held or disposed of and what portion of the Account shall be held uninvested.

Loomis Sayles shall discharge its duties under this Agreement solely in the interest of the Client with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent investment manager acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims. In addition, Loomis Sayles is a "fiduciary" of the Client, as that term is defined in the U.S. Employee Retirement Income Security Act of 1974, as amended ("ERISA"), with respect to the investment and management of the assets in the Account.

Loomis Sayles will place brokerage orders for the execution of portfolio transactions in accordance with its Brokerage Allocation Policies and Procedures (the current version of which is attached hereto as Exhibit H). In selecting brokers or dealers, Loomis Sayles shall use reasonable efforts to seek the most favorable combination of price and execution, and may consider the fact that a broker or dealer has furnished, or has agreed to furnish in the future, statistical, research or other information or services which generally enhance Loomis Sayles' investment research and portfolio management capability for investing the assets. If Loomis Sayles accepts or receives such information or services from a broker or dealer, then Loomis Sayles shall report to the Client.

Notwithstanding the foregoing, Loomis Sayles shall not place orders with any broker/dealer who: (a) the Client has by written notice to Loomis Sayles deemed unsuitable for Account trades or (b) is affiliated with Loomis Sayles. Loomis Sayles agrees to be bound by any changes to such broker/dealer list upon receipt of written notice from the Client. In addition, Loomis Sayles shall not engage in transactions that involve a broker acting as a principal where the broker is an affiliate of the investment manager, without the Client's advance written consent. Loomis Sayles shall not place orders to purchase and/or sell any assets on the basis of any

material information obtained or utilized by Loomis Sayles in violation of the securities laws of the United States, or any other country in which Loomis Sayles transacts business on the Client's behalf.

Loomis Sayles will issue instructions to the custodian or trustee of the Account as may be appropriate in connection with the settlement of portfolio transactions. Loomis Sayles' instructions shall be made in writing sent by first-class mail, electronically through SWIFT or other industry standard means or, at Loomis Sayles' option, orally and confirmed in writing as soon as practical thereafter.

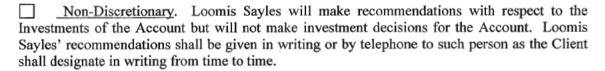
Loomis Sayles may, at its sole discretion, aggregate purchases or sales of any Investment effected for the Account with purchases or sales, as the case may be, of the same Investment effected at the same time for the accounts of one or more of Loomis Sayles' other clients. When transactions are so aggregated, (a) the actual prices applicable to the aggregated transaction will be averaged and the Account and each other account participating in the aggregated transaction shall be deemed to have purchased or sold its share of the Investment involved at such average price and (b) all transaction costs incurred in effecting such an aggregated transaction shall be shared on a pro rata basis among all accounts participating in such aggregated transaction.

Loomis Sayles is hereby appointed as the Client's attorney-in-fact to execute all documentation to facilitate investment in Investments for the Account, including without limitation, broker dealer agreements, counterparty agreements, and futures commission agreements and any other documentation deemed necessary to effect the Investments to the extent permitted by this Agreement and any investment guidelines.

Loomis Sayles acknowledges that the Client reserves all immunities, defenses, rights or actions arising out of its sovereign status or under the Eleventh Amendment to the United States Constitution, and no waiver of any such immunities, defenses, rights or actions shall be implied or otherwise deemed to exist by its entry into this Agreement, by any express or implied provision thereof or by any actions or omissions to act on behalf of the Client or any representative or agent of the Client, whether taken pursuant to this Agreement or prior to the entry by the Client into this Agreement.

Loomis Sayles is authorized to exercise all voting rights, to execute consents and to exercise or sell stock subscription and conversion rights and to join in or oppose (jointly or with others) reorganizations, recapitalizations and liquidations and, in connection therewith, Loomis Sayles is hereby appointed as the Client's attorney-in-fact to execute all documentation to facilitate any reorganization, recapitalization or liquidation, unless the Client otherwise specifies in writing.

The Client has arranged for a periodic sweep of cash held in the Account into the custodian's short-term investment fund program. Loomis Sayles will not be responsible for any Investments made pursuant to such cash sweeps.



1A. FUNDING:

(Please check one)

The account will be funded with cash.

	The acc	count w	ill be	funded	with secu	rities an	d Client	has comple	eted	Loomis	Sayles	s' in
kind	securities	review	and	received	Loomis	Sayles'	written	agreement	to a	ccept in	n kind	the
secur	rities propo	sed to b	e tra	nsferred.								

2. INVESTMENT OBJECTIVE AND GUIDELINES:

Loomis Sayles' investment decisions or recommendations for the Account shall be in accordance with such investment policies and restrictions ("Guidelines") as the Client may establish for the Account and the Client's Statement of Investment Policy ("Investment Policy"). It will be the Client's responsibility to advise Loomis Sayles in writing of such Guidelines and of any changes therein, and to give Loomis Sayles prompt written notice if the Client deems any investment decisions or recommendations made for the Account to be in violation of such Guidelines. If the Client so requests, Loomis Sayles will consult with it as to the Guidelines that Loomis Sayles believes to be appropriate for the Account. The initial Guidelines for the Account are attached as Exhibit A and the Investment Policy is attached as Exhibit I, and the Guidelines and the Investment Policy are incorporated by reference in this Agreement. Except as otherwise specified, Loomis Sayles shall not be limited by the laws of any jurisdiction relating to investments by fiduciaries. In the event the terms of the Guidelines conflict with those of the Investment Policy, the terms of the Investment Policy shall control. Loomis Sayles will attempt to obtain the "best available price and most favorable execution" with respect to all Account transactions.

The Client may withdraw from and decrease the Account assets in its sole discretion, with or without prior notice. Any such notice shall set forth the amount of any such withdrawal or identify the investment assets and amount of cash to be withdrawn, the date as of which such withdrawal shall be effective and such other information that the Client deems necessary or appropriate. On and after the effective date of such withdrawal and decrease and except as may otherwise be set forth in such notice, Loomis Sayles shall cease to be responsible for future investment of the assets and/or cash withdrawn.

3. USE OF MUTUAL FUNDS OR OTHER POOLED VEHICLES:

Loomis Sayles is hereby authorized to invest the Account in shares or interests of mutual funds or other collective investment vehicles that are sponsored and/or managed by Loomis Sayles or Loomis Sayles' affiliates (each a "Fund" and collectively, the "Funds"). These Funds may incur additional and/or higher expenses than the fees and expenses set forth in the Fee Schedule (Exhibit C) in effect for the Account; provided that Loomis Sayles shall fully offset fees paid by the Client to Loomis Sayles pursuant to the Fee Schedule by all such additional and/or higher fees and expenses. Such expenses may include payments for services (such as distribution, administrative, or transfer agent services) rendered to a Fund by Loomis Sayles or its affiliates. Some of the Funds in which the Account may invest may be Funds that are not charged or assessed any fees or expenses other than brokerage commissions, other portfolio transaction costs, taxes and extraordinary expenses. A copy of the current prospectus of any Fund (which includes information about all fees and expenses) in which Loomis Sayles intends to invest the Account's assets shall be provided before any initial investment in the Fund, at which time the Client may direct that the Account's assets not be invested in the Fund. In addition, the Client may revoke the authority granted herein at any time.

Investment in a Fund may be desirable for the Account to obtain exposure to specialized asset classes in an efficient manner, and because investment in a Fund offers a number of operational and pricing advantages, such as daily pricing of shares and yield quotations, diversity, liquidity and the opportunity to obtain economies of scale. In calculating the credit quality and duration of a Fund, that of the Fund will be used and not the credit quality and duration of any individual

investments purchased for the Fund. If neither S&P nor Moody's rates the Fund, then Loomis Sayles' internal rating of the Fund will be used for purposes of calculating the credit quality restrictions.

Loomis Sayles will impose no management fee under this Agreement with respect to any assets invested in a Fund that pays a management fee or performance fee to Loomis Sayles or its affiliates, and Loomis Sayles shall be compensated for its services with respect to those assets directly by the Funds. The investment management fee of a Fund, if any, will be described in its prospectus. There may be a differential between the fee paid under this Agreement and the fee and expenses paid by a Fund. An Account investing in a Fund that does not charge a management fee shall continue to be charged the management fee specified in this Agreement with respect to the Account assets invested in the Fund.

4. REPRESENTATIONS:

The Client represents and warrants that

- (a) the execution and delivery of this Agreement has been authorized by appropriate corporate action and does not violate any obligation by which it is bound;
- (b) Loomis Sayles' performance of its obligations in accordance with this Agreement and any Guidelines made a part hereof will not conflict with any provision of any document or instrument relating to the Account; and
- (c) the Client has received a copy of Part II of Loomis Sayles' Form ADV.

If there should be any change in any matter represented and warranted in this section, the Client will immediately furnish revised or corrected information to Loomis Sayles.

5. CLIENT STATUS:

(Complete the following as applicable)

X	The Client is an "accredited investor," as defined in Regulation D under the Securities Act of 1933 (the "Act"),
X	The Client is a "qualified purchaser," for purposes of Section 3(c)(7) of the Investment Company Act of 1940,
X	The Client is a "qualified institutional buyer" as defined in Rule 144A under the Act of the following type: A plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees. (See (A)(i)(f) of Exhibit B.). As of the date hereof, the Client owns or invests on a discretionary basis at least \$ of "eligible securities". The Client's current fiscal year ends on June 30. (Please refer to Exhibit B for definitions of these terms).

X	The Client	t is a pension	ı plan, U.S.	regulated	investment	company	, non-U.S.	reg	ister	ed or
	regulated	investment	company,	insurance	company	separate	account,	or a	an e	entity
	formed un	der section 5	501(c)(3) of	the Intern	al Revenue	Code.				

	formed
The C	lient is:
□ Ta	axable

If there should be any change in any matter represented and warranted in this section, the Client will immediately furnish revised or corrected information to Loomis Sayles.

6. LIABILITY:

Unless otherwise required by applicable law, in the absence of Loomis Sayles' willful misfeasance, bad faith, gross negligence, fraud, breach of fiduciary duties or reckless disregard of its obligations pursuant to this Agreement, Loomis Sayles shall not be liable for any act or omission in the course of or connected in any way with Loomis Sayles' rendering of services pursuant to this Agreement or for any losses that are sustained in the purchase, holding or sale of any Investment. If any loss is suffered due to the acts or omissions of a custodian, a broker, dealer or underwriter selected and monitored by Loomis Sayles in good faith and in the exercise of reasonable diligence, to which Loomis Sayles has given investment instructions pursuant to this authority, the Client will look only to the custodian, broker, dealer or underwriter, to make good on that loss. Notwithstanding anything contained in this paragraph to the contrary, nothing herein shall constitute a waiver or limitation under any federal or state securities laws.

Loomis Sayles acknowledges that the Client has advised Loomis Sayles that indemnification obligations under this Agreement that may be attributed to the Client are not expressly authorized by the laws of the Commonwealth of Kentucky. As a result thereof, the Client shall not be obligated to make any payment constituting such indemnification to the extent not authorized under such laws. Representations, warranties or covenants made by the Client in this Agreement shall be deemed to be modified so as to be consistent with the provisions of the preceding sentence.

7. REPORTING:

The Client will provide, or instruct the Account's custodian or trustee to provide, Loomis Sayles with such periodic reports concerning the status of the Account as Loomis Sayles may reasonably request. Quarterly, Loomis Sayles will provide the Client with commentary on the performance of their portfolio(s), reviews of the market and future expectations. Also, Loomis Sayles' eService provides clients with online access to current account information. Performance appraisal, purchase and sale summary, portfolio summary, quarterly report and quarterly data sheet client reports are available via eService and can be viewed, printed and saved in Adobe Acrobat PDF or Microsoft Excel format. Loomis Sayles will also tailor reports to meet specific client needs upon request.

8. CONFIDENTIALITY:

All information and advice furnished by either party to the other hereunder shall be treated as confidential and shall not be disclosed to third parties except as required by law or requested by regulators or necessary in the performance of this Agreement. Loomis Sayles may not disclose the Client's name in representative account lists and similar marketing materials without the Client's consent.

(a) Loomis Sayles hereby acknowledges that the Client is a public agency subject to (i) Kentucky's public record law (the "Open Records Act," Kentucky Revised Statutes sections 61.870 to 61.884), which provide generally that all records relating to a public agency's business are open to public inspection and copying unless exempted under the Open Records Act, (ii) Kentucky Revised Statutes section 61.645(19)(i) (the "Fee Disclosure Law"), and (iii)

Kentucky Revised Statutes sections 61.645 (19)(1) and (20) (the "Document Disclosure Law"), which provide generally that all contracts or offering documents for services, goods, or property purchased or utilized by the Client shall be made available to the public unless exempted under the Document Disclosure Law. Notwithstanding any provision in this Agreement, Loomis Sayles hereby agrees that (i) the Client will generally treat all information received from Loomis Sayles as open to public inspection under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, unless such information falls within an exemption under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, and (ii) the Client will not be deemed to be in violation of any provision of this Agreement relating to confidentiality if the Client discloses or makes available to the public (e.g., via Investor's website) any information regarding this Account to the extent required pursuant to or under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, (even if a court or the Attorney General later determines that certain information disclosed by the Client falls within an exemption under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law).

- (b) Loomis Sayles agrees that the Client may disclose a redacted version of this Agreement, in each case to the extent required by the Document Disclosure Law, once this Agreement is fully executed.
- (c) Notwithstanding any provision in this Agreement to the contrary, Loomis Sayles shall provide the Client on at least a quarterly basis the information set forth in the Fee Disclosure Law, including but not limited to, (i) the dollar value of fees and commissions paid by the Client to Loomis Sayles or its affiliates; (ii) the dollar value of the Client's pro rata share of any profit sharing, carried interest distributions or any other incentive arrangements, partnership agreements, or any other partnership expenses paid to Loomis Sayles or its affiliates; and (iii) if applicable, the name and address of all individual underlying managers or partners in any fund of funds in which the Client's assets are invested.
- (d) Loomis Sayles agrees that the Client may disclose confidential information to any governmental body that has oversight over it and its statutory auditor, without notice to Loomis Sayles; provided that such information retains the same confidential treatment with the recipient.
- (e) Loomis Sayles acknowledges and agrees that pursuant to the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, the Client may publicly disclose the information set forth in this paragraph without further notice to Loomis Sayles.

9. SERVICES TO OTHER CLIENTS:

The Client understands that Loomis Sayles performs investment advisory services for various clients, including investment companies, and may give advice and take action with respect to any of those clients that differs from the advice given or the timing or nature of action taken with respect to the Account. Loomis Sayles shall have no obligation to purchase or sell for the Account, or to recommend for purchase or sale by the Account, any Investment which Loomis Sayles, its principals, affiliates or employees may purchase or sell for themselves or for any other clients. Loomis Sayles shall not be liable for any failure to purchase or sell for the Account, or to recommend for purchase or sale by the Account, any Investment on the basis of any material non-public information that may come into Loomis Sayles' possession or if, in Loomis Sayles' opinion, a transaction in any Investment might constitute a violation of any law or regulation, breach of any fiduciary obligation or confidential relationship Loomis Sayles may have to or with another person or entity or be unadvisable because of the percentage of the outstanding Investments of the issuer of such Investment acquired by Loomis Sayles on behalf

of all Loomis Sayles' clients in the aggregate. The Client understands that transactions in a specific Investment may not be accomplished for all of Loomis Sayles' client accounts at the same time or at the same price.

In connection with the Client's Account, Loomis Sayles shall ensure compliance with Kentucky Revised Statutes Section 61.650(1)(d) to the extent applicable. For the avoidance of doubt, it is understood that certain of the above-referenced obligations (including the reference to "the individual ... managing retirement system assets") apply to Loomis Sayles and to the individuals employed by Loomis Sayles.

10. COMPENSATION:

For Loomis Sayles' services the Client will pay Loomis Sayles quarterly fees in accordance with the fee schedule attached as <u>Exhibit C</u> or on such other basis as may be agreed upon in writing from time to time.

11. NOTICES:

Any notices and other communications between the parties contemplated by this Agreement shall be sent by registered letter, overnight express or facsimile with confirmation of receipt to the addresses indicated in Exhibit D hereto. In addition, the Client's authorized signature list is attached as Exhibit E and is incorporated herein.

Notwithstanding the foregoing, the parties may consent to receiving the same notices and communications electronically if they are available in an electronic format. Electronic format includes PDF documents, e-mails or e-mailed links to information on a web site. If one of the parties consents to electronic delivery by the other party, the first party must inform the other party of (a) the documents concerned by its consent and (b) the e-mail addresses to which the documents should be sent. When certain of such notices and communications are not available electronically, they will be delivered as set forth in the paragraph above. Each party may revoke such electronic delivery consent at any time by providing written notice to the other party. The Client hereby consents to receive Form ADV or other similar communication from Loomis Sayles electronically at the email address(es) included in Exhibit D.

12. ASSIGNMENT; TERMINATION:

No assignment, as that term is defined in the Advisers Act, of this Agreement may be made by Loomis Sayles without the Client's consent.

This Agreement may be terminated by either party hereto at any time, without penalty, upon at least 30 business days' written notice to the other party. In the event this Agreement is terminated during a quarter, Loomis Sayles shall be paid a fee based on the pro rata portion of such quarter during which this Agreement was in effect.

The Client may also file suit against Loomis Sayles for any breach of duty and/or confidentiality, without limitation. Should the Client obtain a judgment against Loomis Sayles as a result of a breach of contract, Loomis Sayles consents to such judgment being set-off against any monies owed by the Client to Loomis Sayles under this Agreement or other contracts. This section shall not be interpreted to limit the Client's remedies as provided for by law.

13. CHANGE IN PARTNERSHIP:

Loomis Sayles will notify the Client of any change in the membership of its partnership within a reasonable time after such change.

14. BENEFIT OF MORE FAVORABLE TERMS:

Loomis Sayles will not agree to a lower effective fee rate with any other comparable client, excluding clients whose fees are based on performance, commingled funds and clients who invest in commingled funds, without simultaneously offering the same effective fee rate to Client, pursuant to this Agreement. For purposes of this provision, the term "comparable client" shall mean any person or entity, excluding clients whose fees are based on performance, commingled funds and clients who invest in commingled funds, that (1) enters into an investment management agreement with Loomis Sayles after the date hereof (that is not a renewal, extension of or an amendment of an existing agreement) for the management of an account that is comparable or smaller in size (either alone or together with other accounts of it and its affiliates) to the Account and (2) receives similar investment management services to those provided to the Account, including without limitation, having comparable investment guidelines, restrictions and objectives. The determination of the applicability of this provision to any comparable client shall be made at the time of its agreement to an effective fee rate.

15. PLACEMENT AGENTS:

Loomis Sayles agrees that it will remain in compliance with the Client's Manager and Placement Agent Statement of Disclosure Policy, which is attached hereto as Exhibit J. Loomis Sayles represents that the "Statement of Disclosure and Placement Agents - Manager Questionnaire" that it executed on December 3, 2018 remains accurate, and agrees to provide an updated form of the Statement as of the execution of this Agreement.

