I. INTRODUCTION .....................................................................................................................4
II. STATEMENT OF PURPOSE .......................................................................................................4
III. CONTROLLING STATUTES AND REGULATION ...........................................................................4
    Principal Statutory Investment Provisions ....................................................................4
    Other Statutory Provisions...........................................................................................5
IV. ROLES AND RESPONSIBILITIES ................................................................................................7
    Board of Trustees ........................................................................................................7
    Investment Committee ................................................................................................7
    Chief Investment Officer .............................................................................................8
    Investment Consultant ..................................................................................................8
    Investment Managers .................................................................................................9
    Custodian Bank ...........................................................................................................10
V. INVESTMENT OBJECTIVES .....................................................................................................11
    Nominal Return Requirements...................................................................................11
    Relative Return Requirements ...................................................................................11
VI. PERFORMANCE BENCHMARKS .............................................................................................12
    Total Fund Return ......................................................................................................12
    Allocation Index ........................................................................................................12
    Policy Index ...............................................................................................................12
    Manager Benchmarks ................................................................................................12
VII. ASSET ALLOCATION ..............................................................................................................13
    Asset Classes .............................................................................................................13
    Target Asset Mix .........................................................................................................14
    Style Allocation .........................................................................................................14
    Active/Passive Mix .....................................................................................................15
    Rebalancing ..............................................................................................................15
VIII. RISK MANAGEMENT ...........................................................................................................15
IX. MANAGER SELECTION ..........................................................................................................15
X. INVESTMENT MANAGER GUIDELINES ...................................................................................17
    Introduction ..............................................................................................................17
    Guidelines for Use of Pooled/Commingled Funds .......................................................17
    Domestic Equity Manager Guidelines .........................................................................17
    International Equity Manager Guidelines ...................................................................18
    Passive Equity Manager Guidelines ...........................................................................19
Domestic Core Fixed Income Manager Guidelines ......................................................19
High Yield Fixed Income Manager Guidelines ............................................................20
Global Fixed Income Manager Guidelines ..................................................................21
Emerging Markets Debt (Local Currency) Manager Guidelines ..............................21
Global Multi-Sector Fixed Income Program Guidelines ...........................................22
Alternative Investment Program Guidelines ...............................................................24
  Private Markets .........................................................................................................24
  Absolute Return/Risk Parity .....................................................................................26
  Real Assets/Inflation Protection Investment ..............................................................28
  Derivatives Guidelines ..............................................................................................29
XI. INVESTMENT MANAGER MONITORING ...............................................................................31
  General Guidelines ....................................................................................................31
  Monitoring and Verification .......................................................................................31
  Manager Evaluation ..................................................................................................31
XII. REPORTING REQUIREMENTS ..........................................................................................32
  MANAGER REPORTING ............................................................................................32
    Monthly Reporting Requirements: ...........................................................................32
    Quarterly Reporting Requirements: .........................................................................32
    Semi-Annual Reporting Requirements: .................................................................34
    Annual Reporting Requirements: ............................................................................35
  OTHER REPORTING ....................................................................................................37
    Proxy Voting Report ...............................................................................................37
    Annual Trading Study ............................................................................................37
    Securities Lending Report .......................................................................................37
    Internally Managed Portfolios Review ..................................................................38
LASERS
Statement of Investment Objectives
Section A – General Issues

I. INTRODUCTION

The Louisiana State Employees’ Retirement System (LASERS) was established by the state legislature in 1946 (R.S. 11:401). LASERS is a qualified pension and retirement plan under section 401(a) of the Internal Revenue Code and was created to provide retirement allowances and other benefits for state officers and employees and their beneficiaries. Benefits are funded by three sources: employer contributions, employee contributions and earnings from trust fund investments.

The System is governed by a 13 member Board of Trustees (Board). State law designates members of the Board as follows: six elected active members, three elected retired members and four ex-officio members, which consist of a member of the House Retirement Committee appointed by the Speaker of the House, the Chairman of the Senate Retirement Committee, State Treasurer and Commissioner of Administration, or their designees, in accordance with applicable law.