In addition, Loomis Sayles represents and warrants that:

- (a) No fees, bonuses, compensation, gratuities including placement fees and finder's fees, have been promised or provided by or on behalf of Loomis Sayles or any of its agents or affiliates to any placement agent, finder or other person or entity in connection with the Client's investment, or which could be charged to the Client directly or indirectly.
- (b) None of (i) Loomis Sayles, (ii) any placement agent, solicitor, broker-dealer or other agent engaged by Loomis Sayles, or (iii) any other affiliate of Loomis Sayles, has a commercial, investment, or business or other similar relationship with a Covered Person (as defined below), nor has it engaged in any financial or other transaction with a Covered Person. "Covered Person" means: (i) any Enumerated Person, (ii) any person known to Loomis Sayles to be an immediate family member of an Enumerated Person (i.e., a spouse, parent, child or sibling), and (iii) any affiliate of any of the foregoing known to Loomis Sayles. "Enumerated Person" means (i) any member of the Kentucky Retirement Systems Board of Trustees, and (ii) any other person which is a fiduciary, trustee, staff member, or employee of the Client.
- (c) Neither Loomis Sayles nor any affiliate or agent of Loomis Sayles, has offered, promised, or provided, directly or indirectly, anything of economic value to any Covered Person in connection with the Client's investment. Items of economic value include (by way of example, but not by way of limitation) any economic opportunity, future employment, gift, loan, gratuity, entertainment, meals, campaign contribution, finder's fee, placement fee, discount, travel or trip, favor, or service.

- (d) Neither Loomis Sayles nor any of its affiliates has been convicted of bribery or attempting to bribe an officer or employee of the Commonwealth of Kentucky, nor have any of them made an admission of guilt of such conduct.
- (e) The term "in connection with the Client's investment," as used in this paragraph, includes (i) obtaining an introduction to the Client or any of the Client's officers or employees, and (ii) obtaining a favorable recommendation with respect to the Client's investment. The term "agents," as used in this paragraph, includes anyone who is acting at the behest of any of the persons identified above.
- (f) Loomis Sayles agrees to provide the Client notice within 10 business days if it becomes aware that any of the provisions in this paragraph are not true and accurate, either on the date on which made or on any subsequent date.

16. MANAGER NOT ACTING AS PRINCIPAL:

Loomis Sayles shall not act as a principal in sales and/or purchases of the assets, unless Loomis Sayles shall have received prior written approval from an authorized person listed in Exhibit E for such transaction. Loomis Sayles shall also not engage in prohibited transactions to the extent set forth in section 406(b) of ERISA unless the prohibited transaction meets the conditions of one or more prohibited transaction exemptions.

17. NOTIFICATION OF TAX LIABILITIES:

Loomis Sayles shall use its best efforts to promptly notify the Client if it becomes aware that the Client is required to pay taxes to any government or to file any returns or other tax documents with respect to income earned on the Account assets.

18. MANAGER REPRESENTATIONS:

Loomis Sayles hereby represents and acknowledges to the Client that:

- (a) Loomis Sayles is duly organized, validly existing and in good standing under the laws of the state of its organization and has complete authority to carry out its business as it has been conducted;
- (b) The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby are within the power of Loomis Sayles and have been duly authorized by all necessary corporate action. Loomis Sayles has duly executed and delivered this Agreement, and this Agreement constitutes the legal, valid and binding agreement and obligation of Loomis Sayles, enforceable against Loomis Sayles in accordance with its terms, except insofar as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar limitations on creditors' rights generally and general principles of equity.
- (c) Neither the execution and delivery of this Agreement nor the consummation of the transactions provided herein will violate any agreement to which Loomis Sayles is a party or by which it is bound, any law, regulation, order, or any provision of the charter documents of Loomis Sayles.
- (d) Loomis Sayles is a registered investment adviser as defined is the Investment Advisers Act of 1940, as amended ("the Advisers Act"), and therefore eligible to act as an investment manager under ERISA, is registered in or is exempt from registration in accordance with

applicable state laws and is not subject to any of the disqualifications set forth in Section 411 of ERISA;

- (e) Loomis Sayles has completed, obtained, and performed all registrations, filings, approvals, authorizations, consents, or examinations required by any government or governmental authority for acts as contemplated by this Agreement;
- (f) Loomis Sayles will maintain the following insurance coverage for the duration of this Agreement plus sixty months after expiration or termination of this Agreement. Proof of the existence of such policies shall be provided to the Client annually:
 - a. A fidelity bond in the minimum amount of with a maximum deductible of The bond shall cover at a minimum, losses due to dishonest or fraudulent acts or omissions by Loomis Sayles; and
 - b. An errors and omissions policy in the minimum amount of with a maximum deductible of \$1,000,000 per claim. The policy shall cover, at a minimum, losses caused by errors, omissions, or negligent acts of Loomis Sayles.
- (g) Loomis Sayles will immediately notify the Client by telephone (at the telephone number previously provided to Loomis Sayles), upon the receipt of information indicating possible risks of seizure, loss, or loss of use of Account assets. Such telephonic notice shall be followed by written notice to the Client within twenty-four hours;
- (h) Loomis Sayles has disclosed to the Client any ongoing, and will notify the Client of any future, litigation that could impact Loomis Sayles' ability to perform its duties as an investment adviser to the Account. It also has, and will in the future, promptly disclose to the Client directly, any pending or future investigation of Loomis Sayles by the U.S. Securities and Exchange Commission ("SEC") or any other regulatory authority that could impact Loomis Sayles' reputation or ability to perform its duties as an investment adviser to the Account; and
- Loomis Sayles will promptly notify the Client in writing in the event any of these representations is no longer true.
- (j) Loomis Sayles will make all required filings with all applicable regulatory agencies within all prescribed deadlines on behalf of its investments of the assets in the Account.
- (k) Loomis Sayles shall annually file with the Client a compliance certificate, executed by a responsible officer of Loomis Sayles' firm, within thirty (30) days after each June 30.

19. MEETINGS:

On a periodic basis mutually convenient to Loomis Sayles and Client, Loomis Sayles shall meet with the Client to review the Account investments and to discuss current holdings and future placements and acquisitions. Additionally, the individual or individuals assigned by Loomis Sayles to the Client Account must be generally accessible by telephone to the Client on a daily basis during regular business hours.

20. CHANGE IN STATUS:

Loomis Sayles shall promptly notify the Client in writing of any material change in Loomis Sayles' business which may affect Loomis Sayles' ability to perform its duties and responsibilities under this Agreement, including, but not limited to, any change in Loomis

Sayles' status as a registered investment manager, any material litigation, any material adverse changes to Loomis Sayles' financial or organizational status or any material change in its senior management, and any change in personnel authorized to make investment decisions regarding the Account. It shall promptly notify the Client of any conflicts of interest arising from Loomis Sayles and its relationship with any entity. If, at the sole discretion of the Client, it is determined that any relationship would be considered a potential or actual conflict of interest, the Client may require Loomis Sayles to cease dealing with such entity on behalf of the Client. Loomis Sayles agrees to provide the Client a copy of any amendment to its Form ADV Part 2A promptly after Loomis Sayles files such amendment with the SEC, which shall include a summary of any material changes.

21. AUDIT OR EXAMINATION OF RECORDS:

Loomis Sayles agrees that any authorized representative of the Client shall have access to and the right to examine, audit, excerpt and transcribe, any directly pertinent books, documents, papers, and records of Loomis Sayles relating to this Agreement upon reasonable advance notice and during Loomis Sayles' normal business hours. Loomis Sayles shall retain all records relating to this Agreement for five (5) years following the date of final payment or completion of any required audit, whichever is later.

22. MISCELLANEOUS:

This Agreement shall not be effective until receipt by both parties of an executed copy. This Agreement and the rights of the parties hereunder shall be governed by applicable federal law, including ERISA and, to the extent not pre-empted by the foregoing, the internal laws of the Commonwealth of Massachusetts; provided that to the extent the terms of this Agreement require interpretation or enforcement of a law, regulation or public policy of the Commonwealth of Kentucky, the laws of the Commonwealth of Kentucky shall govern, without regard to principles of conflicts of law. Any legal action or proceeding involving any claim asserted by or against the Client arising out of this Agreement may be brought only in and subject to the exclusive jurisdiction of the Franklin County Circuit Court in the Commonwealth of Kentucky. No term or provision of this Agreement may be amended except by signed writing. This Agreement constitutes the entire Agreement with respect to the subject matter hereof. The Client's tax identification forms and special requirements are attached hereto as Exhibits F and G, respectively. In case one or more of the provisions contained in this Agreement shall be found to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby. All section headings in this Agreement are for convenience of reference only, do not form part of this Agreement, and will not affect in any way the meaning or interpretation of this Agreement.

The undersigned parties have entered into this Agreement, effective as of the date accepted and agreed to by Loomis Sayles.

Kentucky Retirement Systems

	SAL
	Ву:
	Name:
	Title:
	Kentucky Retirement Systems Insurance Trust Fund
	Ву:
	Name:
	Title:
Accepted and agreed:	
LOOMIS, SAYLES & COMPANY, L.P., by its C LOOMIS, SAYLES & COMPANY, INCORPOR	General Partner ATED
Pur Sur Sur Sur Sur Sur Sur Sur Sur Sur S	
By: Authorized Signature	
Name: Lauren B. Pitalis Vice President, Director of Cli Title: Date: /2/11/18	ent Intake
Title:	
Date: 12/11/18	

EXHIBIT A

ACCOUNT GUIDELINES

Intermediate Core Disciplined Alpha Kentucky Retirement Systems

Benchmark

The benchmark for the portfolio is the Bloomberg Barclays U.S. Intermediate Aggregate Index.

Eligible Investments

- Public or private debt obligations issued or guaranteed by U.S. or foreign issuers, including but
 not limited to corporations, governments (including their agencies, instrumentalities and
 sponsored entities), supranational entities, partnerships and trusts. Such obligations may be
 issued at fixed, variable, adjustable or zero coupon rates or convertible into equity instruments,
 including contingent convertibles
- Preferred, hybrid, mortgage or asset-backed instruments (including, but not limited to, TBAs, CMOs and CMBS) issued by any of the above-named entities
- Securities issued pursuant to Rule 144A and/or Reg S
- Cash equivalents
- In addition to the above, any security type that is included in the benchmark is an eligible
 investment. New issues that are expected to be included in the benchmark at its next update are
 also permitted.

Duration

The effective duration of the portfolio will generally not deviate from that of the benchmark index by more than +/- 10%.

Credit Quality

The minimum quality for any investment is BBB-/Baa3/BBB-, as determined at the time of purchase.

Loomis Sayles may continue to hold instruments that are downgraded to below investment grade subsequent to their purchase if, in the opinion of Loomis Sayles, it would be advantageous to do so.

If the ratings assigned to an instrument by Standard & Poor's, Moody's, and/or Fitch are not the same, the highest rating of these rating agencies will be used.

If an instrument is not rated by Standard & Poor's, Moody's, and Fitch, the equivalent rating determined by the Loomis Sayles Research Department will be used.

U.S. Dollar Exposure

All investments must be denominated in U.S. Dollars.

Issuer Limitation

No issuer, except instruments issued or guaranteed by the U.S. Government, its agencies, or instrumentalities or government sponsored entities will comprise more than 3% of the market value of the portfolio as determined at the time of purchase.

Industry Limitation

No industry, as defined by Barclays level 4, except instruments issued or guaranteed by the U.S. Government, its agencies or instrumentalities or government sponsored entities will comprise more than 25% of the market value of the portfolio or benchmark weighting plus 15% (whichever is greater), as determined at the time of purchase.

Short-Term Investment Fund

The Client has arranged for a sweep of any cash in the portfolio into a short-term investment fund program. Loomis Sayles will not be responsible for investments made pursuant to that cash sweep.

Conversion

Notwithstanding the foregoing, the portfolio may receive instruments prohibited or not contemplated herein through the conversion, exchange, reorganization, corporate action or bankruptcy of an otherwise permissible investment. Loomis Sayles may hold or dispose of these investments at its discretion.

Guideline Cure Period

If any of the parameters described above are breached (except those that are to be determined at the time of purchase), as a result of market movements, credit downgrades, capital additions or withdrawals or other events not within the control of Loomis Sayles, Loomis Sayles shall have a reasonable period of time, not to exceed six months, to bring the portfolio into compliance with the applicable investment guidelines, provided, Loomis Sayles shall promptly notify the Client if it becomes aware of a breach.

Performance Measurement

Performance measurement for this portfolio will start on the first day of the month following the first full month of management after portfolio inception to permit the completion of portfolio construction and to manage any transitional issues (such as cash flow, instrument transfers) that may arise during portfolio construction.

EXHIBIT B

DEFINITION OF CERTAIN TERMS

- (A) "Qualified Institutional Buyer" ("QIB") means any of the following institutions:
 - (i) An institution referred to in any of clauses (a) through (m) below that owns or invests on a discretionary basis at least \$100 million of "eligible securities" (defined in (B) below), provided that such institution is buying for its own account or for the accounts of other QIBs.
 - (a) An insurance company as defined in Section 2(13) of the Securities Act of 1933 (the "Act"). A purchase by an insurance company for one or more of the separate accounts (as defined in Section 2(a)(37) of the Investment Company Act of 1940 (the "Investment Company Act")), which separate accounts are not required to be registered under the Investment Company Act, is deemed to be a purchase by the insurance company.
 - (b) An investment company registered under the Investment Company Act.
 - (c) An investment adviser registered under the Investment Advisers Act of 1940 (the "Investment Advisers Act").
 - (d) A corporation (other than a bank as defined in Section 3(a)(2) of the Act or a savings and loan association or other institution referenced in Section 3(a)(5)(A) of the Act or a foreign bank or savings and loan association or equivalent institution).
 - (e) A partnership or Massachusetts or similar business trust.
 - (f) A plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees.
 - (g) An employee benefit plan within the meaning of Title I of the Employee Retirement Income Security Act of 1974.
 - (h) A trust fund whose trustee is a bank or trust company and whose participants are exclusively plans of the types identified in paragraph (f) or (g) above, except trust funds that include as participants individual retirement accounts or H.R. 10 plans.
 - A not-for-profit organization described in Section 501(c)(3) of the Internal Revenue Code.
 - (j) A business development company as defined in Section 2(a)(48) of the Investment Company Act.
 - (k) A business development company as defined in Section 202(a)(22) of the Investment Advisers Act.
 - A Small Business Investment Company licensed by the U.S. Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958.

- (m) A bank as defined in Section 3(a)(2) of the Act, a savings and loan association or other institution as referenced in Section 3(a)(5)(A) of the Act, or a foreign bank or savings and loan association or equivalent institution, that has an audited net worth of at least \$25 million in its latest annual financial statements
- (ii) An investment company registered under the Investment Company Act, acting for its own account or for the accounts of other QIBs, that is part of a family of investment companies (as defined in Rule 144A) which own in the aggregate at least \$100 million in eligible securities.
- (iii) Any entity, all of the equity owners of which are QIBs, acting for its own account or the accounts of other QIBs.
- (B) "Eligible securities" means the aggregate amount of securities owned or invested on a discretionary basis by an entity, excluding the following instruments and interests: securities issued by issuers that are affiliated with the purchaser or, if the purchaser is an investment company seeking to qualify as a QIB pursuant to (A)(ii) above, are part of that purchaser's "family of investment companies;" bank deposit notes and certificates of deposit; loan participations; repurchase agreements; securities owned by subject to a repurchase agreement, and currency, interest rate and commodity swaps.

The value of eligible securities must be calculated based on cost (or on the basis or market value if (a) the entity reports its securities holdings in its financial statements on the basis of their market value and (b) no current information with respect to the cost of those securities has been published).

In determining the aggregate amount of securities owned by an entity or invested by the entity on a discretionary basis, securities owned by subsidiaries of the entity that are consolidated with the entity in its financial statements prepared in accordance with generally accepted accounting principles may be included if the investments of such subsidiaries are managed under the direction of the entity, except that, unless the entity is a reporting company under Section 13 or 15(d) of the Exchange Act, securities owned by such subsidiaries may not be included if the entity itself is a majority-owned subsidiary that would be included in consolidated financial statements of another enterprise.

EXHIBIT C

Performance Fee Schedule

Effective Date: December 31, 2018

Fee

Loomis Sayles (the "Manager") will be entitled to receive an Annual Base Management Fee (as described below). Under certain circumstances, the Manager will be entitled to receive the Annual Base Management Fee plus an Annual Performance Fee based on the excess performance relative to the Bloomberg Barclays Intermediate Aggregate Index (the "Benchmark").

Minimum and Maximum Fees

The Annual Base Management Fee is % of the assets under management in the Account and shall not be lower than \$300,000 in any annual period, prorated for any partial years. Each calendar quarter the Manager will be entitled to receive a prorated (90/360; and adjusted for any period which is less than a full quarter) amount of the Annual Base Management Fee. The Maximum Annual Fee, inclusive of the Annual Base Management Fee and the Annual Performance Management Fee, is %.

Sharing Percentage

Account performance must exceed that of the Benchmark since the Effective Date on a net basis, including the Annual Base Management Fee but excluding the Annual Performance Fee. If the Account performance trails that of the Benchmark since the Effective Date then no Annual Performance Fee will be calculated. If the Account performance exceeds that of the Benchmark since the Effective Date then the Annual Performance Fee will be calculated as follows:

If the excess return, net of the Annual Base Management Fee (the "Net Excess Return"), is greater than 0.00% over the Performance Time Horizon (as defined below), then a Sharing Percentage of % of the Net Excess Return will be due in addition to the Annual Base Management Fee. The excess return is calculated as the gross Account performance less the performance of the Benchmark over the Performance Time Horizon. The Custodian will be the source of all performance.

Performance Time Horizon

The Performance Time Horizon over which the Net Excess Return is calculated as a rolling three-year period as follows:

Years 1 and 2:

Performance share based on the Net Excess Return since the Effective Date as of each respective December 31. Year 3 forward:

Performance share based on the Net Excess Return as of each respective December 31 calculated over the most recent three year period.

Should agreement be terminated:

Performance share based on the Net Excess Return beginning two years prior to the most recent December 31 and continuing through the date discretionary trading ceases. However, if the Account chooses to terminate the relationship less than three years since the Effective Date, the Net Excess Return will be based on the period since the Effective Date. The Annual Performance Fee will be prorated if the date discretionary trading ceases is on a day other than December 31 (# days since the most recent December 31 divided by 360).

For purposes of computing the management fees:

- The Annual Base Management Fee will be calculated quarterly in arrears based on the
 average of the Account's month end assets under management, including cash, cash
 equivalents and accrued income, during the quarter and adjusted for capital additions or
 withdrawals pro rata.
- The Annual Performance Fee will be calculated annually as of December 31 (or period
 end in the event of termination on a date other than December 31) based on the
 Account's average month end assets under management, including cash, cash
 equivalents and accrued income, for the corresponding Performance Time Horizon and
 adjusted for capital additions or withdrawals pro rata.
- For the avoidance of doubt the Account will not be subject to the Annual Performance Fee (a) prior to the Effective Date and (b) subsequent to the date discretionary trading ceases due to pending termination. The Account will only be subject to the Annual Base Management Fee during said periods.
- The Custodian will be the source of the assets under management of the Account used to determine the billable market value basis.

Payment

The Annual Base Management Fee payable to the Manager, as determined above for each calendar quarter, will be paid quarterly in arrears. The Annual Performance Fee will be paid annually in arrears on the anniversary of the Effective Date.

Its: General I	S, SAYLES & COMPANY, INCORPORATED	Name of Client (Please type or print) By:
By:Authoriz	ed Signature	Authorized Signature
Name:	Lauren B. Pitalis	Name:
Title:	Vice President, Director of Client Intake	Title:
		Kentucky Retirement Systems Insurance Trust Fur Name of Client (Please type or print) By: Authorized Signature
		Name:
		Title:

EXHIBIT D

NOTICES

CLIENT:

Any notice to the Client shall be sent to:

NAME: J. Richard Robben

E-MAIL: Rich.Robben@kyret.ky.gov

STREET ADDRESS: 1260 Louisville Road Frankfort, KY 40601

With copies to:

NAME: Mark C. Blackwell

E-MAIL: Mark.Blackwell@kyret.ky.gov

STREET ADDRESS:

1260 Louisville Road

Frankfort, KY 40601

NAME: KRS Investment Accounting

E-MAIL: KRSINVACCTOPS@kyret.ky.gov

STREET ADDRESS: 1260 Louisville Road

Frankfort, KY 40601

NAME: Wilshire Associates (Please see also the form letter of Wilshire.)

E-MAIL: krsfiles@wilshire.com

STREET ADDRESS:

1299 Ocean Avenue

Suite 700

Santa Monica, CA 90401

NAME: Jussi P. Snellman

E-MAIL: jsnellman@reinhartlaw.com

STREET ADDRESS:

22 East Mifflin Street, Suite 700

Madison, WI 53703

INVESTMENT MANAGER:

Notices of capital additions and withdrawals must be sent to clazzaro@loomissayles.com and cash@loomissayles.com.

Any notice to Loomis Sayles shall be sent to:

Loomis, Sayles & Company, L.P. One Financial Center Boston, Massachusetts 02111 Attn: Lauren B. Pitalis Vice President

T: 617-346-9894 F: 617-542-6389

With copies to:

Loomis, Sayles & Company, L.P. One Financial Center Boston, Massachusetts 02111 Attn: General Counsel

T: 800-343-2029 F: 617-482-0653

EXHIBIT E

AUTHORIZED SIGNATURE LIST

[Attached below]



KENTUCKY RETIREMENT SYSTEMS



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

Authorized Persons

Systems' designated positions listed below are authorized to provide verbal and written instructions and notices on behalf of Systems. Such instructions may be provided by facsimile or e- mail. Manager may conclusively rely on the instructions and notices received from any one of these authorized persons unless notified to the contrary.

Interim Chief Investment Officer/Director of Fixed Income Assets

Incumbent: Rich Robben

(502)696-8642 phone; (502) 696-8806

Signature:

Director of Equity Assets

Incumbent: |oe Gilbert

(502) 696-8632 phone; (502) 696-8806 fax

Director of Real Estate/ Real Return

Incumbent: Andy Kiehl

(502) 696-84/0 phone; (502) 696-8806 fax

Director of Private Equity

Incumbent: Anthony Chiu

(502)696-8491 phone; (502)696-8600 fax

Signature:

Interim Executive Director

Incumbent: David Eager

(502) 696-8455 phone; (502) 696-8801 fax

I hereby certify that the above individuals have been duly authorized as indicated above, and that

such authorization remains in force as of this date.

Signed:

Mark Blackwell

General Counsel

(502) 696-8649 phone; (502) 696-8801 fax

REG # 521151

Authorized Persons List

EXHIBIT F SPECIAL REQUIREMENTS

[Please list below or attach]

EXHIBIT G

TAX IDENTIFICATION FORMS

[To W-9 or W-8 Form to be provided]

(Rev. November 2017)
Department of the Treasury

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

internal	Hevenue Service Go to www.irs.gov/Formw9 for ins	tructions and the late	est infori	mation.						
	Name (as shown on your Income tax return). Name is required on this line; do not leave this line blank. Kentucky Retirement Systems									
	2 Business name/disregarded entity name, if different from above									
on page 3.	3 Check appropriate box for federal tax classification of the person whose nar following seven boxes. □ Individual/sole proprietor or □ C Corporation □ S Corporation	one of the	certain ent	ons (codes a ties, not indi s on page 3):	viduals; see					
/pe.	single-member LLC	Exempt payee code (if any)_				ny) 1,3				
Print or type. Specific Instructions on page 3.	Limited liability company. Enter the tax classification (C=C corporation, S Note: Check the appropriate box in the line above for the tax classificatio LLC if the LLC is classified as a single-member LLC that is disregarded from the owner for U.S. federal tax p is disregarded from the owner for the tax of tax of the tax of tax	n of the single-member ov om the owner unless the o urposes. Otherwise, a sing	wner. Do owner of to	he LLC is	Exemption code (If any	from FATCA	reporting A,C			
Ğ.	Other (see instructions) ► State Pens	sion Fund			(Applies to ecco	unts maintained e	outside the U.S.)			
ဇ္ဇ	5 Address (number, street, and apt. or suite no.) See instructions.		Request	er's name a	nd address	(optional) .				
See	1260 Louisville Road									
	6 City, state, and ZIP code									
- 1	Frankfort, KY 40601 7 List account number(s) here (optional)									
	, List account number(s) here (optional)									
Part	Taxpayer Identification Number (TIN)									
	our TIN in the appropriate box. The TIN provided must match the name			Social sec	urity numbe	r				
resider	o withholding. For individuals, this is generally your social security num nt alien, sole proprietor, or disregarded entity, see the instructions for i s, it is your employer identification number (EIN). If you do not have a m	Part I, later, For other	ta .]				
TIN, la		Alaa saa What Mama		Employer i	dentificatio	n number				
	f the account is in more than one name, see the instructions for line 1. or To Give the Requester for guidelines on whose number to enter.	Also see What Name a	ana L	Employer	T T	T I				
Part	Certification									
	penalties of perjury, I certify that:									
2. I am Serv	number shown on this form is my correct taxpayer identification numb not subject to backup withholding because: (a) I am exempt from bac ice (IRS) that I am subject to backup withholding as a result of a failure onger subject to backup withholding; and	kup withholding, or (b)	I have n	ot been no	tified by th	e Internai I				
3, 1 am	a U.S. citizen or other U.S. person (defined below); and									
4, The	FATCA code(s) entered on this form (If any) indicating that I am exemp	t from FATCA reporting	g is corre	ect.						
you hav acquisit other th	eation instructions. You must cross out Item 2 above if you have been not re failed to report all interest and dividends on your tax return. For real est tion or abandonment of secured property, cancellation of debt, contribution an interest and dividends, you are not required to sign the certification, but	ate transactions, item 2 ons to an individual retire	does not ement arr	apply. For angement	mortgage i (IRA), and g	interest paid jenerally, pa	d, ayments			
Sign Here	Signature of U.S. person		oate ►	1/25	118					
Gen	eral Instructions	• Form 1099-DIV (div funds)	idends,	including t	hose from	stocks or r	nutual			
Section noted,	references are to the Internal Revenue Code unless otherwise	Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)				or gross .				
related	developments. For the latest information about developments to Form W-9 and its instructions, such as legislation enacted ey were published, go to www.irs.gov/FormW9.	Form 1099-B (stock transactions by broken)	ers)							
	ose of Form	 Form 1099-S (proce Form 1099-K (merce) 					actions)			
An Indi	vidual or entity (Form W-9 requester) who is required to file an ation return with the IRS must obtain your correct taxpayer	• Form 1098 (horne n 1098-T (tuition)								
identific	cation number (TIN) which may be your social security number	• Form 1099-C (canc		•	ont of so	wad mean	da.A			
taxpaye	ndividual taxpayer identification number (iTIN), adoption or identification number (ATIN), or employer identification number or report on an information return the amount paid to you, or other	Form 1099-A (acqui Use Form W-9 only Is provide your	if you a	re a U.S. p						
amount returns	reportable on an Information return. Examples of Information include, but are not limited to, the following. 1099-INT (interest earned or paid)	If you do not return	lien), to provide your correct TIN. If you do not return Form W-9 to the requester with a TIN, you might e subject to backup withholding. See What is backup withholding, ther							

(Rev. November 2017) Department of the Treasury

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

internal	Hevenue Service Go to www.irs.gov/Formw9 for in											
	1 Name (as shown on your income tax return). Name is required on this line;	do not leave this line blank										
	Kentucky Retirement Systems Insurance Trust Fund											
	Business name/disregarded entity name, if different from above											
on page 3.	3 Check appropriate box for federal tax classification of the person whose national following seven boxes. Individual/sole proprietor or C C Corporation S Corporation	_	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):									
ons o	single-member LLC	III - Faithership	Trust/estate Exempt payee code (if any) 1									
Print or type. See Specific Instructions	Limited liability company. Enter the tax classification (C=C corporation, Note: Check the appropriate box in the line above for the tax classificat LLC if the LLC is classified as a single-member LLC that is disregarded another LLC that is not disregarded from the owner for U.S. federal tax is disregarded from the owner should check the appropriate box for the	ion of the single-member of from the owner unless the purposes, Otherwise, a sing	Exemption from FATCA reporting code (if any)									
ec.		rance Fund		(Applies to accounts maintained outside the U.S.)								
တ္တိ	5 Address (number, street, and apt. or suite no.) See instructions.	•	Requester's name a	nd address (optional)								
Š	1260 Louisville Road 6 City, state, and ZIP code											
	Frankfort, KY 40601	*										
1	7 List account number(s) here (optional)											
Part	Taxpayer Identification Number (TIN)		37.400									
Enter y	our TIN in the appropriate box. The TIN provided must match the na	me given on line 1 to av	old Social sec	urity number								
	o withholding. For Individuals, this is generally your social security nunt alien, sole proprietor, or disregarded entity, see the instructions for		or a									
entities	i, it is your employer identification number (EIN). If you do not have a											
TIN, la	•	Alon one What Name	Or Employer	dentification number								
	f the account is in more than one name, see the instructions for line or To Give the Requester for guidelines on whose number to enter.	I. Also see What Name	and	dentification number								
Part	Certification											
Under	penalties of perjury, I certify that:											
2, I am Serv	number shown on this form is my correct taxpayer identification num not subject to backup withholding because: (a) I am exempt from ba ice (IRS) that I am subject to backup withholding as a result of a failuinger subject to backup withholding; and	ckup withholding, or (b)	I have not been no	tified by the Internal Revenue								
3. I am	a U.S. citizen or other U.S. person (defined below); and											
	FATCA code(s) entered on this form (if any) indicating that I am exem											
you hav acquisit other th	ation instructions. You must cross out item 2 above if you have been no failed to report all interest and dividends on your tax return. For real estion or abandonment of secured property, cancellation of debt, contribut an interest and dividends, you are not required to sign the certification.	state transactions, item 2 lons to an individual retire	does not apply. For	mortgage interest paid, (IRA), and generally, payments								
Sign Here	Signature of U.S. person		Date > 1/25	18								
Gen	eral Instructions	 Form 1099-DIV (div funds) 	vidends, including t	hose from stocks or mutual								
Section noted.	references are to the Internal Revenue Code unless otherwise	 Form 1099-MISC (sproceeds) 	various types of inc	ome, prizes, awards, or gross								
related	developments. For the latest information about developments to Form W-9 and its instructions, such as legislation enacted by were published, go to www.irs.gov/FormW9.	 Form 1099-B (stock transactions by broke 	Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)									
Purn	ose of Form	 Form 1099-S (proc Form 1099-K (merc 		d party network transactions)								
An Indi	Idual or entity (Form W-9 requester) who is required to file an	,		1098-E (student loan interest),								
	tion return with the IRS must obtain your correct taxpayer ation number (TIN) which may be your social security number	• Form 1099-C (cano	celed debt)									
(SSN), I	ndividual taxpayer identification number (ITIN), adoption			ent of secured property)								
(EIN), to	er Identification number (ATIN), or employer identification number or report on an information return the amount paid to you, or other or reportable on an information return. Examples of information	Use Form W-9 only alien), to provide you		erson (including a resident								
returns	include, but are not limited to, the following. 1099-INT (interest earned or paid)	If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding,										

EXHIBIT H

LOOMIS BROKERAGE ALLOCATION POLICIES AND PROCEDURES

[Attached Below]

Loomis, Sayles & Company, L.P.

BROKERAGE ALLOCATION POLICIES AND PROCEDURES

Dated: November 2003

Amended: September 2004

Amended: May 2008

Amended: November 2008

Amended: April 2009

Amended: May 2013

Amended: December 2014

Amended: May 2015

Amended: November 2015

Amended: March 2016

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Introduction

Loomis, Sayles & Company L.P. ("Loomis Sayles") has adopted these Brokerage Allocation Policies and Procedures ("Procedures") to govern the manner in which Loomis Sayles will: seek best price and execution ("best execution") for its client accounts; use soft dollars to acquire brokerage, research and research services; and manage client directed brokerage arrangements. It is extremely important that the firm follow these Procedures given the fact that the manner in which the firm executes transactions for its client accounts is a critical component of clients' performance, and given the fact that best execution, soft dollars and directed brokerage are areas that are highly scrutinized by the regulators.

I. BEST PRICE AND EXECUTION

A. POLICY STATEMENT

1. Best Price and Execution - General

Transaction costs are costs borne by Loomis Sayles' clients and therefore should be used in their interests. Accordingly, Loomis Sayles at all times owes a duty to its clients to execute securities transactions in such a manner that the clients' total costs or proceeds in each transaction are the most favorable under the circumstances. Unless otherwise provided for in these Procedures, the traders on the Loomis Sayles' Trading Desk ("Trader(s)" or "Trading Personnel") should never, under any circumstances, direct transactions to a particular broker-dealer to satisfy business obligations such as those related to administration, operations, trade errors, new business solicitation or in recognition of mutual fund distribution (i.e., promotion or sale of mutual fund shares or in reciprocation for any gifts or entertainment the broker-dealer has provided to the Trader). Additionally, a Trader should never cause a client to pay a higher execution cost, including but not limited to, any commission, mark-up, mark-down or other fee or portion thereof, than that which is otherwise available unless the higher cost is justified by the value of the broker-dealer's brokerage, research and/or other services.

Research and Soft Dollar Considerations

Loomis Sayles' receipt of brokerage and research products or services may sometimes be a factor in Loomis Sayles' selection of a broker-dealer to execute transactions for client accounts where Loomis Sayles believes that the broker-dealer will provide quality execution of the transactions. When several broker-dealers appear to offer best execution in connection with a transaction, a Trader may place an order with a particular broker-dealer on the basis that the broker-dealer can provide research that may be helpful to Loomis Sayles' clients. Such brokerage and research products or services may be paid for with client commissions otherwise known as soft dollar ("Soft Dollars").

Loomis Sayles periodically negotiates Soft Dollar arrangements with broker-dealers pursuant to which it may receive specific research products or services in exchange for the expectation, but not the obligation, that a certain amount of brokerage commissions will be directed to the particular broker-dealer in return for such research services. Under these circumstances, Trading Personnel are required to follow the *Soft Dollar Policies and Procedures set forth in Section II of these Procedures*.

3. Commission Recapture for Mutual Funds

As investment adviser or sub-adviser for certain mutual funds, Loomis Sayles may be instructed to direct brokerage for mutual funds to certain brokers-dealers that have agreed to use a portion of the commissions to pay the operating expenses of the applicable mutual funds to defray the funds' expenses as part of such funds' commission recapture program. The foregoing practice is subject to guidelines established by the boards of trustees of the relevant funds.

4. Prohibition on Fund Sales Compensation

Formal agreements, non-binding understandings and arrangements, including oral arrangements and agreements in which securities transactions of a mutual fund are used to compensate broker-dealers for the promotion or sale of shares of that fund or other mutual funds, are strictly prohibited. In addition, mutual fund securities transactions may not be used to compensate a broker-dealer for the broker-dealer's promotional or sales efforts with respect to separate account strategies managed by Loomis Sayles or its affiliates.

As a policy matter, information on mutual fund sales is not provided to the Traders or the Investment Teams, so their selection of broker-dealers cannot be made on this basis.

B. OPERATING PROCEDURES

Approved Broker-Dealer List

The Trading Desk maintains a list of authorized broker-dealers ("Approved Broker-Dealer List"). The Approved Broker-Dealer List is established and maintained according to the policies and procedures described below. Additions to the Approved Broker-Dealer List may only be made with the approval of the Head of Trading and the Chief Compliance Officer, or designees thereof, by completing the New Approved Broker-Dealer Request Form (Exhibit A). Deletions and suspensions from an Approved Broker-Dealer List may result from action by Head of Trading, the Trading Oversight Committee or the Derivatives Counterparty Risk Committee. The Approved Broker-Dealer List is maintained in GPS, the firm's accounting system, by the Operations Department.

Client directed broker-dealers that are only used by the client providing the direction, and not by other client accounts, are automatically set up in the trading system in order to facilitate the client's request. These broker-dealers do not need to go through the standard approval process required for Approved Broker-Dealers and they would not be deemed Approved Broker-Dealers for other Loomis client accounts.

2. Considerations When Selecting Broker-Dealers

Except in those circumstances where discretion is limited by a client (see *Directed Brokerage in Section III of these Procedures*), Trading Personnel have sole discretion in selecting broker-dealers from the Approved Broker-Dealer Lists when seeking the best execution of transactions in client accounts. Therefore, it is incumbent upon Trading Personnel, unless directed by a client, to never select a broker-dealer for reasons other than their trading ability.

Trading Personnel who wish to place a trade with a broker-dealer who is not currently on the Approved Broker-Dealer List must seek approval as described in B.1. above prior to placing such trade. In determining whether to include a new broker-dealer on the Approved Broker-Dealer List, Trading Personnel, may consider, but is not limited to, the following¹:

- A broker-dealer's overall competitiveness, financial soundness, reputation and integrity or specialized expertise
- The flow of information from the broker-dealer including idea and research generation
- Portfolio Manager and Research Analyst input and the results of the most recent Equity Research Vote (Equity only)
- The fact that the particular broker-dealer is a market maker in the securities to be traded
- A broker-dealer's willingness to enter into a difficult transaction (e.g. putting their own capital at risk, the size of the order, etc.)
- The facilities that a broker-dealer makes available such as trading networks, access to multiple floor brokers and markets, and significant resources for positioning as principal

¹While the general financial soundness and reputation of a particular broker-dealer should be considered by the Head of Trading, this does not imply responsibility for analyzing the broker-dealer's financial statements or making any judgments on financial strength of the broker-dealer. The firm's Trading Oversight Committee has concluded that Loomis Sayles historical trading practices suggest that there are limited circumstances (e.g. forward settling transactions such as OTC derivatives transactions, TBAs, etc.) where the use of a broker-dealer to execute a client's order results in additional material risk to the client. This is due primarily to the way in which Loomis Sayles places orders for its clients in that almost every market in which the firm trades, client transactions are settled on a delivery-verses payment basis ("DVP") and transactions are settled through a central securities depository system. Further, the federal securities laws subject U.S. registered broker-dealers to minimum capital and other regulatory requirements to ensure the financial stability of U.S. broker-dealers.

- A broker-dealer's ability to effect difficult trades in less liquid, smaller capitalized, and more closely held issues
- The commission rate or spread the broker-dealer will charge for the transaction
- The quality of the broker-dealer's back office (ability to settle the transaction in a timely fashion)

If the Head of Trading and the Chief Compliance Officer approve the submission of a New Approved Broker-Dealer Request Form, the broker-dealer can be added to the Approved Broker-Dealer List. The Operations Department is notified via electronic communication that such broker-dealer should be set up in the Charles River Trading System ("CRTS"). Thereafter, on a quarterly basis, the Head of Trading and the Legal and Compliance Department will review the then current Approved Broker-Dealer List from CRTS to ensure that the appropriate approvals were obtained for any new broker-dealer appearing on the list and/or that broker-dealers are removed from such list if appropriate. The broker-dealers on the Approved Broker-Dealer List are all broker-dealers that we execute trades with and do not include broker-dealers that are limited to providing us with research. The Approved Broker-Dealer List is maintained in GPS by the Operations Department and is accessible at any time. The Head of Trading will report any significant developments that may occur with a particular broker-dealer to the Trading Oversight Committee on a quarterly or as needed basis.

If the Head of Trading learns of circumstances which suggest that the firm should cease to trade with a particular broker-dealer, the Head of Trading should either discuss potential removal or suspension with the Trading Oversight Committee at its next meeting or, if the Head of Trading feels appropriate, immediately remove or suspend such broker-dealer from the Approved Broker-Dealer List and communicate the change to all relevant Trading Personnel and the Chief Compliance Officer.