II. STATEMENT OF PURPOSE

This document specifically outlines the investment philosophy and practices of LASERS and has been developed to serve as a framework for the management of the System’s defined benefit plan. The Board has established the investment guidelines set forth herein, to formalize investment objectives, policies and procedures and to define the duties and responsibilities of the various entities involved in the investment process. All policy decisions shall include liquidity and risk considerations that are prudent and reasonable under the circumstances that exist over time. The policies will evolve as the internal conditions of the fund and the capital markets environment changes. Any resulting material changes will be communicated to all affected parties.

III. CONTROLLING STATUTES AND REGULATION

Investments of the Louisiana State Employees’ Retirement System shall be made in full accordance with Louisiana Revised Statutes, applicable legislation or regulation as well as LASERS internal policies and procedures.

Principal Statutory Investment Provisions

LASERS shall operate under the “Prudent Man” rule, used herein meaning, that when investing, the Board shall exercise the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent institutional investor acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. (R.S. 11:263) LASERS will apply this standard to the entire fund portfolio, and as part of an overall
investment strategy. This will include an asset allocation study and a plan for implementation which will incorporate risk and return objectives reasonably suitable to the fund. The following types of risk are to be examined: market value, credit, interest rate, inflation, counterparty and concentration. The study and implementation of such plan will be designed to preserve and enhance principal over the long term, provide adequate liquidity and cash flow for the system, and minimize the risk of loss unless it is clearly prudent not to do so. (R.S. 11:263.C)

With respect to fiduciary duty, the following shall be deemed to have a fiduciary relationship: (1) any person who exercises any type of discretionary authority or discretionary control with respect to the management of system funds or assets; and (2) any person who renders investment advice or services for compensation, directly or indirectly, with respect to the system funds or assets. (R.S. 11:264)

Other Statutory Provisions
When contemplating any investment, action or asset allocation the Board shall consider the following factors:

- The availability of public pricing to value each investment
- The ability to liquidate each investment at a fair market price within a reasonable time frame for the size of investment that is being considered
- The degree of transparency that accompanies each investment
- The risk of fluctuations in currency that may accompany each investment
- The experience of the professionals who will manage each investment and the financial soundness of the business entity employing such professionals
- The degree of diversification which exists within each investment and that such investment itself may provide relative to the other existing investments in the portfolio
- Whether leverage is involved
- The potential for unrelated business taxable income as defined in Section 512 of the Internal Revenue Code
- The jurisdiction of the laws that govern each investment
- The net return that is expected relative to the risk that is associated with each investment (R.S. 11:263.D)

LASERS is subject to a legislative limit restricting the fund so that no more than 65% of its total assets are invested in publicly traded equities. Should LASERS have more than 55% of its total
assets invested in publicly traded equities, at least 10% of those equities must be invested in one or more index funds. Alternative assets are not considered to be equities when calculating LASERS equity exposure. LASERS will take steps to rebalance if, at the end of its fiscal year, its exposure to publicly traded equities is above 65%. LASERS is aware that markets will fluctuate, and any rebalancing will appropriately consider market conditions and any other relevant factors. (R.S. 11:263.D)

When requesting proposals for investment advisory services, fees are required to be quoted on a fixed, market value of assets or performance basis. (R.S. 11:265)

Investment performance reports by investment managers and advisors shall be in compliance with the current Global Investment Performance Standards (GIPS) as amended and published by the CFA Institute (formerly known as Association for Investment Management and Research). This is not required for limited partnerships, limited liability partnerships, private placements or natural resource portfolios. (R.S. 11:266)

Consultants and money managers shall provide full disclosure of conflicts of interest, including non-pension sponsor sources of revenue. Consultants also shall provide full disclosure of any payments they receive from money managers. (R.S. 11:269) Details for this reporting requirement are listed under the Semi-Annual Reporting Requirements under the Conflicts of Interest Report in Section XII of these guidelines.

LASERS shall report to the legislature and other Louisiana state and statewide retirement systems on a quarterly basis investment returns and expenses on a total fund and asset class basis for the quarter, fiscal year-to-date, one year, three year, five year, and ten year periods. This will include at a minimum, the following:

- Investment returns net of fees and expenses expressed as a percentage return and dollar amount
- Administrative expenses
- Board-approved target/current asset allocation (R.S. 11:263.G)

LASERS shall report to the legislature on a semiannual basis investment in any company having facilities or employees or both located in a prohibited nation. A prohibited nation is considered to be one of the following: Iran, North Korea, Sudan or Syria. (R.S. 11:312) Details for this reporting requirement are listed under the Semi-Annual Reporting Requirements under the Prohibited Nations Report in Section XII of these guidelines.