Trading Personnel will only select those broker-dealers which appear on the Approved Broker-Dealer List and will consider those factors described above when making their selections. When possible and the situation warrants, Traders will attempt to solicit multiple bids when in competitive bidding situations, unless, in the judgment of the Trader, competitive bidding is either not likely to result in, or is not necessary to achieve best execution.

Prohibition on Fund Sales Compensation Review

With respect to the prohibition on directing client transactions to broker-dealers in recognition of the promotion or sale of Loomis Sayles/Natixis mutual fund shares, Traders are required to confirm they have not received information on mutual fund sales as part of the Semi-Annual Trader Conflict of Interest Certification (Exhibit B). Additionally, on a quarterly basis, the Legal and Compliance Department will compare the top 10 broker-dealers responsible for Loomis

Sayles/Natixis mutual fund sales identified by the Finance Department against the firm's trading activity with these broker-dealers. Quarter-over-quarter changes in fixed income, equity and derivative trading volumes, as well as commission volumes will be reviewed, and any material correlations will be escalated to the Chief Compliance Officer for further review.

4. Affiliated Broker-Dealers

Affiliated broker-dealers may not be used to execute client transactions because many clients prohibit such trading, and Loomis Sayles currently does not have the client consent necessary to permit such trading from the remaining clients. Given the currently limited market share of the affiliated broker-dealers, the Trading Desk does not believe it is necessary to trade with them in order to achieve best execution. The Legal and Compliance Department maintains a list of affiliated broker-dealers that includes the Natixis affiliates. However, this list may change from time to time, and it is important that the Trading Desk checks with the Legal and Compliance Department if it is not sure as to whether or not a particular broker-dealer may be an affiliate.

For clients who have an affiliated broker-dealer of their own with which they prohibit trading, a CRTS block is added to the account by the Legal and Compliance Department.

5. Affiliated Underwritings

Certain affiliated broker-dealers engage in underwriting activities, and there are specific SEC and DOL rules that govern a 40 Act Fund's and ERISA account's investing in affiliated underwritings. The Natixis affiliates that engage in underwriting activities will notify the Loomis Sayles Trading Desk and the Legal and Compliance Department, via email about any underwritings that they are planning on participating in, or have participated in, as such information becomes available. Upon receipt of such emails, the Trading Desk will inform the Legal and Compliance Department if it has participated or intends to participate in the underwriting on behalf of Loomis Sayles' client accounts. Separately the Trading Desk will inquire with its counterparties to determine whether any affiliated broker-dealers are involved in an underwriting.

If a Loomis Sayles ERISA client and/or 40 Act Fund has or intends to participate in an affiliated underwriting, the Legal and Compliance Department will ensure that the firm complies with the regulatory requirements that govern such transactions by completing the PTE 75-1 Checklist (Exhibit C) for ERISA accounts and the Rule 10f-3 Reporting Form (Exhibit D) for 40 Act Funds.

The Legal and Compliance Department will also ensure that all affiliated underwriting reporting requirements are satisfied.

For clients who have an affiliated broker-dealer of their own that engage in underwriting activities, Loomis Sayles will follow the policies and procedures provided by the client in compliance with the appropriate regulatory requirements.

6. Equity Trading Venue Review

On an ongoing basis, the Director of Equity Trading meets with broker-dealers to review the following topics: (i) high touch trading; (ii) low touch trading; (iii) market structure; (iv) execution performance; (v) new execution tactics/offerings and refinements of existing ones; (vi) broker-dealer personnel, and (vii) other pertinent equity related topics. The Equity Traders use these reviews for the following purposes: (i) as a general measure of its broker-dealer relationships; (ii) to ensure they are making effective use of specific trading venues/tools, and (iii) to implement changes to their trading process as necessary.

Equity Trading Cost Analysis

Trade Informatics, LLC ("TI") performs a quarterly trade cost analysis of the Loomis Sayles' equity trading group. TI evaluates the transactional process from three perspectives: portfolio management, trading desk, and brokerage. Using decision capture versus slippage, timeliness, and cause and effect diagnostics methodologies, TI provides recommendations that seek to optimize the trading process. TI looks for areas where inefficiencies may be adding to the total cost of a trade by analyzing commissions, market impact of the trade, manager timing, and opportunity cost. Broker-dealer performance is scrutinized and benchmarked to gauge effectiveness. Each trade is gauged against a proprietary TI benchmark. As part of the analysis, the timeliness of decisions and the efficiency of trade implementation are measured. Equity transactions executed by Fixed Income Traders are excluded from this evaluation due to the fact that they are often a component of multi-legged transaction that would not be properly analyzed by TI. TI meets quarterly with the Head of Trading, Director of Equity Trading and the Deputy Chief Compliance Officer to review the results of their analysis.

The Director of Equity Trading will review the TI Reports on a quarterly basis to assist with the evaluation of the Equity Traders' performance. The Director of Equity Trading will also provide the Trading Oversight Committee with an overview of the TI reports on a quarterly basis. The Director of Equity Trading will also review daily reports provided by TI detailing the costs associated with all equity trades executed the prior business day by the Equity Traders.

8. Fixed Income Trading Cost Analysis

There are various internal processes in place to monitor the performance of the Fixed Income Traders in obtaining best execution. As part of this process, the Head of Trading receives a daily report of all trades. This report is reviewed

periodically to identify trends or outlying trades that may require further explanation from the Trader(s). The trade report is also distributed daily to all Portfolio Managers. The Head of Trading also receives, on a monthly basis, a report detailing the volume of trades done with each broker-dealer. This monthly report is further broken down by product in order to monitor the trade flow of any given product type. A high concentration of trading with a specific broker-dealer would be highlighted in this report, and the Trader(s) would be required to explain the reason for the concentration.

Loomis Sayles has engaged Global Trading Analytics, LLC ("GTA") to perform trading cost analysis of Loomis Sayles' trading in certain fixed income securities (primarily sovereign governments, agencies, US corporate, mortgages and FX). Due to the large number of fixed income client accounts managed by Loomis Sayles, GTA is only provided with the trading activity of regulated U.S. and offshore funds for which Loomis Sayles acts as an adviser or sub-adviser. The trading activity of these funds provides a proxy for the fixed income products managed by Loomis Sayles and the trading experience in such products.

GTA's trading cost analysis includes the following key measurement points for analyzing fixed income trading. These measurement points are displayed on an overall basis for all of the funds included in the analysis, on a fund by fund basis, by market sector, and by dealer.

- Net cost or benefit of trading expressed in basis points comprised of the Market Impact of the trades completed and Institutional Peer Universe Market Impact of the trades completed
- Total excess trading costs or benefits derived express in dollars
- Universe Ranking expressed in percentage and quartile terms (overall ranking only)
- Universe Standard Deviation A measure of volatility
- Universe Mean/VWAP Differential A measure of substantial off-market trading

Included in the GTA analysis is commentary on the methods utilized in their analysis, points of emphasis regarding the results and information on the relative performance measurements achieved by Loomis Sayles during the period.

9. Monitoring Broker-Dealer Allocations.

The Head of Trading will ensure that the Trading Desk adheres to the best execution requirements of these Procedures when selecting broker-dealers for client transactions. The Head of Trading will periodically evaluate the quality of services received from broker-dealers with whom the Trading Desk has placed client orders. These evaluations assist in the determination of membership on the Approved Broker-Dealer List.

10. Authorized Traders List

The Head of Trading is responsible for maintaining an "Authorized Traders List". This list shall include the names of all individuals authorized to place orders with broker-dealers on behalf of Loomis Sayles' clients. This list will be distributed to third parties by the Client Intake Group. The Head of Trading is responsible for notifying the Client Intake Group any time there are changes to the Authorized Traders List so that the appropriate adjustments may be made.

11. Trading Oversight Committee

The Trading Oversight Committee will review the GTA and TI best execution analysis reports to monitor the Trading Desk's best execution practices. In addition, if the Head of Trading learns of circumstances which suggest that the firm should cease to trade with a particular broker-dealer, the Head of Trading may discuss potential removal or suspension with the Trading Oversight Committee at its next meeting. The Trading Oversight Committee will determine what action, if any, is necessary or appropriate. If the Head of Trading deems it appropriate to immediately remove or suspend such broker-dealer from the Approved Broker-Dealer List, the Head of Trading will consult with the Chief Compliance Officer and the Trading Oversight Committee members will be notified via email.

II. SOFT DOLLARS

A. POLICY STATEMENT

Soft Dollars - General

As previously mentioned, Loomis Sayles may cause a client account to pay more than the lowest available commission cost or price in exchange for brokerage, research and research services from a broker-dealer (i.e., Soft Dollars). When Loomis Sayles uses Soft Dollars to acquire brokerage and research and other research services (hereinafter the research services are referred to as "Research"); it will continue to meet its fiduciary duty to obtain best execution for its clients provided the following provisions are met:

- Research acquired through a Soft Dollar arrangement must provide lawful and appropriate assistance to Loomis Sayles' investment decision-making process;
- b. Client commissions may only be used to obtain Research such as, but not limited to: research reports, analyst recommendations, research conferences, expert consultants, access to company management, political and economic analysis, technical and fundamental analysis, market data, etc.). If the Research is used for any additional purpose other than research, Loomis Sayles must pay hard dollars for the non-

Research related portion of the product or service. Soft Dollars may not be used to acquire: information designed to improve Loomis Sayles' marketing and sales services; performance measurement services used in marketing; computer software for financial and tax accounting or record keeping; travel cost; hotels, etc. in connection with research seminars; or other goods or services that do not provide lawful and appropriate assistance in the investment decision-making process. (Please see *Mixed-Use Products and Services* below for more detail on such practices);

- Loomis Sayles has determined in good faith that any commissions paid
 to the broker-dealer pursuant to a Soft Dollar arrangement are
 reasonable in relation to the value of the brokerage and Research
 received;
- d. The Research must be "provided by" the particular broker-dealer to which the commission business is directed. However, Research may be received from a third party other than the Soft Dollar broker-dealer. Loomis Sayles is responsible for directing payment to those third parties;
- Loomis Sayles may only generate Soft Dollars with commissions in agency transactions. Loomis Sayles cannot use dealer markups in principal transactions to generate Soft Dollars;
- f. Loomis Sayles must have investment discretion over the account that is generating the Soft Dollars. Soft Dollars may not be generated on those accounts for which investment discretion resides with the client (i.e. non-discretionary accounts); and
- g. The brokerage placed is for "securities" transactions (and thus, for example, not futures transactions).

2. Equity Research Vote

On a quarterly basis, Loomis Sayles conducts an internal voting process whereby the Equity Portfolio Managers and Research Analysts vote on various aspects of a broker-dealer's qualitative services, which will include without limitation: Research, idea generation, and the ability to arrange company meetings (the "Equity Research Vote"). The results of the Equity Research Vote are provided to the Equity Trading Desk as guidance to which broker-dealers are providing the most valued qualitative services. These results can be and are used as a tool for estimating commission targets for various broker-dealers.

3. Client Commission Arrangements

Loomis Sayles has entered into several client commission arrangements ("CCAs") (also known as commission sharing arrangements) with some of its key broker-dealer relationships. In a CCA, subject to best execution, Loomis Sayles will allocate a higher portion of its clients' equity trading with broker-dealers who have agreed to unbundle their commission rates in order to enable Loomis Sayles to separately negotiate rates for execution and Research. The execution rates Loomis Sayles has negotiated with such firms vary depending on the type of order Loomis Sayles executes with the CCAs, i.e. electronic or traditional, but they will generally be between \$.005 and \$.02 per share. The Research rates with such firms will also vary, but they will generally be between \$.0175 and \$.0225 and will generally result in a total cost of no more than \$.04 per share.

Pursuant to the CCA agreements Loomis Sayles has with these broker-dealers, each firm will pool the Research commissions accumulated during a calendar quarter and then, at the direction of Loomis Sayles, pay various broker-dealers or general research providers from this pool for the Research Loomis Sayles has received from such firms.

The CCAs enable Loomis Sayles to: strengthen its relationships with its key broker-dealers, and limit the broker-dealers with whom it trades to those with whom it has a FIX connectivity, while still maintaining the research relationships with broker-dealers that provide Loomis Sayles with Research. In addition, the ability to unbundle the execution and Research components of commissions enables Loomis Sayles to manage commissions more efficiently, and to provide greater transparency to its clients in their commission reports.

These CCAs are deemed to be soft dollar arrangements, and Loomis Sayles and each CCA intends to comply with the applicable requirements of Section 28(e) of the Securities Exchange Act of 1934, as amended, as well as any guidance from the SEC on soft dollars. The Equity Research Vote, described above in Section II A. 2. is used to inform Loomis Sayles' decisions as to which services Loomis Sayles should obtain through its CCAs.

Direct and Non-Direct Benefit

Loomis Sayles may use Soft Dollars to acquire Research that has potential application to all client accounts or to a certain group of client accounts which need not be the accounts that paid the commissions that generated the Soft Dollars.

Mixed-Use Soft Dollar Products and Services

Mixed-use Research is any product that is not used solely for investment decisionmaking purposes, such as marketing or client reporting. Loomis Sayles must identify the use of a research product or service that does not pertain to investment decision-making, and pay for such use with Loomis Sayles' own hard dollars. In doing so, Loomis Sayles must to be able to demonstrate a good faith attempt to allocate payment for the product or service between soft and hard dollars, clearly document how it made those allocation determinations, and periodically review the allocations to determine if they are still accurate and relevant.

B. OPERATIONAL PROCEDURES

1. Research Approval Process

The traditional, proprietary Research received from the broker-dealers with whom Loomis Sayles trades is deemed to be eligible to be paid with Soft Dollars, and such Research does not have to be pre-approved by the Loomis Sayles Chief Compliance Office ("CCO").

If a Loomis Sayles investment person intends to acquire Research from a broker-dealer pursuant to a CCA arrangement ("3rd Party Research") and pay for such Research with Soft Dollars (as a subscription apart from the Research vote process), such firms need to be pre-approved by the CCO as set forth below. This pre-approval process is also required for Research vendors that do not have brokerage capabilities if Loomis Sayles intends to pay for said Research with Soft Dollars.

- a. An investment person seeking approval to pay Soft Dollars for 3rd Party Research or a Research vendor must submit his/her request to the Director of Enterprise Data Management and include: (i) the name of the Research firm; (ii) whether it is a broker-dealer; (iii) samples of its Research; (iv) the bios of the principals of the firm; and (v) an explanation of why the firm should be added to the list of approved Research providers
- b. Once the Director of Enterprise Data Management has determined the request to be in good order, it will be forwarded to Technology, as there may be an existing relationship with the Research provider that Loomis Sayles may be able to leverage. Technology will also determine whether there are any technical issues associated with the receipt of the service.
- c. Technology will then forward the request to the CCO, or a designee thereof, and the CCO will determine whether the proposed Research is eligible to be paid for with Soft Dollars, based on the information provided in the request.
- d. The request is then forwarded to the to Finance Department who will work with the Director of Equity Trading to determine whether the service should be paid with hard or Soft Dollars, depending on the Research budget.
- e. If a particular Research product will involve a "mixed use" of the

product, the individual seeking approval of the Research must propose a good faith allocation of the cost of the product between hard and Soft Dollars to pay for such product, including an explanation of the method or principle used to determine the allocation. Such proposal must be approved by the CCO, and ratified by the Trading Oversight Committee at its next meeting.

f. The results of the Equity Research Vote are used to provide the Commission Management Coordinator with guidance as to the amount of Soft Dollars that should be paid to each Research provider.

2. Soft Dollar Reconciliation Administration Process

- a. The Equity Traders will identify client commissions that generated Soft Dollar credits in CRTS for reconciliation, client and regulatory reporting purposes, if applicable.
- b. The Commission Management Coordinator is responsible for reconciling the Soft Dollar trading activity with the Soft Dollar broker-dealer(s) and CCAs, on at least a monthly basis and resolving any reconciliation issues identified.
- c. The Commission Management Coordinator will instruct the CCAs to pay the broker-dealers that provide Loomis Sayles with Research the amounts determined by the Equity Research Vote on a quarterly basis.
- d. The Technology Department will maintain the Financial Information Tracking System (FITS) that details the approved 3rd Party Research currently being paid for with Soft Dollars and hard dollars, if any. Invoices to be paid in Soft Dollars will be reviewed and signed off by Technology (all market data services) or by the Equity Business Management Group (all Research services) to ensure that all such invoices are accurate and correct according to the agreement with the vendor and the applicable Soft Dollar broker dealer.
- e. The Director of Equity Trading, or his or her designee, will maintain a record of all approved Soft Dollar broker-dealers and arrangements and will report actual commissions paid year to date on a quarterly basis to the Trading Oversight Committee.
- f. The Client Intake Group is responsible for determining whether new clients have any Soft Dollar restrictions or reporting requirements. The Director of Equity Trading is responsible for reviewing a client's proposed Soft Dollar language as part of the Client Intake Process. As a policy matter, Loomis Sayles will generally not accept any equity client that prohibits Soft Dollars for its account.

III. DIRECTED BROKERAGE

A. POLICY STATEMENT

1. Directed Brokerage - General

From time to time, Loomis Sayles may accept written instructions from clients or their consultants to direct some or all of the client's brokerage to a broker-dealer ("Directed Broker") pursuant to a commission recapture or other program. Clients who make such arrangements may receive cash rebates, expense payments or expense reimbursements, custody, check writing, products, consulting and other services from the broker-dealer based on commissions charged by such broker-dealer when Loomis Sayles places trades for the client's account ("Directed Accounts").

Where Loomis Sayles is acting with sole trading discretion, Loomis Sayles has a fiduciary duty to seek best execution on each transaction made on behalf of a client. Where a client has directed Loomis Sayles to use a particular broker-dealer to execute some or all of its transactions, however, Loomis Sayles may be fully or partially relieved of its fiduciary duty to obtain best execution depending on the specific conditions applied to the directed brokerage arrangement. However, Loomis Sayles must fully and fairly disclose to its clients how directed brokerage arrangements may affect the handling of their accounts. To satisfy this requirement, Loomis Sayles' ADV discloses, among other things, the fact that: (i) Directed Accounts will forgo any benefit from savings on execution costs that Loomis Sayles may obtain by negotiating volume commission discounts on block trades; (ii) Directed Accounts may be paying a higher commission rate than the commission rate paid by non-Directed Accounts; (iii) Directed Accounts' transactions may be executed after the transactions of non-Directed Accounts; (iv) Directed Accounts that direct 100% of their transaction to their Directed Broker may not participate in IPOs or secondary offerings; and (v) Directed Accounts may not receive the best execution possible on transactions for their account and therefore, they may not generate returns equal to those of non-Directed Accounts.

2. Acceptable Directed Brokerage Requirements for Equity Products

Generally, Loomis Sayles will accept responsibility for best execution with a Directed Account provided that the client's direction does not exceed the following percentage limits that have been set for each equity product:

Large Cap Value	25%	Dividend Income	10%
Large Cap Growth	25%	Mid Cap Core	15%
Large Cap Core	25%	Small Cap Growth	10%

Global Equity Opportunities	10%	Small Cap Value	10%
Focused Value	25%	Small/Mid Cap	10%
Energy and Basic Materials	25%	SMID Growth	10%
Financial Services	25%	Tech. and Comm.	25%

These percentages may be affected by a client's choice of Directed Broker. For example, if the Directed Broker is not a market maker in the relevant product area or is not the type of broker-dealer who would typically be able to provide the coverage necessary for the product group involved, the percentage detailed above may not be attainable. This process is handled according to the Operating Procedures detailed in Section III.B of these Procedures.

3. <u>Directed Account Categories</u>

Because the levels of direction given to Loomis Sayles by clients can vary greatly, and as a result, can affect the handling of the orders of Directed Accounts and the determination of who has the ultimate responsibility for best execution, Loomis Sayles has created the following categories of Directed Accounts:

- a. <u>Discretionary Directed Accounts</u> An account that has directed Loomis Sayles to execute transactions through a Directed Broker only when Loomis Sayles believes it can obtain best execution in doing so. These accounts would include those that: (i) have asked Loomis Sayles to consider their Directed Broker in the bid/offer process to the extent possible while not specifying an actual percentage of transactions to be directed; or (ii) have requested a specific acceptable percentage of transactions be directed as specified by the relevant product group; and (iii) permitted Loomis Sayles to use step-out transactions to fulfill their direction.
- b. Non-Discretionary Directed Accounts- An account that has directed Loomis Sayles to execute <u>all</u> of its transactions through its Directed Broker, or has requested an amount that exceeds the percentage that Loomis Sayles has deemed acceptable for the product, <u>and</u> has not permitted Loomis Sayles to use step-outs to fulfill the client's direction.

B. OPERATING PROCEDURES

- All Directed Brokerage arrangements must be in writing, signed by the client or consultant.
- 2. A new client's Directed Brokerage arrangements, if any, will be identified by the appropriate parties during the Client Intake process and communicated to the Director of Contract Administration who will ensure

- that the client's investment management agreement ("Agreement") includes the appropriate Directed Brokerage language.
- If the appropriate Directed Brokerage language is not captured in the client's Agreement, the Portfolio Manager or Client Service Representative, as appropriate, is responsible for ensuring that the Directed Account receives, signs and returns the Trading Instructions (Exhibit E) to Loomis Sayles in advance of Directed Brokerage trading for the account.
- The Director of Contract Administration is responsible for providing the Trading Desk with the relevant documentation setting forth the client's Directed Brokerage requirements.
- Upon receipt, the Trading Desk will code the client's account in CRTS as appropriate, given the client's Directed Brokerage arrangement. The Legal and Compliance Department will add post-trade alerts in CRTS for monitoring purposes on T+1, as applicable.
- 6. Orders for Discretionary Directed Accounts will generally be aggregated with the orders of other client accounts trading in the same securities, at the same time, and same direction. Such orders will be handled in the manner set forth in the firm's Trade Aggregation and Allocation Policies and Procedures. Traders may, but are not obligated to, use steps-out when they feel they are appropriate and feasible to fulfill a client's Directed Brokerage instruction (e.g. Traders may be unable to utilize step-outs when a broker-dealer has committed capital to the transaction).
- 7. Unless the Trading Desk is executing a block order with the Direct Broker of a Non-Discretionary Directed Account, the order for Non-Discretionary Directed Accounts will be handled <u>after</u> the block order has been executed. The accounts whose broker-dealers have FIX connectivity are executed via CRTS simultaneously, after the block order. Non-Discretionary Directed Accounts whose broker-dealers do not have FIX connectivity are then manually processed in a fair and equitable manner.
- 8. With limited exceptions, Loomis Sayles has not historically accepted true Directed Brokerage direction relating to fixed income transactions. Therefore, any direction requested on fixed income transactions, will be handled on a case by case basis and must receive sign off from the Head of Trading, the Chief Compliance Officer and any other relevant parties prior to its acceptance and implementation.

EXHIBIT A

New Approved Broker-Dealer Request Form

This Form is available on the Loomis Sayles Legal and Compliance Homepage under Application

LOOMIS, SAYLES & COMPANY, L.P.

SEMI-ANNUAL TRADER CONFLICT OF INTEREST CERTIFICATION

As a fiduciary, Loomis, Sayles, & Company, L.P. ("Loomis Sayles") must uphold the highest of ethical standards in fulfilling its obligations to its clients. As a Trader for Loomis Sayles ("Trader"), it is your responsibility to seek to achieve the best execution of our clients' transactions.

The existence of certain personal or familial relationships between Traders and the traders at the broker-dealers with whom Loomis Sayles conducts business ("Broker-Dealers") may create incentives for Traders to transact with such traders in a way that is not in our clients' best interest.

Additionally, directing commissions to a Broker-Dealer as compensation for promoting or selling shares of the mutual funds that are advised or sub-advised by Loomis Sayles ("Mutual Fund(s)") is strictly prohibited.

Finally, the acceptance of certain gifts and forms of entertainment from Broker-Dealers, may present similar conflicts of interest, and a Trader is prohibited from directing client transactions to Broker-Dealers in reciprocation for any gifts or entertainment received by the Trader from the Broker-Dealer.

By signing this certification, you certify that:

- Except as noted below, you do not maintain any personal or familial relationships with traders at the Broker-Dealers;
- You have read, understand, and conducted all trading activities in accordance with the applicable policies and procedures contained in the Loomis Sayles Compliance Manual;
- You have not received information on Mutual Fund sales by the Broker-Dealers, and have not directed trades to the Broker-Dealers as compensation for promoting or selling the Mutual Funds; and
- 4. You have not directed client transactions to the Broker-Dealers in reciprocation for any gifts or entertainment you have received from such Broker-Dealers.

These policies and procedures can be found on the Legal and Compliance section of the firm's home page.

EXHIBIT B (Cont.)

I maintain the following relationship(s) with individual(s) at a Broker-Dealer(s) which may present a conflict of interest:

Name of Individual	Name of Broker-Dealer	Nature of Relationship
	Acknowledged and Agreed:	:
	Signature:	
	Print Name:	
	Date:	

AFFILIATED UNDERWRITING CHECKLIST ("CHECKLIST") FOR ERISA ACCOUNTS (PTE 75-1)

The completion of this Checklist by the Trading Desk and Compliance is required to ensure compliance with the ERISA requirements applicable to participations in affiliated underwritings for ERISA and ERISA-Equivalent accounts.

Issu	er:	ERISA Account below.				[‡] 10
Offe	ering Date:	Number of Secu Offered (# of sha bonds):	res or #		_	
Affi	liated Broker:	Price per Unit:			_	
1.	Is the affiliated broker a <u>lead</u> or <u>co</u> underwriting? (If the answer to the "yes", you cannot purchase this is accounts.)	nis question is	YES	NO 🗆		
	Natixis is a					
2.	Are the issuer's securities being of a firm commitment underwriting?	fered pursuant to	YES	NO		
3.	Will the transaction be executed avand not allocated to Natixis if it is	•	YES	NO		
4.	Has the executing dealer represent Natixis will not receive selling con-	ncession in	YES	NO		

5.	Will the issuer's securities be purchased at not more than the public offering price and no later than the day after the issue is first offered to the public?	YES	NO	
6.	Is the commission or spread to be received by the underwriters reasonable and fair compared to that received in comparable transactions?	YES	NO	
7.	If a municipal issuer, (1) does the issue have an investment grade rating from at least one Nationally Recognized Statistical Rating Organization ("NRSRO") or (2) if the issuer of the securities has less than three (3) years of continuous operations, does the issue have one of the highest ratings from one such NRSRO?	YES	NO	N/A □
8.	If not a municipal issuer, has the issuer (including predecessors) been in continuous operation for more than three years?	YES	NO	N/A □
	Issuer was founded:			
9.	Will the consideration paid by each ERISA Account be no more than 3% of each account's total assets under Loomis Sayles' management? (If the consideration to be paid by an ERISA Account exceeds \$1 million, it must not exceed 1% of the ERISA accounts total assets under management with Loomis Sayles.) To determine compliance with the requirements in question 10, please complete the following:	YES	NO	

Account Name	Units To Buy	Offer Price	Mkt. Value of Purchase (A)	Mkt. Value of Acct. Assets	Acct. Mkt. Val. x .03 (B)	In Compliance if (A) is less than (B)
See attached list						

10. Will the amount of securities purchased for an individual YES NO ERISA account be no more than 3% of the total securities offered? (Show calculations below.) □			
Units Offered x O	offering Price = Total Offering $x .03 = 3\%$ of Offering		
Can the ERISA	account(s) participate in the underwriting?	YES NO	
	Trading Desk Signature: Signed By: Date:		
	Compliance Signature: Signed By: Date:		

AFFILIATED UNDERWRITING CHECKLIST FOR 40 ACT FUNDS (RULE 10f-3)

The completion of this Checklist by the Trading Desk and Compliance is required to ensure compliance with the SEC rule that governs a 40 Act Fund's participating in affiliated underwritings.

Name of Adv	viser/Subadviser:	
Name of Fun	d:	
Total Net Ass	sets of Funds:	
Issuer:	· .	
Underwriter(s	s):	
Affiliated Un	derwriter in the Syndicate:	
Date of Purch	nase:	
Date of Offer	ing:	
Amount of Pu	urchase: ²	
Purchase Pric	e:	
Commission	or Spread:	
	Il the following conditions have been met (any exceptions net) the Compliance prior to participating in the underwriting):	nust be
	The securities are (i) part of an issue registered under the Securities (ii) 1933 (the "1933 Act") that is being offered to the public, (ii) issue of government securities as defined under the Investme Act of 1940, (iii) "municipal securities" as defined under the Exchange Act of 1934, (iv) sold in an offering conducted under the accountry other than the United States subject to certain record (v) exempt from registration under Rule 144A of the 1933. If the securities meet conditions (i), (ii), (iv) or (v):	part of an ent Company Securities der the laws quirements,

² Include all purchases made by two or more funds which have the same investment adviser or sub-adviser.

The issuer of such securities has been in continuous operation for not less than three years (including operations of predecessors).
Issuer was founded in
If the securities meet condition (iii):
such securities are sufficiently liquid that they can be sold at or near their carrying value within a reasonably short period of time and are either subject to no greater than moderate credit risk or, if the issuer of the municipal securities (or the entity supplying revenues or other payments from which the issue is to be paid) has been in continuous operation for less than three years (including any predecessors), subject to a minimal or low amount of credit risk (with the determination as to whether the issue of municipal securities meets the preceding criteria having been made by the investment adviser and/o subadviser of the relevant fund).
The securities were purchased prior to the end of the first day of which any sales were made and the purchase price did not exceed the offering price (or fourth day before termination, if a rights offering).
The underwriting was a firm commitment.
The commission, spread or profit was reasonable and fair compared to that being received by others for underwriting similar securities during a comparable period of time.
The amount of the securities purchased by the Fund, aggregated with purchases by any other investment company advised by the Fund's investment adviser or sub-adviser, and any purchases by another account with respect to which the investment adviser or sub-adviser has investment discretion if the investment adviser or sub-adviser exercised such investment discretion with respect to the purchase did not exceed 25% of the principal amount of the offering. ³
No underwriter which is an affiliate of the Fund's adviser or sub-adviser was a direct or indirect participant in, or benefited directly or indirectly from the purchase.
The purchase was not part of a group sale (or part of the institutional pot), or otherwise allocated to the account of an officer, director, member of an advisory board, investment adviser or employee of the Fund or affiliated person thereof.

³ Special counting rules apply for Rule 144A offerings.

Trading Desk	Compliance
Signature:	Signature:
Signed By:	Signed By:
Date:	Date:

TRADING INSTRUCTIONS

Please	indicate if the account will have (please check one box):
	Directed Brokerage
	Commission Recapture
with I Sayles the Cli	nection with the Client's Investment Management Agreement (the "Agreement") coomis, Sayles & Company, L.P. ("Loomis Sayles"), the Client directs Loomis to execute brokerage transactions for the Client's Account, as detailed below, with (the Client's "Broker"). The Client has entered into an arrangement with tent's Broker pursuant to which the Client receives certain goods and/or services in to execution.
	The Client has negotiated a commission rate with Client's Broker that is currently per share [Must be greater than 0 cents per share]. The Client will inform Loomis Sayles in writing should such rate change over the course of the Client's relationship with Loomis Sayles. The Client understands that since it has negotiated commission rates with Client's Broker, Loomis Sayles will not separately negotiate commission rates with Client's Broker on the Client's behalf.
	The Client has not negotiated a commission rate with the Client's Broker and Loomis Sayles will execute Client's trades at the rate Loomis Sayles independently negotiates with the executing broker-dealer. The Client will inform Loomis Sayles in writing should such rate be set over the course of the Client's relationship with Loomis Sayles.

As described in the Agreement, the Client understands that Loomis Sayles may aggregate some of the orders for the Client's account with the orders from Loomis Sayles' other client accounts and execute them away from the Client's Broker. In these cases, the Client understands that Loomis Sayles may look to meet some or all of the Client's directed trading requirements by instructing the executing broker to send the Client's portion of the aggregated order to the Client's Broker for clearing and settlement. The Client understands that the commission rate the Client will pay on such transactions will be the same as if Loomis Sayles had executed the transaction with the Client's Broker. The Client understands that "Step-outs," as these arrangements are called, are described in Items 12 A & B Part II of Loomis Sayles' ADV under the heading "Where Clients Direct Brokerage." Client understands that Loomis Sayles may use step-outs to satisfy the Client's directed broker requirements unless Client specifically prohibits them.

EXHIBIT E (Cont.)

,	The Clien check one		e its brokerage transactions as follows: (please
		commissions generated on equit Client's Broker based on the per	ion, direct a percentage of the brokerage y transactions for the Client's account to the reentage limits that have been set for each em 12 A & B Part II of Loomis Sayles' Form Clients Direct Brokerage."
		generated on equity transactions Broker. The Client understands than the product group target de Sayles' Form ADV under the he may have the effect of limiting I execution on transactions execute executes a block order with the executed with the block order ar for that trade. However, if Loon	a, direct% of the brokerage commissions for the Client's account to the Client's that the amount of this direction is greater scribed in Item 12 A & B Part II of Loomis ading "Where Clients Direct Brokerage." and Loomis Sayles' ability to achieve best ted for the Client's Account. If Loomis Sayles Client's Broker, the Client's trade will be and the Client's Broker will receive the credit mis Sayles chooses another broker- dealer to be for the Client's Account will be executed a block trade has been executed.
		•	By:
	Name of 0	Client (Please type or print)	Authorized Signature
			Name:
	Date:		Title

EXHIBIT I

Investment Policy

[Attached below]



Kentucky Retirement Systems

Statement of Investment Policy Adopted July 12th, 2017

This Statement of Investment Policy is issued by the Board of Trustees of the Kentucky Retirement Systems (Systems) in connection with investing the pension and insurance funds of the Kentucky Employees Retirement Systems, the County Employees Retirement Systems and the State Police Retirement System. This document supersedes all prior documents entitled Statement of Investment Policy.

I. The Board of Trustees

The retirement plans administered by the Kentucky Retirement Systems are a "Qualified Pension Plan" under Section 401 of the Internal Revenue Code. Additionally, KRS 61.701 establishes health insurance benefits to recipients of the Kentucky Employees Retirement Systems, County Employees Retirement Systems and State Police Retirement System. KRS 61.702 provides that all amounts necessary to provide for insurance benefits shall be paid to the insurance fund. The Board shall administer the fund in the same manner as the retirement funds.

The Board of Trustees authorizes and directs the appointment of an Investment Committee with full power to act for the board in the acquisition, sale and management of the securities and funds of the Systems in accordance with the provisions of the Statutes and Investment Policy of the Board. The Board shall review the actions of the Investment Committee at each quarterly Board meeting.

II. The Investment Committee

The Investment Committee consists of nine members of the Board of Trustees. The 6 members appointed by the Governor, and 3 members of the committee being appointed by the chairperson of the Board of Trustees. In accordance with statute, six (6) positions are filled by the Trustees that were appointed to the board as persons with specific experience (Section 61.645.1.e.2). The committee acts on behalf of the board on investment related matters.

The Investment Committee has the following oversight responsibilities:

- A. Assure compliance with this policy and all applicable laws and regulations.
- B. Approve the selection and termination of service providers. If a situation warrants a termination of an investment manager prior to the next available investment committee, the Chief Investment Officer can terminate an investment manager relationship with a detailed review of the situation to occur at the next investment committee.

- C. Meet no less than quarterly to evaluate whether this policy, the investment activities and management controls and processes continue to be consistent with meeting the Systems' goals. Mandate actions necessary to maintain the overall effectiveness of the program.
- D. Review assessment of investment program management processes and procedures, and this policy relative to meeting stated goals.

III. Staff Responsibilities

The Chief Investment Officer is responsible for administration of investment assets of the Systems consistent with the policies, guidelines and limits established by the law, this Statement of Investment Policy and the Investment Committee.

The Chief Investment Officer receives direction from and reports to the KRS Investment Committee on all investment matters, including but not limited to the following:

- A. Maintaining the diversification and risk exposure of the funds consistent with policies and guidelines.
- B. Assess and report on the performance and risk exposure of the overall investment program relative to goals, objectives, policies and guidelines.
- C. Monitoring and assessing service providers, including not less than annual onsite visits, to assure that they meet expectations and conform to policies and guidelines.
- D. Recommend changes to service providers, statutes, policies or guidelines as needed to maintain a productive relationship between the investment program and its goals; act as liaison on all investment related matters.
- E. Communicating with the mass media and other agencies, entities or institutions regarding investment related issues.
- F. Identify issues for consideration by the Investment Committee and prepare recommendations regarding such matters.
- G. Preparing for each proposed investment a memo to the Investment committee covering the pertinent details including but not limited to: Amount of the investment, type of investment, purpose, opportunity/goal, risks, volatility assumptions, liquidity, structure, fees, background of investment firm with reasons for selection, list of other firms considered, which plans will invest, and the reasons why specific plans may be excluded.

The Chief Investment Officer or designee is authorized to execute trades on fixed income and equity securities (including ETF's) and to execute proxies for the Board consistent with this Policy.

To carry out this Policy and investment related decisions of the Board, the Chief Investment

Officer or designee is authorized to execute agreements and other necessary or proper documents pertaining to investment managers, consultants, investment related transactions or other investment functions.

IV. Service Providers

A. Investment Managers

In instances where the Investment Committee has determined it is desirable to employ the services of an external Investment Manager, the following shall be applicable:

- Investment Managers shall be qualified and agree to serve as a fiduciary to the Systems and shall generally have been in the business of investment management for large United States institutional investors for at least three to five years.
- Investment Managers shall manage assets in accordance with this Policy and any additional guidelines established by contract, as may be modified in writing from time to time.
- Total assets assigned to the selected manager shall not exceed 25% of that firm's total assets under management and shall not exceed 25% of a firm's total assets under management in a commingled product. Separate accounts or funds of one are not included in this 25% limitation for commingled products.
- The assets managed by any one active or passive investment manager shall not exceed 15% of the assets in the pension and insurance funds.
- All investment management services will be contracted according to the KRS Investment Procurement Policy established by the Board of Trustees.

B. Custody Bank

The Board shall hire custodians and other agents who will be fiduciaries to the Systems and who will assume responsibility for the safekeeping and accounting of all assets held on behalf of the Systems and other duties as agreed to by contract.

C. Investment Consultants

Qualified independent investment consultants may be retained by the Systems for asset allocation studies, asset allocation recommendations, performance reviews, manager searches and other investment related consulting functions and duties as set forth by contract.

D. Selection

Qualified investment managers, custody banks, investment consultants and other service providers shall be selected by the Investment Committee in accordance with the KRS Investment Procurement Policy. The selection shall be based upon the demonstrated ability of the professional(s) to provide the required expertise or assistance described in the RFP/RFI (if utilized). In order to create an efficient and effective process, the Investment Committee or Chief Investment Officer may, in their sole discretion, utilize RFI, RFP, third

party proprietary software or database, review of existing service provider capabilities or any combination of these or other methods to select a service provider.