LASERS shall have a corporate governance strategy of constructive engagement with each company in which it has direct and indirect ownership that has facilities or employees or both located in a prohibited nation. This strategy shall contain a plan of action to cause any such
company to remove facilities, employees or both from any prohibited nation. This excludes private equity and hedge funds. (R.S. 11:314 & 315)

LASERS is required to invest a portion of funds in an international terror-free fund, which identifies and excludes from the fund companies having facilities or employees or both in a prohibited nation. (R.S. 11:316)

LASERS shall report to the legislature on a quarterly and annual basis its use of Louisiana broker dealers on specified transactions. (R.S. 11:266.1) Details for this reporting requirement are listed under the Quarterly Reporting Requirements under the Broker-Dealer Information in Section XII of these guidelines.

IV. ROLES AND RESPONSIBILITIES

The following section outlines the roles and responsibilities for each of the parties involved with executing the policy. In addition to the activities described below, each person involved with the policy serves as a fiduciary and will adhere to the “Prudent Man” rule as described in State Statute, which is outlined under the Principal Statutory Investment Provisions found in these guidelines.

Board of Trustees

The Board of Trustees is responsible for the total investment program. The Board shall approve the investment policy and provide overall direction to the administrative staff in the execution of the investment policy.

- Formal Review Schedule - the Board will conduct formal annual evaluations of the administrative staff, investment consultant and custodian.

Investment Committee

The Investment Committee was established by the Board to assist in oversight of the investment program; it will consist of not less than seven members of the Board. The Committee reviews and makes recommendation to the Board on investment actions including, but not limited to the following:

1. Asset Allocation
   a. Establishing the asset allocation policy for the portfolio, including target percentages and ranges.
   b. Approving asset classes for inclusion in the portfolio.
   c. Establishing the structure of the portfolio, including the funds to be allocated to active/passive portfolios and internal/external managers.
2. **Asset Management**
   a. Hiring, retaining or terminating investment managers, consultants, custodians and securities lending agents based on established evaluation processes.

3. **Risk Control**
   a. Ensuring that appropriate investment policies are in place, along with compliance of policies and directives.
   b. Continue to be aware of information on compliance with Securities and Exchange Commission (SEC) rules on pay to play practices.

4. **Monitoring**
   a. Establishing performance benchmarks and expectations.
   b. Monitoring the performance of investments.

**Chief Investment Officer**
The Chief Investment Officer (CIO) shall assist the Board in developing and modifying policy objectives and guidelines, including the development of liability-driven asset allocation strategies and recommendations on long-term asset allocation and the appropriate mix of investment manager styles and strategies. Choosing appropriate manager styles and strategies will include assisting the Board in evaluating the use of index funds as an alternative to active management. Additionally, the CIO shall provide assistance in manager searches and selection, investment performance calculation and evaluation, and any other analysis associated with the proper execution of the Board’s directives.

The CIO shall also communicate the decisions of the Investment Committee to investment managers, custodian bank(s), actuary, and consultant. The CIO provides oversight of the investment consultant, investment service providers and personnel of LASERS investment division.

**Investment Consultant**
The Investment Consultant works under direction of the Board, offering a third party perspective and providing an additional level of oversight to the System’s investment program. The Consultant’s normal functions shall include assisting the Board and the CIO in developing and modifying policy objectives and guidelines, including the development of a liability-driven asset allocation strategy and recommendations on the appropriate mix of investment manager styles, strategies and funding levels.

Additionally, the Consultant shall provide education and training and assist in manager searches and selection, investment performance evaluation, and assist both the Board and CIO in the use of index funds as an alternative to active management. The Consultant shall provide timely information, written and/or oral, on investment strategies, instruments, managers and other related issues, as requested by the Board, the Investment Committee, or the CIO.
**Investment Managers**

The duties and responsibilities of each of the investment managers retained by the Board include, but may not be limited to, the following:

- Investing the assets under its management in accordance with the policy guidelines and objectives expressed herein as well as any directives listed in individual investment manager agreements

- Meeting or exceeding the manager-specific benchmarks, net of all fees and expenses, expressed herein over various and appropriately measured time periods