V. Investment Philosophy

The Trustees of the Kentucky Retirement Systems recognize their fiduciary duty not only to invest the Systems' funds in formal compliance with the Prudent Person Rule but also to manage those funds in continued recognition of the basic long term nature of those systems. The Trustees interpret this to mean, in addition to the specific guidelines and restrictions set forth in this document, that the assets of the systems shall be proactively managed — that is, investment decisions regarding the particular asset classes, strategies, and securities to be purchased or sold shall be the result of the conscious exercise of discretion.

The Trustees recognize that, commensurate with their overall objective of maximizing long-range return while maintaining a high standard of portfolio quality and consistency of return, it is necessary that proper diversification of assets be maintained both across and within the classes of securities held to minimize/mitigate overall portfolio risk. Consistent with carrying out their Fiduciary Responsibilities and the concept of Modern Portfolio Theory, the Trustees will not systematically exclude any investments in companies, industries, countries, or geographic areas unless required to do so by statute. Within this context of proactive management and the necessity for adherence to proper diversification, the Trustees rely upon appropriate professional advice from multiple service providers.

The Trustees and other fiduciaries shall discharge their duties with respect to the Systems: (1) solely in the interest of the participants and beneficiaries; (2) for the exclusive purpose of providing benefits to participants and beneficiaries; (3) with the care, skill and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an activity of like character and purpose; (4) impartially; (5) incurring and paying appropriate and reasonable expenses of administration which may not necessarily be the lowest and (6) in accordance with a good faith interpretation of the laws, regulations and other instruments governing the Systems.

Additionally, the Trustees and other fiduciaries shall not engage in any transaction which results in a substantial diversion of the Systems income or assets without adequate security and reasonable rate of return to a disqualified person or in any other prohibited transaction described in Internal Revenue Code Section 503(b).

VI. Investment Objectives

The Board of Trustees realizes that prudent investment management is a duty. In fulfillment of this duty, the Board of Trustees recognizes that while long-term objectives are important, it is also necessary that short-term benchmarks be used to assess the periodic performance of the investment program.

Accordingly, the Board of Trustees has established the following investment objectives:

- Long-Term: Defined as a period of time exceeding twenty years.
 In the long-term, the total assets of the Systems 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.
 - Short-Term: Defined as any period shorter than the defined Long-Term period.

The returns of the particular asset classes of the System, measured on a rolling basis, should seek to exceed the returns achieved by comparable passive market indices as described in the appropriate Addendum of this statement.

VII. Derivative Securities and Leveraging

Definition:

A derivative is broadly defined as a financial instrument whose value, usefulness, and marketability is derived from or linked to the value of an underlying security.

Definitions and examples in the investment universe include:

Forward Contracts - a forward contract is a non-standardized, Over-the-Counter (OTC) contract between two parties, governed by ISDA agreements, to buy or sell an asset at a specified future time at a price agreed to today. This is in contrast to a spot contract, which is an agreement to buy or sell an asset at a set price today. It costs nothing to enter a forward contract. The party agreeing to buy the underlying asset in the future assumes a long position, and the party agreeing to sell the asset in the future assumes a short position. The price agreed upon is called the delivery price, which is equal to the forward price at the time the contract is entered into. An example of a forward contract is a currency forward contract. Currency forward contracts are commonly used to hedge foreign currency risk, which is an inherent risk of investing in international assets.

Futures Contracts - a futures contract is a standardized, exchange traded contract between two parties to buy or sell a specified asset of standardized quantity and quality at a specified future date at a price agreed to today (the futures price). Futures contracts are not "direct" securities like stocks, bonds, rights or warrants. The party agreeing to buy the underlying asset in the future assumes a long position and the party agreeing to sell the asset in the future assumes a short position. Futures may be settled in cash or physically settled depending on the characteristics of the underlying asset and the specifications of the contract. If futures are physically settled the buyer must make arrangements for taking physical delivery. An example of a futures contract is the S&P 500 Futures contract which is traded at the Chicago Mercantile Exchange. The S&P 500 futures contract is commonly used for equitization of cash held in the equity portfolio of a fund so as to keep un-invested cash levels at a minimum. Futures contracts have many other uses for portfolio managers and are considered a valuable tool for adding flexibility and cost effectiveness to the management of a portfolio.

Options - Options are derivative financial instruments that may be standardized, exchange traded, or OTC contracts that specify a contract between two parties for a future transaction on an asset at a reference price. The buyer of the option gains the right, but not the obligation, to engage in that transaction, while the seller incurs the corresponding obligation to fulfill the transaction. The price of an option is derived from the difference between the reference price and the value of the underlying asset (commonly a stock, a bond, a currency or a futures contract) plus a premium based on the time to maturity, expected volatility, and the interest rate environment. Other types of options exist, and options can in principle be created for any type of valuable asset.

An option which conveys the right to buy an asset is called a call; an option which conveys the right to sell an asset is called a put. The reference price at which the underlying asset may be traded is called the strike price or exercise price. The process of activating an option and thereby trading the underlying asset is referred to as exercising it. While there are several styles of option contracts the two most common are American-style contracts and European-style contracts. American-style options contracts may be exercised at or before expiration while European-style options may only be exercised at expiration. Most options have an expiration date while others have strike reset points. If the option is not exercised by the expiration date, it becomes void and worthless.

In return for assuming the obligation, called writing the option, the originator of the option collects a payment, a premium, from the buyer. The writer of an option must make good on delivering (or receiving) the underlying asset or its cash equivalent, if the option is exercised.

An example of an option contract is an S&P 500 put contract. These contracts may be used by a portfolio manager to purchase downside portfolio protection or may be combined with other options contracts to temper volatility in the portfolio, thus reducing risk.

Swaps and Swaptions – Swaps are derivative financial instruments in which counterparties exchange certain benefits of one party's financial instrument for those of the other party's financial instrument. (Swaptions are simply options on swaps) Most swaps are non-standardized, OTC contracts between two parties and are governed by ISDA agreements. Some types of swaps are also exchanged on public markets such as the Chicago Mercantile Exchange, the Chicago Board Options Exchange, Intercontinental Exchange and Frankfurt-based Eurex AG. The benefits of a swap depend on the type of financial instruments involved. At the initiation of a swap contract, two counterparties agree to exchange one stream of cash flows against another stream. These streams are called the legs of the swap. The swap agreement defines the dates when the cash flows are to be paid and the way they are calculated. Usually at the time when the contract is initiated, at least one of these series of cash flows is determined by a reference point such as an interest rate, foreign exchange rate, equity price or commodity price. The cash flows are calculated on a notional principal amount, which is usually not exchanged between counterparties. Value transfers can be made with cash or collateral depending on contract terms.

An example of a swap contract is an interest rate swap. An interest rate swap is an agreement to exchange a series of cash flows on periodic settlement dates over a certain

time period. The duration properties of interest rate swaps are the primary reason for their popularity as an effective portfolio management tool for fixed income managers. If a fixed income manager agrees to pay a floating rate and receive a fixed rate in a swap, s/he will be increasing duration in her/his portfolio.

Warrants - a warrant is a type of derivative security that entitles the holder to buy or sell the underlying stock of the issuing company at a fixed exercise price until the expiry date. Warrants may be either exchange traded or OTC in nature. OTC Warrants are typically long term in nature.

Warrants are frequently attached to bonds (to reduce interest rates for the issuer) or preferred stock (to reduce dividend payments) as a sweetener. Warrants can also be used in private equity deals. Frequently, these warrants are detachable, and can be sold independently of the bond or stock. (Typically traded OTC)

This list is not intended to be an all-encompassing list of derivative contracts available for use in the portfolios, but rather, to display a sample of the most common types of contracts and describe the spirit of their intended use in the portfolios.

Derivatives Permitted Use:

KRS permits external managers and Investment Division (Staff) to invest in derivative securities, or strategies which make use of derivative investments, for exposure, cost efficiency and risk management purposes, if such investments do not cause the portfolio to be leveraged beyond a 100% invested position. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price. Typical uses of derivatives in the portfolio are broadly defined below:

Exposure:

Derivatives are an effective way for a portfolio manager to gain exposure to a security that the manager does not want to purchase in the cash market. Reasons for gaining exposure to a security through the use of derivatives may include cheaper transactions costs, liquidity/lack of supply in the underlying market, and the flexibility to implement investment views with minimum portfolio disruption. An example is a cash equitization program.

Cost Efficiency:

Derivatives are often used due to the cost efficiency associated with the contract properties. Given the fact that derivatives can be used as a form of insurance, upfront trading costs must be sufficiently low for investors to purchase the contract and insure their portfolios efficiently. Furthermore, due to properties associated with derivatives and cash outlay characteristics (minimal cash outlay at inception of the contract) derivatives are generally a vehicle of gaining cost efficient exposure. An example is the cost (zero) to purchase a futures contract.

Risk Management:

Derivatives can be used for mitigating risk in the portfolio. When used as a risk management tool, derivatives can significantly reduce an identified financial risk or involuntary risk from investment areas by providing changes in fair values or cash flows that substantially offset the changes in fair values or cash flows of the associated item being hedged. An example is the use of currency forwards to offset periods of dollar strength when international equity markets increase in value, thereby protecting foreign asset gains in the portfolio.

Derivatives Restricted Use:

Settlement:

Investments in futures contracts are to be cash settled unless physically settled and stored by external managers. At no time shall KRS agree to take physical delivery on a futures contract.

Position Limits:

Futures and options positions entered into by KRS, or on its behalf, will comply with all position and aggregate limits established by the local governing authorities within each jurisdiction.

Over-the-Counter (OTC):

Investments in securities not traded on public exchanges that are deemed Over-the-Counter (OTC) in nature are allowed provided that a counterparty risk monitoring component is delineated in the manager's guideline section of the manager's contract. All counterparties must have a short-term credit rating of at least BBB (Standard and Poor's or Fitch) or Baa2 (Moody's).

All OTC derivative transactions, including those managed through Agency Agreements, must be subject to established International Swaps and Derivatives Association, Inc. (ISDA) Master Agreements and have full documentation of all legal obligations of KRS under the transactions. All ISDA Master Agreements entered into by or on behalf of KRS by the Investment Division (Staff) and external manager pursuant to an Agency Agreement shall provide that Netting applies. (Netting allows the parties to an ISDA Master Agreement to aggregate the amounts owed by each of them under all of the transactions outstanding under that ISDA Master Agreement and replace them with a single net amount payable by one party to the other.) The Investment Division (Staff) and external managers may also use collateral arrangements to mitigate counterparty credit or performance risk. If an external manager utilizes a collateral arrangement to mitigate counterparty credit or performance risk the arrangement shall be delineated in the manager's guideline section of the manager's contract.

Derivatives Applications Not Permitted:

Speculation:

Except for investments in alternative, absolute return investments, and real return investments, derivatives may not be used for any activity for which the primary purpose is speculation or to profit while materially increasing risk to KRS. Derivatives are considered

speculative if their uses have no material relation to objectives and strategies specified by KRS IPS or applicable to the portfolio. Derivatives may not be used for circumventing any limitations or restrictions imposed by the KRS IPS or applicable regulatory requirements.

Leverage:

Leverage is inherent in derivative contracts since only a small cash deposit is required to establish a much larger economic impact position. Thus, relative to the cash markets, where in most cases the cash outlay is equal to the asset acquired, derivative investments offer the possibility of establishing substantially larger market risk exposures with the same amount of cash as a traditional cash market portfolio. Therefore, risk management and control processes must focus on the total risk, i.e. the net notional value, assumed in a derivative investment.

The above is not intended to limit KRS from borrowing to cover short-term cash flow needs nor prohibit KRS from loaning securities in accordance with a securities lending agreement.

VIII. Asset Allocation Guidelines

In establishing asset allocation guidelines the Board recognizes that each system has its own capacity to tolerate investment volatility, or risk. Therefore, each system has been studied and asset allocation guidelines have been established on a system by system basis. The Board will cause the asset allocation guidelines of each system to be reviewed annually. The Board will provide the Investment Committee with the results of any asset liability study and guidance for determining the needs of the systems.

The intent of the Board of Trustees in allocating funds to the investment managers is for the investment managers to fully invest the funds. However, the Board of Trustees is aware that from time to time the investment manager will require a portion of the allocated funds to be held in cash provided the cash holdings do not exceed Five percent (5%) of the manager's allocation for any given quarter, unless such cash holdings are an integral part of a fixed income manager's investment strategy.

The individual plan level asset allocations of the each Pension and Insurance Fund constituent will be reviewed monthly by staff relative to its target asset class allocation, taking into account any tactical policy shift directed by the Investment Committee. Staff shall reallocate the assets when the actual asset class allocation deviates from the policy plus any tactical shift by a minimum of 1%, and a maximum of 15% of the allocation target (if target allocation is 20% then action required when +/- 3%).

Regarding individual investment manager initial allocations, staff will get approval at the Investment Committee meeting for a specific dollar amount intended to be committed to a closed-end fund such as private equity or real estate funds and will get approval for a percent of plan assets for open-end investments such as public equity, public fixed income, and absolute return managers. For those open-end funds where assets can be added or

subtracted, the Chief Investment Officer will have full discretion to reduce an investment manager's allocation or fire a manager, and will have limited discretion to add to an investment manager's allocation. Limited discretion is defined as doubling the size of any Investment Committee approved investment where the of that investment that is less than or equal to 1% of total assets, or adding an additional 1% of capital to any investment committee approved amount that is greater than 1% of total assets. In neither case will this occur prior to the one-year anniversary of the amount approved by the Investment Committee, and must be reported to the Investment Committee at the next scheduled meeting

In keeping with its responsibility as Trustee and wherever consistent with its fiduciary responsibility, the Board encourages the investment of the fund's assets in investments, funds, and securities of corporations which provide a positive contribution to the economy of the Commonwealth of Kentucky. However, where any security is not a prohibited investment under the governing laws and policies, discretion will be granted to the appointed investment managers in the selection of such securities and timing of transactions consistent with the following guidelines and restrictions.

A. Domestic Equity Investments

Investment may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant ETF's or any other type of security contained in a manager's benchmark. Each individual domestic equity account shall have a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance for the account.

The internally managed equity index funds are intended, consistent with the governing plan documents, to gain exposure to a broad asset sector to replicate the characteristics of the asset class, to minimize administrative expenses and to help achieve overall portfolio objectives. These objectives can be achieved through several management techniques, including but not limited to, portfolio optimization, non-reinvestment of index dividends and other management techniques intended to help achieve the objectives of the entire pension fund.

B. International Equity Investments

Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant ETF's or any other type of security contained in a manager's benchmark. Each individual international equity account shall have a comprehensive set of investment guidelines which shall contain a listing of permissible investments, portfolio restrictions and standards of performance for the account.

C. Fixed Income Investments

Fixed Income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks. The fixed income accounts may include, but are not limited to the following fixed income securities: U.S. Government and Agency bonds, investment grade U.S. corporate credit, investment grade non-U.S. corporate credit including both bonds and bank loans, non-investment grade non U.S. corporate credit including bonds and bank loans, municipal bonds, non-U.S. sovereign debt, mortgages including residential mortgage backed securities, commercial mortgage backed securities, and whole loans, asset-backed securities, and emerging market debt including both sovereign EMD and corporate EMD and asset class relevant ETF's.

Each individual fixed income account shall have a comprehensive set of investment guidelines which contains a listing of permissible investments, portfolio restrictions, risk parameters, and standards of performance for the account.

D. Private Equity Investments

Subject to specific approval of the Investment Committee of the Board of Trustees, investments may be made for the purpose of creating a diversified portfolio of alternative investments. Private equity investments are expected to achieve attractive risk-adjusted returns and, by definition, possess a higher degree of risk with a higher return potential than traditional investments. Accordingly, total rates of return from private equity investments are expected to be greater than those that might be obtained from conventional public equity or debt investments. They have low correlation to other investment classes and therefore can contribute to reducing the risk and enhancing the returns of a total portfolio, as well as providing portfolio diversification. Examples of such investments include, but are not limited to, venture capital partnerships, private equity, leveraged buyouts and funds, private debt, timberland, oil and gas partnerships, commodities and private placements. While it is expected that the majority of these assets will be invested within the United States, a portion has been allocated to non-US investments. These non-U.S. investments are not restricted by geography.

Guidelines for Private Equity

The private equity market is highly sophisticated and specialized with respect to variety and types of investment structures. There exist major competition for deal flow on the part of both investor and general partners. To a great extent, market forces drive the bargaining of economic terms. Most investment vehicles are structured as commingled vehicles and often blind pool investment partnerships. The most common offering forms are equity private placements where the governing laws of the partnership impose a passive role of the limited partner investor. These contractual arrangements are long-term in nature and provide the general partner or sponsors a reasonable time horizon to wisely invest capital, add value through intensive operational management, then realize the proceeds of such an investment. Moreover, terms of the partnership are proposed by the general partner are critical to the economic incentives and ultimate net performance of the partnership.

Over the long term, KRS will use a specified index plus risk premium approach.

Investment Strategy and Plan Guidelines

To strengthen the diversification of the investments, several guidelines will be utilized in Staff's formulation and recommended annual investment strategy and plan. These guidelines encompass annual commitment levels to the asset class, types of investment vehicles that can be utilized, controlling financing stage risks, industry, manager and geography concentration/diversification limits, acceptable contact negotiations, appropriate sizes for investments, and the preferred alignment of interests.

<u>Investment Vehicles</u>: KRS will gain exposure to private equity investments by hiring external investment managers either directly or through participation in secondary private equity markets. Typically, the Fund will subscribe as a Limited Partner to limited partnership vehicles sponsored by such specialty external investment managers. KRS may also gain exposure by utilizing the following vehicles: limited liability companies and co-investments alongside the Fund's existing or potential limited partnerships.

Investment Timing Risks: Staff should limit the potential for any one investment to negatively impact the long-term results of the portfolio by investing across business cycles. Moreover, the portfolio must gain exposure to the array of financing stages by opportunistically exploiting the best investments at different stages of the business cycle. Staff may also consider purchasing secondary partnership interests to shorten the effective life of the partnership interest and therefore positively impacting the current and long term net return of the portfolio. In addition, mindful of vintage year diversification, KRS should seek to identify attractive commitments annually, further ensuring the portfolio invests across business cycles.

<u>General Partner Diversification</u>: Staff will seek to work with a variety of general partners due to their specialized expertise in particular segments of the private equity market and source of their deal flow. No more than fifteen (15) percent of the KRS Pension or Insurance total allocation to private equity investments may be committed to any one partnership, without the approval of the Board.

<u>Geographical Diversification</u>: To ensure geographical diversification, the target range for total commitments outside of the United States will be 15-45% through commitments to funds located and or investing both in and outside of the United States.

<u>Industry/Sector Concentration</u>: As fallout of diversified commitments outlined above, it is expected that the portfolio will be generally diversified by sector/industry. KRS will maintain diversification by ensuring:

No more than 35% of total net assets of the private equity portfolio may be invested in a single sector of the domestic economy.

No more than 20 % of total net assets of the private equity portfolio may be invested in a single industry within a particular sector.

No more than 10% of total net assets of the private equity portfolio may be invested in any single equity or debt related assets.

Subcategory Strategy

The private equity portfolio includes strategic subcategory classifications including venture capital, buyouts and debt-related. The target percentages set forth below for each category are based on invested capital. For specific plan allocations to Private Equity, Please refer to Appendix A for the Pension funds and Appendix B for the Insurance funds.

The sub-asset target allocations to Venture Capital, Buyouts, and Debt-related for specific plan allocations refer to Appendix A for the Pension funds and Appendix B for the Insurance fund are based on market value and will have a range of +/- 10%:

E. Real Estate Investments

Subject to specific approval of the Investment Committee of the Board of Trustees, investments may be made in equity and debt real estate for the purpose of achieving the highest total rate of return possible consistent with a prudent level of risk. Allowable real estate investments include open-end and closed-end commingled real estate funds, joint venture investments, public and private REITs (real estate investment trusts), public real estate operating companies, and real estate related debt.