- Exercising investment discretion within the guidelines and objectives stated herein. Such discretion includes decisions to buy, hold or sell securities in amounts and proportions reflective of the manager’s current investment strategy and compatible with the investment objectives

- Complying with all provisions pertaining to the investment manager’s duties and responsibilities as a fiduciary

- Complying with the CFA Institute’s Code of Ethics & Standards of Professional Conduct and Global Investment Performance Standards (GIPS)

- Disclosing all conflicts and potential conflicts of interest

- Ensuring that all portfolio transactions are made on a “best execution” basis

- Exercising ownership rights, where applicable

- Meeting with the Board as needed upon request of the Board, and timely submitting all required reports outlined in Section XII of these guidelines

- Promptly informing the Board regarding all significant matters pertaining to the investment of the fund assets, for example:
  
  - Changes in investment strategy, portfolio structure and market value of managed assets
  
  - Changes in the ownership affiliations, organizational structure, financial condition, professional personnel staffing and clientele of the investment management organization
  
  - Any material changes in the liquidity of the securities they hold in the LASERS portfolio
LASERS  
Statement of Investment Objectives  
Section A – General Issues  

- Campaign contributions made by executives or employees to elected officials who can influence selection decisions

- Initiating written communication with the Board when the manager believes that this Investment Policy is inhibiting performance and/or should be altered for any valid reason. No deviation from the guidelines and objectives established in the Policy is permitted until after such communication has occurred and the Board has approved such deviation in writing

- Reconciling performance, holdings and security pricing data with the Fund’s custodian bank. If the Fund’s custodian bank shows a significantly different price for a given security, the manager should work with the custodian bank to resolve pricing differences. Managers shall provide to LASERS staff a summary of reconciled holdings both in hard copy and the electronic format of LASERS choosing

- Any other duties included in the contract

Custodian Bank  
The Custodian is responsible for the safekeeping of System assets and serves as the official book of record. It is understood that investments that are held in partnerships, commingled accounts or unique asset classes are unable to be held by the System’s custodian bank.

The Custodian will be responsible for performing the following functions:

- Holding System assets directly, through its agents, its sub-custodians, or designated clearing systems

- Registration of System assets in good delivery form, collection of income generated by those assets, and any corporate action notification

- Delivery and receipt of securities

- Disbursement of all income or principal cash balances as directed

- Providing daily cash sweep of idle principal and income cash balances. Dividends, interest, proceeds from sales, new contributions and all other monies are to be invested or reinvested promptly

- Providing online records and reports

- Providing monthly statements by investment managers’ accounts and a consolidated statement of all assets

- Providing monthly performance reports and quarterly performance analysis reports
V. INVESTMENT OBJECTIVES

Nominal Return Requirements
The investment program shall be structured to preserve and enhance principal over the long term, in both real and nominal terms. For this purpose, short-term fluctuations in values will be considered secondary to long-term investment results. The investments of the Fund shall be diversified to minimize the risk of significant losses. Total return, which includes realized and unrealized gains, plus income less expenses, is the primary goal of LASERS.

The actuarial valuation discount rate for the Fund is 7.25% effective July 1, 2022. However, LASERS seeks to achieve a long-term actuarial rate of return that is 35 basis points greater than the discount rate in order to account for the expected cost of gain-sharing which funds the experience account.

Relative Return Requirements
LASERS seeks to have total returns rank in the top half of the appropriate public fund universe, reflecting similar circumstances to the Fund. The total fund return should, over time, exceed the Policy and Allocation Indices (see Section VI for a description of how the Policy and Allocation Indices are calculated.) Returns for LASERS managers should exceed their respective benchmarks, as well as rank in the top half of the appropriate universe of managers adhering to the same investment strategy.

The Board further recognizes that the return targets described herein may not be achieved in any single year. A longer-term horizon of 5-7 years shall be used in measuring the long-term success of the Fund. While the Board expects that returns will vary over time, LASERS has a risk tolerance
consistent with that of other funds created for similar purposes, and the assets of the Fund shall be invested accordingly.

VI. PERFORMANCE BENCHMARKS

Total Fund Return
The Total Fund return shall be compared against other public pension plans. LASERS will compare its returns against other funds of similar size and circumstances. LASERS Total Fund return should meet or exceed the Allocation Index return and the Policy Index return, which are each described below.

Allocation Index
The Allocation Index return shall measure the success of the Fund’s current allocation. It shall be calculated by using index rates of return for each asset class invested in by the Fund multiplied by the actual percent allocated to each asset class. The difference between the Allocation Index return and the Total Fund return measures the effect of active management. If the Total Fund return is greater than the Allocation Index return, then active management has in aggregate added value. If the Total Fund return is less than the Allocation Index return, then active management has not added value.

Policy Index
The Policy Index return shall measure the success of the Fund’s target allocation. It shall be calculated by using index rates of return for each asset class invested in by the Fund multiplied by the percent targeted to each asset class. The difference between the Allocation Index return and the Policy Index return measures the effects of deviating from the target allocation. If the Allocation Index return is greater than the Policy Index return, then deviating from the target allocation has added value. If the Allocation Index return is less than the Policy Index return, then deviating has not added value.

Manager Benchmarks
LASERS Investment Managers shall be compared to a combination of passively managed index returns matching the managers’ specific investment styles, as well as the median manager in their appropriate peer group universe. Specific benchmarks and peer groups are described for each manager in Section B of this document.
VII. ASSET ALLOCATION

The foundation of the System’s strength and stability rests upon the diversification of plan assets. The following section outlines the current asset allocation, which was designed to achieve the required return objectives of the System, given certain risk considerations. This is to be pursued by LASERS on a long-term basis, but will be revised if significant changes occur within the economic and/or capital market environment. Changes in liability structure, funded status, or long-term investment prospects should trigger a revision of the asset allocation.

Asset Classes
The current allocation includes the following asset classes:

**Traditional Assets**
- Domestic Equity
- International Equity
- Emerging Market Equity
- Domestic Fixed Income
- Global Multi-Sector Fixed Income
- Emerging Market Debt

**Non-Traditional Assets**
- Private Markets Fund of Funds - Domestic and International
- Private Markets Direct Funds - Domestic and International
- Absolute Return - Fund of Funds
- Absolute Return - Direct Funds
Based on the Board’s determination of the appropriate risk tolerance for the System and its long-term expectations, the following asset class policy target allocation and permissible ranges have been established:

**Target Asset Mix**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Market Value Target (%)</th>
<th>Minimum Exposure (%)</th>
<th>Maximum Exposure (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities</strong></td>
<td>54</td>
<td>44</td>
<td>64</td>
</tr>
<tr>
<td>Domestic Large Cap</td>
<td>23</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>Domestic Mid Cap</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Domestic Small Cap</td>
<td>5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Established International (Lg Cap)</td>
<td>10</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Established International (Sm Cap)</td>
<td>5</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Emerging International Equity</td>
<td>8</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td>20</td>
<td>11</td>
<td>31</td>
</tr>
<tr>
<td>Core Fixed Income</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Global Multi-Sector</td>
<td>14</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Emerging Market Debt</td>
<td>3</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td><strong>Alternative Assets</strong></td>
<td>26</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>Private Markets</td>
<td>22</td>
<td>17</td>
<td>27</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td><strong>Cash</strong></td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

**Implementation**

LASERS recognizes that special expertise is required to properly invest the majority of the assets described above. However, certain highly efficient passively managed investment strategies lend themselves to internal management, resulting in lower management fees for the Fund as a whole. Where appropriate, LASERS will manage these assets internally, so long as the same level of care, prudence and oversight is maintained that an outside professional investment advisor would typically provide.

**Style Allocation**

LASERS shall strive to maintain a neutral bias with respect to style allocation (growth versus value) in its equity investments, unless deemed advantageous to implement a style bias. LASERS recognizes that over the long run, returns from growth and value investing tend to approximate
each other; over shorter periods, however, differences in returns can be significant. The CIO, as part of the normal rebalancing responsibilities, shall use appropriate judgment and care when rebalancing style-biased portfolios.

**Active/Passive Mix**

LASERS shall make use of passive strategies only where passive management, after all fees and expenses, can effectively compete with actively managed portfolios in terms of returns and variability of returns.

**Rebalancing**

The CIO will review LASERS asset allocation at least quarterly to determine if it is consistent with the exposure ranges established for LASERS described herein. The CIO will direct staff and investment managers to transfer funds to rebalance the asset allocation as necessary. The CIO will consider market conditions and transaction costs, as well as any other relevant factors when rebalancing.