Private real estate investments are unique and can be illiquid and long term in nature. Given that this may lead to large short term performance discrepancies versus public benchmarks, KRS more appropriately measures its real estate investments based on both relative return and absolute return methodologies:

Relative Return: The real estate portfolio is expected to generate returns, net of all fees and expenses, in excess of the National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity Index ("NCREIF ODCE") lagged 1 calendar quarter.

Absolute Return: The long term real return objective (returns adjusted for inflation) for the KRS real estate portfolio is five percent (5%) over the Barclays Capital U.S. 7-10 Year Treasury Bond Index, net of investment management fees. This return shall be calculated on a time-weighted basis using industry standard reporting methodologies.

KRS has determined that the primary role of the real estate asset class is to provide for the following:

- Attractive risk adjusted returns through active management and ability to
 access managers with the expertise and capabilities to exploit market
 inefficiencies in the asset class. The illiquid nature of real estate investments
 combined with the complexity of investments makes it difficult for casual
 investors to effectively access the asset class effectively. It is our belief that
 through active management and by investing in top tier managers with interests
 aligned through co-investment and incentive based compensation, KRS can
 maximize its risk adjusted returns. This active management approach will be
 pursued.
- Diversification benefits through low correlations with other asset classes, primarily the U.S. equity markets.
- Provide a hedge against unanticipated inflation, which real estate has historically provided due to lease structures and the increases in material and labor costs during inflationary periods.
- Permit KRS to invest in unique opportunities that arise due to dislocations in markets that occur from time to time.

Allocation to Real Estate Asset Class

KRS divides the real estate investment universe into core, value-add, opportunistic and public securities sectors, with descriptive attributes of each listed below. It should be noted that targeted returns for each sector denoted in the descriptions below are based on industry guidelines and may vary based on different points in market cycles and changes in general inflation levels.

A. Core Properties

- Operating, substantially leased office, retail, industrial or apartment properties.
 Several alternative property types may be included in Core such as self-storage, medical office, ground leases, senior housing and triple net leased properties to the extent they exhibit similar risk and return attributes to the traditional Core property types.
- Generally have institutional qualities for size, physical attributes and location.
- Target total returns of 3-5% per year (net of fees and promoted interest) above the Barclays Capital U.S. 7-10 Year Treasury Bond Index, with a high proportion of the total return to be generated from current income and a small proportion of the total return generated from appreciation.

 Leverage for core properties is moderate with an upper limit of 50% loan to value.

B. Value Added Properties

- Office, retail, industrial or apartment properties that have moderate risk associated with their investment. Several alternative property types may be included in Value-Added such as self-storage, medical office, senior housing and triple net leased properties to the extent they exhibit similar risk and return attributes for Value-Added investments.
- Value-Added investments are targeted to capitalize on defects with specific properties that can be identifiable and correctable through leasing, redevelopment, management and/or recapitalization.
- Target returns for value added investments are 5-7% above the Barclays Capital U.S. 7-10 Year Treasury Bond Index per year (net of fees and promoted interest).
- Leverage for value added investments is generally limited to approximately 65% loan to value.

C. Opportunistic Investments

- Opportunistic investments can be comprised of any property sector.
 Opportunistic investments can include office, retail, industrial and apartments with high-risk attributes. In addition, hotels, operating companies, development, land and distressed properties are all examples of opportunistic investments
- Leverage for opportunistic investments can be 75% loan to value or higher in certain cases.
- Opportunistic investments will target returns in excess of 7% (net of fees and promoted interest) above the Barclays Capital U.S. 7-10 Year Treasury Bond Index in order to compensate for the additional risk commensurate with the increased risk compared to core property investments.

D. Public Securities

 Public Real Estate securities ("Public Securities") do not allow for control over the assets or management. Examples of public securities may include REITs and CMBS, among others. Investment strategies using public securities may be classified as core, value-add, or opportunistic strategies based on the characteristics of those specific investments and are reviewed on a case by case basis. Real estate strategies utilizing public securities that provide daily liquidity to KRS shall be required to be classified as "Public Securities" under the Investment Policy Statement.

- Public Securities generally have higher risk and return characteristics than Core
 properties due to higher leverage and operating company risks. In addition, the
 daily pricing of securities result in additional reported volatility of returns.
- Daily pricing and public market trading provide liquidity. However, due to small float and limited market capitalization of Public Securities, improved liquidity may come at a price.
- The emergence of the international Public Securities market has broadened the universe to include Asia, European, Australian and North American property companies.
- Expected returns are dependent on investment strategy of the public security which shall be identified at time of investment and the return expectation will match one the above the categories

Diversification and Risk Management Guidelines

The policy ranges for the real estate portfolio sectors have been set with reasonably wide ranges in order to allow KRS to capitalize on market inefficiencies and attractive opportunities, while also maintaining a certain level of low risk stability to the portfolio. Since many of the real estate investments will be private market investments in commingled funds, KRS will not have precise control over the actual real estate exposure. Funding, de-funding and rebalancing the portfolio may be protracted (like private equity) due to the asset classes illiquid characteristics.

A. Sector Diversification

KRS will seek to limit investments using the following diversification limits:

	Target	Range
Core:	70%	50% to 90%
Value Added:	20%	10% to 30%
Opportunistic:	10%	0% to 20%
Public Securities:	0%	0% to 100%

B. Investment Vehicles

Due to the size of KRS's portfolio, the preferred investment structure is commingled funds. Exceptions may be for public equity accounts which may be efficiently invested through a separate account or single property investments. Single property investments, outside of a joint venture with an approved property manager or co-investment with an approved real estate fund manager, shall be limited to no more than 5% of the total real estate allocation and a presentation to the full board prior to investment.

KRS may also consider co-investment opportunities in cases where discounted fees and appropriate diversification can be achieved for a particular investment opportunity.

C. Diversification

KRS will seek to control risk in its real estate investment program by diversifying its investments by investment manager, property type and location diversification.

D. Investment Manager

KRS will limit the amount committed to any one investment manager to the larger of thirty percent (30%) of the total allocation for real estate investments or 1% of the total funds value at the time of commitment.

E. Property Type Diversification

KRS will seek to limit investments by property type diversification using the following limits:

Office: 0% to 40% of the total allocation

Retail: 0% to 40% of the total allocation

Apartment: 0% to 40% of the total allocation

Industrial: 0% to 40% of the total allocation

Other: 0% to 40% of the total allocation (other includes hotels, self-storage, parking, etc.) Geographic Diversification

The KRS real estate portfolio shall seek to include investments diversified across various locations with different economic concentrations. The portfolio shall be at least 80% invested in U.S. markets.

Diversification will be monitored with respect to major regional areas; e.g. Pacific, Mountain, Southwest, Southeast, Mideast, Northeast, East North Central, West North Central. International monitoring will be carried out in a similar fashion as that used domestically.

F. Total Leverage

KRS recognizes that leverage is an inherent component of real estate investments and use of leverage can be an effective means to increase overall returns from time to time on a risk-adjusted basis. There will be a goal to a limit of 65% of the total portfolio placed on the use of leverage. The measurement will be the weighted average of investments with their max allowed leverage.

All portfolio leverage will be secured through the individual fund investments. There will be no recourse debt permitted.

G. Vintage Year Risks

KRS will seek to avoid any concentrated vintage year risks.

F. Real Return Investments

The purpose of the Real Return Portfolio is to identify strategies that provide both favorable stand-alone risk-adjusted returns as well as the benefit of hedging inflation for the broader plans. Real return strategies are not necessarily a separate asset class but may include real assets, such as infrastructure, real estate, commodities, and natural resources among others, as well as financial assets that have a positive correlation to inflation. This can include "real" bonds such as TIPs (and other inflation linkers) or "real" stocks such as REITs, MLPs, and oil & gas stocks. Additionally, real return managers may attempt to add value by tactically allocating to various asset classes according to how each asset class performs across an economic cycle and the manager's perception of where we are in the cycle. The goal is to invest in inflation sensitive assets during inflationary periods, and avoid those assets in deflationary periods, thus providing a positive real return across the cycle.

The real return opportunity set may include numerous vehicles to access a wide variety of investment styles and strategies. These investment vehicles may include mutual funds, ETFs, separately managed accounts as well as hedge funds (open-end limited partnerships) and private equity (close-end limited partnerships). The list of strategies that the KRS Real Return Portfolio may use includes, but is not limited to, the following:

GTAA (Global Tactical Asset Allocation)/ Global Macro: GTAA or macro strategies are
those that make directional bets on major markets or asset classes instead of individual
securities. GTAA and macro strategies typically invest in all major assets classes
including equity markets, credit and debt instruments, currencies/interest rates, and
commodities. These strategies tend to focus on economic factors that would suggest an
opportune time to invest in a given asset class, and will change their allocations actively

over time. Within a real return portfolio, these strategies may use inflation as the economic factor to gain exposure to and will target a real rate of return over time.

- Inflation Linked Securities are securities that directly tie coupon payments or principal
 increases to an inflation index, such as CPI. These strategies could include not only US
 TIPs, but also global sovereign inflation linked bonds, corporate or infrastructure inflation
 linked bonds, and possibly short duration floating rate bonds.
- Inflation Sensitive Equities include publicly traded equity and equity related securities in companies which have a high sensitivity to inflation in their profit margins via the nature of their operating assets, such as energy companies, basic materials and miners, natural resource stocks, and listed infrastructure. This category can also include REITs, MLPs as well as ETFs and index products on REITS, MLPs, natural resource stocks, etc.
- Commodities: Commodities are the raw materials that are physical inputs into the
 production process. Managers that invest in liquid commodity strategies using exchange
 traded futures can span from simple indexing (matching a long-only commodities index),
 to enhanced indexing or active long (selecting positions that vary from the index but
 within fairly tight ranges), as well as unconstrained long-short managers.
- Private Property: For the purposes of this policy, private property refers to the ownership of an idiosyncratic, physical asset that is predominately fixed and/or permanent or at least substantially long-lived. This includes real estate, such as land and any improvements to or on the land, as well as timberland and farmland. Timberland investing involves the institutional ownership of forest for the purpose of growing and harvesting the timber. The timber may be used for furniture, housing lumber, flooring, pulp for paper, woodchips, and charcoal, among other things. Farmland investing entails ownership of land used primarily if not exclusively for agricultural production both for crops, including row crops and permanent crops, as well as livestock. Private property can also include infrastructure investing, which refers to financing the manufacture or development of the underlying fundamental assets and basic systems that are necessary for an economy whereby such assets are largely fixed and long-lived. These tend to be high cost, capital intensive investments that are vital to a society's prosperity and facilitate the transfer, distribution, or production of basic goods and services.
- Natural Resources: Natural resources can include investing in the financing, development, extraction, and production of minerals, basic materials, petroleum products, and water as well as renewable resources such as agricultural commodities and solar energy. As opposed to property, the returns generated in these investment

strategies come more from the actual production of the resource itself. Further, these are depleting and/or consumable assets that are also portable and fungible and which in the aggregate comprise a majority of the inputs into most measurements of inflation.

- Private Assets: Private assets can include tangible or intangible assets that are not
 easily sold in the regular course of a business's operations for cash, and which are held
 for their role in contributing directly to the business's ability to generate profit. As the
 useful life of the asset tends to extend across many years and the assets tend to be
 capital intensive as well, they have some similarity to private infrastructure. Further,
 given that the assets contribute directly to the production process as well as often
 retaining intrinsic value, there is a fundamental link to inflation somewhat similar to
 natural resources.
- Other (Opportunistic Inflation Hedge): Other/opportunistic strategies include those that
 have a propensity to provide a positive real return or positive correlation with inflation
 over time. Liquid strategies such as inflation swaps, diversified inflation hedging mutual
 funds, or nominal bonds backed by inflation sensitive assets may be included in this
 allocation, while other illiquid strategies that may provide the same real profile can
 include private equity in inflation sensitive companies, hard asset-backed private credit,
 and structured inflation-linked products among others.

The Real Return allocation shall seek to achieve the following:

- Short-term benchmark: For periods less than five years or a full market cycle, the allocation should achieve an annual rate of return that exceeds the appropriate benchmark (the weighted average return of the underlying investment benchmarks) annually over a complete market cycle, net of all investment management fees.
- Strategic objective: For periods greater than five years or a full market cycle, the allocation should not only outperform the short-term benchmark, but also achieve a rate of return that exceeds (CPI + 300 basis points) as well.

Portfolio Guidelines

No more than 50% of the total net assets of the Real Return portfolio may be invested in any one registered investment vehicle, mutual fund, or separately managed account.

No more than 20% of the total net assets of the Real Return portfolio may be invested in any single closed-end or open-end limited partnership or other unregistered investment vehicle.

The relative allocations to the liquid and illiquid portfolios will be determined according to each individual plan's liquidity needs, funding status, and allocation targets on an investment by investment basis.

G. Cash Equivalent Securities

Selection of particular short-term instruments, whether viewed as liquidity reserves or as investment vehicles, should be determined primarily by the safety and liquidity of the investment and only secondarily by the available yield. The following short-term investment vehicles are considered acceptable: Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective STIFs, money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail. All instruments shall have a maturity at the time of purchase that does not exceed 397 days. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

The Systems' fixed income managers that utilize cash equivalent securities as an integral part of their investment strategy are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

H. Absolute Return Strategies

The purpose of the Absolute Return Portfolio is to identify strategies that provide both favorable stand-alone risk-adjusted returns as well as the benefit of diversification for the overall plan. Absolute return strategies, by definition, are not necessarily a separate asset class, but broaden the opportunity set within existing asset classes such as stocks, bonds, currencies and commodities by going both long and short, employing derivatives and leverage, shortening and extending investment horizons, and moving across public and private markets, amongst others. By focusing on the idiosyncratic risks of security selection and often attempting to

minimize systematic market risks through hedging activities, absolute return managers can make investment decisions unconstrained by restrictive relative benchmarks such as the S&P 500 or Barclay's Aggregate Bond Index, and add value to portfolios by achieving favorable risk-adjusted returns in most market environments while also reducing overall plan volatility.

The absolute return opportunity set is generally considered to include hedge funds and other strategies attempting to achieve positive returns without heavy reliance on the assumption of traditional systematic risk factors. Investment vehicles used to access this opportunity set can include limited partnerships, but also mutual funds, ETFs, and separately managed accounts, amongst others. Absolute return strategies are extremely heterogeneous, as managers have both greater variability within a strategy and the flexibility to evolve across styles and asset classes. This is a key benefit of absolute return; however, it also makes strategy classifications less meaningful and manager selection significantly more important. It also necessitates relatively broader allowable strategy ranges than in other more traditional asset classes.

The list of strategies that the KRS Absolute Return Portfolio may utilize includes, but is not limited to:

- Equity Strategies: Equity-based hedge funds are those which primarily purchase listed stocks, long and short, using no to substantial leverage. These strategies may differ across multiple styles such as broad or sector based mandates, geographically focused or global, concentrated versus diversified, long biased or market neutral, or short term trading versus longer term fundamental. Sub-strategies in this category would include fundamental long/short equity, short bias, tactical trading, and equity market neutral.
- Event Driven: Event-driven strategies also invest in the securities of corporate issuers, including stocks and corporate bonds. However, these strategies will invest based upon specific corporate actions that will change the value of these securities including mergers, spin-offs, tender and exchange offers and bankruptcy or restructuring. These strategies can be flexible across equity/credit, long/short as well as other style characteristics noted earlier. Another critical differentiator among event driven strategies is whether they pursue primarily hard versus soft catalysts. Examples of sub-strategies in this category include merger arbitrage, shareholder activism, multi-strategy event, special situations, and opportunistic value/soft catalyst.
- Credit Strategies: Credit strategies are those which focus on the debt side of the capital
 structure. They may have equity exposure, but the vast majority of the portfolio is
 invested in credit securities. Similarly, these strategies may be long biased or more
 hedged, may be more fundamentally based or more quantitative, focus on paying versus
 non-performing, and shorter term trading versus longer term focused. However, some
 funds may be focused on structured credit markets, including RMBS and CMBS, and
 others may move opportunistically across various credit segments. Sub-strategies may
 include long/short corporate credit, structured credit, and distressed securities.
- Relative Value: Relative Value strategies are those that do not invest in the intrinsic value of any individual security, but rather research the historical and/or mechanical

relationships between related securities and invest in the spread. For example, they may bet on one bond being overvalued relative to another bond from the same issuer. These strategies are almost always market neutral, but may vary from moderately to highly leveraged, concentrated versus diversified, or from HFT (high frequency trading) to a longer term investment horizon. Examples of sub-strategies in this category include fixed income arbitrage, convertible arbitrage, and statistical arbitrage.

- Multi-Strategies: Multi-Strategy hedge funds are those which will actively employ several
 of the other major hedge fund categories. Typically, hedge funds may do more than one
 thing, but to be a true multi-strategy, a hedge fund must have meaningful allocations of
 capital to at least 3 of the other four major categories: equity, credit/event, relative value,
 and macro/CTA. A true multi-strategy hedge fund should not have 50% to 70% of NAV
 invested in one strategy or 50% to 70% of the historical return attribution from one
 strategy. Finally, most multi-strategy hedge funds have their roots in one specific style
 and have evolved into multi-strategies over time.
- Global Macro: Macro strategies are those that make directional bets on major markets
 or asset classes instead of individual securities. Global macro funds are typically
 diversified across 3 of the 4 major liquid markets: equity indices, credit/debt,
 currencies/rates, and commodities. These strategies are often quantitative or
 discretionary, or shorter term/market timing versus longer term/macroeconomic
 focused. Finally, some traders may focus largely on certain markets, such as rates or
 currencies, trading on fundamental economic signals.
- CTA/Commodity/Currency: Managed Futures or CTAs will trade the same markets as
 global macro funds (i.e. equity indices, debt markets, currencies, and commodities) but
 will focus heavily on price or other technical signals, instead of fundamental or economic
 data. CTAs tend to be purely systematic (black-box) or discretionary, shorter to longer
 term and will employ either trend following/momentum strategies or counter-trend/ mean
 reversion. Similar to macro funds, some CTAs focus purely on certain markets, such as
 commodities or currencies.
- Other: Strategies in this category, sometimes referred to as alternatives to alternatives, tend to be the most highly uncorrelated strategies. These may not be true "alpha" generators, as they often are simply accessing extremely unique and non-competitive markets, looking to harvest systemic risk premia found in these markets. However, the "betas" they are accessing are truly idiosyncratic. These strategies are much smaller and tend to have a bit higher illiquidity than other hedge funds. Examples of substrategies that fall in this category would be intellectual property, weather risk, and insurance strategies.

The Absolute Return allocation shall seek to achieve the following.

- Short-term benchmark: For periods less than five years or a full market cycle, the allocation should achieve an annual rate of return that exceeds the appropriate benchmark (HFRI Diversified Fund of Fund Composite), net of all investment management fees, with similar risk relative to the benchmark.
- Strategic benchmark: For periods greater than five years or a full market cycle, the allocation should not only outperform the short-term benchmark, but also achieve a rate of return that exceeds the appropriate long-term benchmark (1 Year Treasury Bill Rate + 500 basis points) as well.

Portfolio Guidelines

No more than 10% of the total net assets of the Absolute Return portfolio may be invested in any one single manager hedge fund. No more than 15% of the total net assets of the Absolute Return portfolio may be invested in any one single separately managed account, mutual fund, or other registered investment vehicle.

No more than 15% of the total net assets of the Absolute Return portfolio allocation may be invested with any one single hedge fund manager strategy (excluding Funds of Funds). No more than 25% of the net assets of the Absolute Return portfolio allocation may be invested with any one single investment manager (excluding Funds of Funds).