**VIII. RISK MANAGEMENT**

It is recognized that risk issues permeate the entire investment process, and risk is considered throughout the investment process from asset allocation to performance evaluation. Ongoing monitoring will be accomplished through a “mosaic” approach, in which various forms of analysis and reporting contribute to the total picture. Inspection of levels of diversification, nominal risk exposures, risk/return plots, sortino ratio, Value at Risk, tracking error, and worst case scenarios modeling form the core of the monitoring process.

**IX. MANAGER SELECTION**

LASERS reserves the right to retain managers to oversee portions of the System’s assets. Manager selection is accomplished in accordance with the vendor selection criteria in LASERS Board Governance Policy.

LASERS will not consider the selection of any manager without first setting a target allocation to a particular asset class, and determining that a manager is needed to implement that allocation strategy. Once LASERS has determined that a manager search is warranted, it will establish certain minimum criteria for a manager to be considered eligible to participate in the search. LASERS intends that any qualified candidate receive fair consideration. As such, industry recognized databases will be used for screening purposes to ensure that an unbiased and objective search process is achieved.
In selecting investment managers LASERS will follow a due diligence process, so as to avoid selecting managers on an ad-hoc basis. The process will involve analyzing investment manager candidates in terms of appropriate criteria. LASERS shall strive to hire investment managers that offer the greatest incremental benefit to the Fund, net of fees and expenses, in accordance with, but not limited to, the due diligence criteria listed below:

**Qualitative Factors**
- Appropriateness of investment philosophy and process
- Fit between product and existing plan assets, liabilities and objectives
- Length of key professionals’ tenures

**Quantitative Factors**
- Absolute and relative returns, and variability of returns
- Portfolio characteristics

**Organizational Factors**
- Length of firm history
- Stability of the firm’s client base and assets under management
- Ownership structure
- Compensation structure
- Fee structure
- References and professional qualifications

As private markets does not lend itself to traditional manager searches, LASERS shall seek to perform the same level of due diligence on these opportunities as it would in a typical manager search. Because most private markets products have only brief, discrete time periods during which they are raising assets, LASERS will consider an additional investment with an existing manager if the investment philosophy, process, people, performance and fees are materially similar to previous investments. LASERS may invest with a new manager only after the appropriate due diligence is performed.

As part of the search process prospective candidates will be required to disclose any campaign contributions made to any LASERS Trustee, staff member or elected official in Louisiana who can influence the selection of an advisor or manager.
X. INVESTMENT MANAGER GUIDELINES

Introduction
Full discretion, within the parameters of the guidelines described herein, is granted to the investment managers regarding the selection of securities, and the timing of transactions. However, LASERS prohibits its public market investment managers from utilizing any form of soft dollar or commission recapture trading arrangements, requiring its managers to seek the best execution possible with the lowest possible commission costs.

Compliance with all guidelines must be monitored by the investment managers on a regular basis (monthly or more frequently when market conditions warrant) and based on then current market values. Securities that, at purchase, would move the portfolio out of compliance with these guidelines, based on the investment manager’s most recent valuation, may not be purchased.

In the event that a portfolio moves out of compliance with these guidelines (as identified in the investment manager’s regular review of the portfolio), through market conditions or other changes outside the control of the manager, the manager must bring the portfolio composition back into compliance within 45 days or make a written request to LASERS Investment Committee for a compliance waiver.

Guidelines for Use of Pooled/Commingled Funds
Mutual funds and other types of commingled investment vehicles provide, under some circumstances, lower costs and better diversification than can be obtained with a separately managed fund pursuing the same investment objectives. However, commingled investment funds cannot customize investment policies and guidelines to the specific needs of individual clients. The Board is willing to accept the policies of such funds in order to achieve the lower costs and diversification benefits of commingled funds. Therefore, commingled investment vehicles are exempt from the policy’s restrictions if:

- The investment practices of the commingled fund are consistent with the spirit of this policy, and are not significantly different in letter
- The benefits of using a commingled vehicle rather than a separate account are material

Domestic Equity Manager Guidelines
The guidelines listed below shall apply to all actively managed domestic equity portfolios, unless otherwise specifically noted:

- Domestic equity purchases are limited to publicly traded common stocks. Exceptions shall be approved by the Board in advance
LASERS
Statement of Investment Objectives
Section A – General Issues

- No single holding shall account for more than 6% of the allowable equity portion of the portfolio at market value, or 150% of a stock’s weighting in the style benchmark against which the manager is measured, whichever is larger.

- LASERS domestic equity portfolios are expected to be fully invested. No more than 10% of a manager’s domestic equity portfolio may consist of cash or cash equivalents.

- No single holding in LASERS portfolio shall account for more than 5% of the outstanding common stock of any one corporation. Additionally, no single holding across all actively managed portfolios of an investment management firm shall account for more than 15% of the outstanding common stock of any one corporation.

- The purchase of stocks or convertibles in foreign companies which are publicly traded securities may be held by each domestic stock manager in proportions which each manager shall deem appropriate, up to 10% of the portfolio at market value.

- Convertible bonds, convertible preferred stocks, warrants and rights may be purchased as equity substitutes so long as they meet the equity guidelines listed above.

International Equity Manager Guidelines

The guidelines listed below shall apply to all international equity portfolios, unless otherwise specifically noted:

- Short-term reserves may be held in U.S. dollar-denominated, local currency securities, or investment vehicles available through the System's custodian.

- Managers may purchase or sell currency on a spot basis to accommodate securities settlements. Foreign exchange shall be negotiated by the investment manager when settling trades, repatriating interest and dividends, or other income, except in instances that the currency is restricted.

- Managers may enter into forward exchange contracts on currency provided that use of such contracts is designed to dampen portfolio volatility or to facilitate the settlement of securities transactions.

- LASERS international equity portfolios are expected to be fully invested. No more than 10% of a manager’s international equity portfolio may consist of cash or cash equivalents.

- Equity securities should be issued by non-U.S. issuers, although the manager has latitude to hold U.S. securities provided that such investment is consistent with attainment of the portfolio's investment objectives and does not exceed 10% of the portfolio’s market value. American Depository Receipts (ADRs) do not count towards this 10% limitation.
• The number of issues held and their geographic or industry distribution shall be left to the investment manager provided that equity holdings in any one company (including common stock and convertible securities) do not exceed 6% of the portfolio at market value, or 150% of a stock’s weighting in the benchmark against which the manager is measured, whichever is larger. Additionally, bonds of the companies in question would be included in LASERS exposure calculation if held in the manager’s portfolio.

• Managers with established international equity mandates may invest up to 10% of their portfolio(s) in emerging markets, as defined by the MSCI EM Index.

• Managers with an emerging markets equity mandate are expected to invest in the emerging (non-established) markets, subject to the guidelines listed above, unless LASERS has chosen to invest in a commingled fund in which case the fund’s guidelines take precedent.

Passive Equity Manager Guidelines
The guidelines listed below shall apply to all passively managed equity portfolios unless otherwise specifically noted:

• Passive strategies are expected to have characteristics similar to the underlying benchmark. For example, a large cap passive equity portfolio shall have similar capitalization and sector exposure to the underlying benchmark.

The following guidelines listed below shall apply to all internally managed passive equity portfolios, unless otherwise specifically noted:

• Tracking error (deviation from the underlying benchmark) is limited to 15 basis points annually for domestic large cap equity strategies, 25 basis points for domestic mid cap equity strategies, 35 basis points for domestic small cap and international large cap equity strategies and 75 basis points for international small cap equity strategies.

Domestic Core Fixed Income Manager Guidelines
The guidelines listed below shall apply to all domestic core fixed income portfolios, unless otherwise specifically noted:

• Domestic core fixed income investments may include U.S. Government and Federal Agency obligations, corporate bonds, debentures, commercial paper, certificates of deposit, Yankee bonds, mortgage-backed securities and senior secured debt and other instruments deemed prudent by the investment managers.
LASERS
Statement of Investment Objectives
Section A – General Issues

- No more than 6% of the market value of LASERS domestic core fixed income assets may be invested in the debt securities of any one issuer. No limitations on issues and issuers shall apply to obligations of U.S. Government and Federal Agencies.

- The overall average quality of each fixed income portfolio shall be rated A- or higher. Non-rated issues may be purchased, provided that in the judgment of the manager, they are of a quality sufficient to maintain the average overall portfolio quality of A- or higher. Non-rated issues or issues below investment grade (below BBB-) may be purchased up to a maximum of 15% of the portfolio.