As the Absolute Return allocation can invest in various investment vehicles and strategies with differing liquidity profiles, it is important to consider liquidity as a separate risk spectrum. In order to manage the portfolio and provide the system liquidity as necessary, but remain flexible enough to capture returns available in moderately illiquid opportunities, the Absolute Return allocation will adhere to the following liquidity targets:

At all times, at least 25.0% of the Absolute Return portfolio as a whole is to be available in quarterly or better liquidity vehicles.

At all times, no more than 50.0% of the Absolute Return portfolio as a whole is to be committed to vehicles that provide liquidity on a greater than annual basis.

No investments to vehicles with a greater than 5 year lock-up are permitted in the Absolute Return portfolio.

IX. Standards of Measurement

Performance Measurement

The Kentucky Retirement Systems ("KRS") overall fund performance is measured relative to the KRS Pension or Insurance Total Fund Benchmark. The benchmark is calculated by means of a weighted average methodology. This method is consistent with industry-wide standards and the practices utilized by the CFA Institute. It is the product of the various component weights (i.e., asset classes' percentages) by their respective performance (returns). Due to market fluctuations and acceptable divergence, the asset classes' weights (percentages) are often not equivalent to the benchmark's weights. Therefore, the performance may indicate that the Funds have outperformed (underperformed) relative to their respective benchmarks, even when the preponderance of lesser weighted categories have underperformed (outperformed) their indices.

KRS measures its asset classes, sub-asset classes, sectors, strategies, portfolios, and instruments (investment) performance with indexes that are recognized and published (e.g., S&P 500 & Barclays Aggregate Bond Index). These indices are determined to be appropriate measures of investments and composites of investments with identical or similar investments profiles, characteristics, and strategies. The benchmarks and indexes are intended to be objective, investable, replicable, representative and measurable of the investment mandate and, developed from publicly available information that is acceptable to KRS and the investment manager/advisor as the neutral position consistent with the underlying investor status. KRS' investment consultant and staff recommend the benchmarks and indexes. These measures shall be subject to the annual review and approval of the KRS Investment Committee and ratification of the Kentucky Retirement Systems' Board of Trustees.

The KRS Total Fund Benchmarks and sub-components, indexes, are described in Appendix A and B of this document. The following descriptions represent general standards of measurement that will be used as guidelines for the various classes of investments and managers of the Kentucky Retirement Systems. They are to be computed and expressed on a time-weighted total return basis:

Total Public Asset Class Allocations

Short-term

- For periods less than five years or a full market cycle, the Asset Class Allocation should exceed the returns of the appropriate Index.

Intermediate & Long-term

- For periods greater than five years or one market cycle, the Asset Class Allocation should exceed the appropriate Index, compare favorably on a risk-adjusted basis, and generate returns that rank above the median return of a relevant peer group. Volatility, as measured by the standard deviation of monthly returns, should be comparable to the Index.

<u>Individual Public Security Portfolios:</u> Individual portfolios shall be assigned a market goal or benchmark that is representative of the style or market capitalization of the assignment. Individual accounts should be monitored using the following Standards:

Short-term

 For periods less than five years or a full market cycle, individual portfolios should exceed the returns of their market goal or benchmark.

Intermediate & Long-term

- For periods greater than five years or one market cycle, individual portfolios should exceed the return of their market goal or benchmark, compare favorably on a risk-adjusted basis, and generate returns that rank above the median return of a relevant peer group. Volatility, as measured by the standard deviation of monthly returns, should be comparable to the benchmark

Alternative Assets:

In addition to exceeding the appropriate benchmark listed in Appendix A and B, the Alternative portfolio should also seek to achieve the following:

Short-term

 Alternative investments should earn a Net IRR that place the investment above the median Net IRR of other similar funds, of the same vintage year, as reported by Venture Economics.

Intermediate & Long-term

 The private equity portfolio should earn a return that meets or exceeds the KRS Private Equity Index. Individual private equity investments should earn a Net IRR above the median Net IRR of other similar funds, of the same vintage year, as reported by Venture Economics.

Real Estate

The Total Real Estate allocation of the fund shall be benchmarked to the appropriate benchmark and are listed in Appendix A and B.

Real Return

The total Real Return allocation shall seek to:

- (1) Achieve a rate of return that exceeds the appropriate benchmark annually over a complete market cycle (historically 3-5 years), net of all investment management fees.
- (2) Achieve a rate of return that exceeds the appropriate real return composite index over a complete market cycle (historically 3-5 years), net of all investment management fees.
- (3) Achieve a positive risk/reward trade-off when compared to similar style real return Investment Managers.

Absolute Returns

The total Absolute Return allocation shall seek to:

(1) Achieve a rate of return that exceeds the appropriate benchmark annually over a complete market cycle (historically 3-5 years), net of all investment management fees. (2) Achieve a positive risk/reward trade-off when compared to similar style FOF return Investment Managers.

X. Investments Performance Review Procedures

On a timely basis, but not less than quarterly, the Investment Committee, on behalf of the Board of Trustees, will review the performance of the portfolio for determination of compliance with this Statement of Investment Policy. On an annual basis, a comprehensive review of each asset class and underlying portfolios shall be conducted by the staff and presented to the Investment Committee. The review shall consist of an organizational, performance and compliance assessment.

The Compliance Officer shall perform tests at least monthly to assure compliance with the restrictions imposed by this policy. These tests shall be performed at the asset class and total fund level. Quarterly, the Compliance Officer shall prepare a report to the Investment Committee detailing the restrictions tested, exceptions, the cause of the exception and the subsequent resolution. The Investment Committee shall report the findings to the Board of Trustees at the next regularly scheduled meeting.

The following restrictions shall be tested at least monthly:

- 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 Systems' assets.
- The amount of stock held in the domestic or international equity allocation shall not exceed 3% of the outstanding shares of any single corporation.
- Investment in "frontier" markets (those countries not included in the MSCI EM Index) shall not exceed 5% of the System's international equity assets.
- The duration of the core and global fixed income portfolios combined shall not vary from that of the KRS Fixed Income Index by more than+/- 25% duration as measured by effective duration, modified duration, or dollar duration.
- The duration of the TIPS portfolio shall not deviate from the KRS TIPS benchmark by more than 10%.
- The amount invested in the debt of a single issuer shall not exceed 5% of the total market value of the Systems' fixed income assets, with the exception of U.S. Government issued, guaranteed or agency obligations (or securities collateralized by same), and derivative securities used for exposure, cost efficiency, or risk management purposes in compliance with Section VII of this policy.
- 50% of the fixed income assets must have liquidity that is trade date plus three days or better.

The Chief Investment Officer shall develop a comprehensive set of investment guidelines for each externally managed account. These guidelines should ensure, at the total fund and asset class level, that the restrictions set forth above are preserved.

XI. Additional Items

The KRS Board recognizes that the voting of proxies is an important responsibility in assuring the overall performance of the Fund over a long time horizon. The Board has delegated the responsibility of voting all proxies to an outside Proxy Voting service provider or contracted external investment manager. The Board expects that the proxy voting service will execute all proxies in a timely fashion, and in accordance with the voting policy which has been formally adopted.

The Board has adopted the ISS U.S. Proxy Voting Guidelines as the System's approved Proxy Voting Policy for all internally voted items. This policy is updated at least annually by ISS is and hereby incorporated by this reference. The policy can be found publically using the following link:

http://www.issgovernance.com/files/2012USSummaryGuidelines1312012.pdf

- A. Investment Procurement Policy Dated July 2017 is hereby incorporated by reference.
- B. Investment Brokerage Policy dated May 2011 is hereby incorporated by reference.
- C. Transactions Procedures Policy dated November 2014 is hereby incorporated by reference.
- D. Securities Litigation Policy and Procedures dated May 2011 is hereby incorporated by reference.
- E. Investment Securities Lending Guidelines dated May 2011 is hereby incorporated by reference.
- F. Securities Trading Policy for Trustees and Employees dated February 2015 is hereby incorporated by reference.
- G. Manager and Placement Agent Statement of Disclosure Policy dated August 2012 is hereby incorporated by reference.

As Adopted by the Investment Committee	As Adopted by the Board of Trustees	
Date:	Date:	
Signature:	Signature:	
Mr. David L. Harris	Mr. John R. Farris	
Chair, Investment Committee	Chair, Board of Trustees	

EXHIBIT J

KRS' Manager and Placement Agent Statement of Disclosure Policy

[Attached below]

Kentucky Retirement Systems



Statement of Disclosure and Placement Agents - Manager Questionnaire

- Did your firm use a placement agent as defined in the KRS "Statement of Disclosure and Placement Agents" policy in an effort to solicit an Investment from KRS? If yes, please continue to question 2; if no, please proceed to question 10.
 No
- Please disclose the name of the placement agency used, the names of the individuals contracted by the placement agency (either as employees or as sub-agents) in order to solicit an investment from KRS, and the fees paid or payable to the placement agent in connection with a prospective KRS investment.
- Please represent that any fees paid to placement agents are the sole obligation of the investment manager and not that of KRS or the limited partnership.
- 4. Please disclose the names of any current or former Kentucky elected or appointed government officials (federal, state, and local government), KRS Board of Trustees members, employees, or consultants of KRS, or any other person, if any, who suggested the retention of the placement agent.
- Please provide evidence of the regulatory agencies, if any, in any Federal, state or foreign jurisdiction the placement agent or any of its affiliates are registered with, such as the Securities and Exchange Commission ("SEC"), FINRA, or any similar regulatory agency.
- Please provide a resume for each officer, partner or principal of the Placement Agent detailing the
 person's education, professional designations, regulatory licenses and investment and work
 experience.
- Please describe the services to be performed by the Placement Agent.
- Please disclose whether the Placement Agent, or any of its affiliates, is registered as a lobbyist with any and all Kentucky state and local (county) governments.

- 9. Please disclose any political contributions made by the Placement Agent, a Placement Agent principal, or their family as defined by KRS 11A.010(4) to: any Kentucky official; political party; political organization; or other political entity within the prior 2 years.
- 10. Please disclose the names of any current or former Kentucky elected or appointed government officials (federal, state, and local government) KRS Board of Trustees members, employees, or consultants of KRS that are receiving any fees or compensation from the External Manager and/or placement agent. Please disclose any additional known relationships or conflicts with same.

None.

11. Please disclose any political contributions made by External Manager, its principals, or their family as defined by KRS 11A.010(4) to any Kentucky official; political party; political organization; or other political entity in the prior 2 years.

None

12. Please disclose whether any principals of the firm are the subject of any pending litigation or have been involved in any regulatory proceedings related to the performance of their duties as an investment adviser. If so, please supply details concerning the issue.

None,

13. Please provide a statement representing and warranting the accuracy of the information provided to KRS regarding the Statement of Disclosure, and acknowledge that similar language will be included in any final written agreement with a continuing obligation to update any such information within 10 business days of any change in the information.

Signature

Print Name

.

Firm Name: Laomis, Sayles & Co., L.P.



Kentucky Retirement Systems Manager and Placement Agent Statement of Disclosure Approved June 27, 2018

A. Purpose

This Manager Statement of Disclosure (Policy) sets forth the disclosure requirements which must be satisfied prior to any Kentucky Retirement Systems (KRS) investment. This policy requires disclosure of conflicts of interest and/or political contributions with any new KRS investment. KRS shall require the disclosure of detailed information regarding any manager used, their services, and payments and fees in connection with all KRS investments. This Policy is intended to apply broadly to all of the types of investment advisors with whom KRS conducts or potentially conducts business with including general partners, managers, investment managers and sponsors of hedge funds, private equity funds, real estate funds, as well as investment managers retained pursuant to a contract.

The goal of this Policy is to bring transparency to our investment management relationships in connection with KRS' investments and to help ensure that KRS' investment decisions are made based solely on the merits of the investment opportunity and in a manner consistent with the responsibilities of the Board of Trustees and individuals who owe a fiduciary duty to KRS.

B. Objectives

The objectives of KRS' policy are:

- To ensure that KRS' investment decisions are consistent with KRS' overall Investment Policy Statements;
- To supplement the due diligence and information available to KRS Board members, staff, and consultants when evaluating an investment opportunity;
- To prevent impropriety and/or the appearance of improprieties and to disclose conflicts of interest and/or the appearances of conflicts of interest;
- 4. Provide transparency and confidence in KRS investment decision-making and process; and
- Establish procedures to comply with state and federal law.

C. Application

This Policy applies to all agreements with managers that are entered into after the date this Policy is adopted. This Policy also applies to existing agreements with managers if, after the date this Policy is adopted, the term of the agreement is extended; there is any increased commitment of funds by KRS pursuant to the existing agreement; or there is a material amendment to the substantive terms of an existing agreement, including the fees or compensation payable to the manager.

D. Definitions

- "KRS vehicle" means a partnership, limited liability company, account or other investment vehicle in which KRS is the investor.
- "Consultant" refers to individuals or firms, and includes key personnel of consultant firms, who are contractually retained or have been contracted by KRS to provide investment advice to KRS but who do not exercise investment discretion.
- 3. "Manager" means an asset management firm that is seeking to be, or has been, retained by KRS or by a KRS vehicle to manage a portfolio of assets (including securities and or contracts, etc...) for a fee. The manager usually has full discretion to manage KRS assets, consistent with investment management guidelines provided by KRS and fiduciary responsibility.
- 4. "Placement Agent" means any person or entity hired, engaged or retained by or acting on behalf of an External Manager or on behalf of another Placement Agent as a finder, solicitor, marketer, consultant, broker or other intermediary to raise money or investments from or to obtain access to KRS, directly or indirectly, including without limitation through a KRS Vehicle.
- 5. "Executive Agency Lobbyist (EAL)" means any person engaged to influence executive agency decisions or to conduct executive agency lobbying activity as one of his main purposes on a substantial basis. An EAL does not include an elected or appointed officer or employee of a federal or state agency, state college, state university, or political subdivision who attempts to influence or affect executive agency decisions in his fiduciary capacity as a representative of his agency, college, university, or political subdivision.
- 6. "Executive Agency Lobbying Activity" includes any contact made to promote, oppose, or otherwise influence the outcome of an executive agency decision by direct communication with an elected executive official, the secretary of any cabinet listed in Kentucky Revised Statutes 12.250, any executive agency official, or a member of the staff of any one of the officials listed in this paragraph.
- 7. "Real Party-In-Interest (RPI)" is a person or organization on whose behalf the executive agency lobbyist is acting, if that person is not the employer. For example, if the ABC Corporation engages XYZ Consulting Company which, in turn, hires John Smith to influence decisions or conducts

Consulting Company is the employer; and (c) ABC Corporation is the "real party in interest".

Manager's Responsibilities

Prior to KRS investing with any manager, KRS Staff shall obtain a signed Manager Disclosure Questionnaire from the investment manager. This form includes a statement as to whether or not the investment manager has used a placement agent in connection with the proposed KRS investment opportunity. It also includes conflict of interest disclosures and political contribution disclosures among other required information including but not limited to:

- The name of the placement agent;
- The fee paid or payable to the placement agent;
- Representation that the fee is the sole obligation of the investment manager and not that of KRS or the limited partnership;

- Current or former Kentucky officials (federal, state, and local government), KRS Board of Trustees members, KRS employees or consultants to KRS that are receiving any fees or compensation from the manager and/or placement agent;
- The names of any current or former Kentucky elected or appointed government officials (federal, state, and local government) KRS Board of Trustees members, employees, or consultants of KRS, or any other person, if any, who suggested the retention of the placement agent;
- Evidence of the regulatory agencies, if any, in any Federal, state or foreign jurisdiction the
 placement agent or any of its affiliates are registered with, such as the Securities and
 Exchange Commission (SEC), Financial Regulatory Agency (FINRA), or any similar
 regulatory agency;
- A résumé for each officer, partner or principal of the placement agent detailing the person's education, professional designations, regulatory licenses and investment and work experience;
- A description of the services to be performed by the placement agent;
- A statement whether the placement agent, or any of its affiliates, is registered as a lobbyist with any and all Kentucky state and local (county) governments; and
- A statement by the manager and/or placement agent representing and warranting the
 accuracy of the information provided to KRS regarding the Statement of Disclosure in any
 final written agreement with a continuing obligation to update any such information within
 10 business days of any change in the information.

The manager shall notify the placement agent of his or her obligations under Kentucky Revised Statutes Chapter 11A.

Compliance with the following procedures is the responsibility of the manager, the EAL and the placement agent. KRS staff is not responsible for ensuring compliance with the following procedures as staff is not a party to the process.

The following is a description of the process external persons must follow to comply with Kentucky's EAL registration procedures:

Prior to contact with KRS personnel the placement agent, employer, and, if applicable, the RPI, is required to file jointly, the Initial Registration Statement Form* with the Kentucky Executive Branch Ethics Commission (EBEC) and furnish a copy to KRS.

Questions as to the process or applicability should be addressed to:

Executive Branch Ethics Commission (502) 564-7954.

- After Initial Registration, the placement agent, employer, and, if applicable, the RPI, is required
 to abide by the EBEC Requirements After Registration by filing an Updated Registration
 Statement** annually (Due by July 31) with the EBEC and furnish a copy to KRS.
- 3. If the placement agent, employer, and, if applicable, the RPI, wishes to terminate their lobbying effort they must notify the EBEC within 30 days after the termination of engagement by filling out the Termination Notification Form *** attaching it to the EAL's final Updated Registration Statement form** and furnishing a copy to KRS.

- * Initial Registration Statement Form is available at: http://ethics.ky.gov/lobbying/Pages/Registration.aspx
- ** Updated Registration Statement Forms are available at: http://ethics.ky.gov/lobbying/Pages/RequirementsAfterRegistration.aspx
- *** Termination Notification Form is Available at: http://ethics.ky.gov/lobbying/Pages/howToTerminate.aspx

In the event a placement agent is expected to receive remuneration for a KRS investment, KRS staff will notify the Investment Committee in the memorandum discussing the recommended/approved investment. If a manager breaches this policy, staff will notify the Investment Committee as soon as practicable.

KRS Staff Responsibilities

KRS staff are responsible for:

- · Providing the public with disclosure by posting a copy of this policy on KRS' website;
- Implementing this policy on behalf of KRS with each Investment Director responsible for their specific asset class; and
- · Providing regular disclosure updates to the KRS Investment Committee and the Board of Trustees.

All parties responsible for implementing, monitoring and complying with this Policy shall consider the spirit as well as the literal expression of the Policy.

F. Conflict of Interest

All persons and entities contracting with KRS shall certify that:

- · they are legally capable of entering into a binding contract and authorized to do so;
- that they are not, nor shall be, in violation of any Kentucky law, statute or regulation pertaining to a conflict of interest including, but not limited to, Kentucky Revised Statutes 121.056; and
- that they are not, nor shall be, in violation of any provision of Kentucky Revised Statutes Chapter 11A or any regulation promulgated there under, or any law or regulation pertaining to the Kentucky Registry of Election Finance and the reporting requirements thereof.

All persons and entities seeking to or actually contracting with KRS shall disclose all relationships and potential conflicts of interest with any KRS staff, committee or Board Member. Any disclosed conflicts of interest will be discussed at the Investment Committee as to the severity of the conflict and the appropriate resolution. Options the Investment Committee might recommend include but are not limited to: no action required; conflicted party abstention; and refusal to invest. Subsequent discovery of any undisclosed conflict may be considered a breach of contract and may result in immediate termination of any agreements without penalty or fee to KRS.

Signatories

As Adopted By The Investment Committee	As Adopted By The Board of Trustees
Date: 6-27-1/8	Date: 6-27-18
Signature: Mil	Signature:
Mr. Neil Ramsey	Signature: Mr. David L. Harris
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