- The average duration (interest rate sensitivity) of an actively managed portfolio shall not differ from the passive benchmark’s duration by more than two years.

- The diversification of securities by maturity, quality, sector, coupon and geography is the responsibility of the manager. Active bond management is encouraged, as deemed appropriate by the investment managers.

- Investments in mortgage-backed securities shall have the characteristics of fixed income securities and be responsive to changes in domestic interest rate changes, as well as other factors that affect the credit markets and mortgage investments. The investment managers are responsible for making an independent analysis of the credit worthiness of securities and their suitability as investments for the Plan, and shall adhere to the specific investment, security, diversification limits and administrative guidelines established in the investment management agreement(s).

**High Yield Fixed Income Manager Guidelines**
The guidelines listed below shall apply to all high yield fixed income, unless otherwise specifically noted:

- High yield fixed income managers should perform careful credit analysis to mitigate losses from defaults.

- Investments should be diversified across sector, industry, sub-industry and market to mitigate losses from defaults.

- No more than 6% of the market value of LASERS high yield assets may be invested in the debt securities of any one issuer.

- High yield fixed income managers may invest up to 20% of their portfolios in non-U.S. fixed income securities.
Global Fixed Income Manager Guidelines
The guidelines listed below shall apply to all global fixed income portfolios, unless otherwise specifically noted:

- The global bond portfolio may hold no more than 30% of its assets, at market value, in the debt securities of any single government or non-U.S. government entity. No single non-government debt security shall constitute more than 6% of the global bond portfolio, at market value. Securities issued by AAA Rated Supranational Organizations (such as the World Bank) shall be considered to be government equivalents.
- Short-term reserves may be held in U.S. dollar denominated or local currency securities or investment vehicles available through LASERS custodian.
- Managers may enter into forward exchange contracts on currency provided that use of such contracts is designed to dampen portfolio volatility rather than lever portfolio risk exposure. Currency contracts may be utilized to either hedge the portfolios currency risk exposure or in the settlement of securities transactions.
- Managers may purchase or sell currency on a spot basis to accommodate securities settlements.
- Decisions as to the number of issues held and their geographic distribution shall be the responsibility of the investment manager.
- The overall average quality of each global fixed income portfolio shall be A- or higher. Non-rated issues may be purchased, provided that in the judgment of the manager, they are of a quality sufficient to maintain the average overall portfolio quality of A- or higher. Issues below investment grade (below BBB-), and/or mortgage-backed securities, may be purchased up to a maximum of 15% of the portfolio.
- The average duration (interest rate sensitivity) of a global fixed income portfolio shall not differ from the passive benchmark by more than two years.

Emerging Markets Debt (Local Currency) Manager Guidelines
The guidelines listed below shall apply to all emerging markets debt (local currency) portfolios, unless otherwise specifically noted:

- The emerging markets debt (local currency) portfolio may hold no more than 1.75 times the passive benchmark weight, at market value, in the debt securities of any single sovereign entity. The portfolio may hold up to 15% in securities not issued by benchmark countries. The portfolio may hold up to a combined allocation of 20% in non-benchmark inflation-linked bonds and corporate debt securities.
LASERS
Statement of Investment Objectives
Section A – General Issues

- Emerging markets fixed income managers are responsible for performing careful credit analysis related to sovereign debt and other debt issuers to mitigate losses from defaults.
- Investments should be diversified across sovereign issuers and markets to mitigate losses from defaults.
- Decisions as to the number of issues held and their geographic distribution shall be the responsibility of the investment manager.
- The overall average quality of each emerging market debt portfolio shall be BBB- or higher. Non-rated issues may be purchased, provided that in the judgment of the manager, they are of a quality sufficient to maintain the average overall portfolio quality of BBB- or higher.
- Managers may enter into forward exchange contracts on currency provided that use of such contracts is designed to prudently improve portfolio risk-adjusted return rather than lever portfolio risk exposure. Currency contracts may be utilized in the settlement of securities transactions.
- Managers may purchase or sell currency on a spot basis to accommodate securities settlements.
- The modified duration (interest rate sensitivity) of an emerging markets debt (local currency) portfolio shall not differ from the passive benchmark by more than three years.

Global Multi-Sector Fixed Income Program Guidelines
This section sets out the general policies and guidelines for the Global Multi-Sector (“GMS”) Fixed Income Program and shall apply to all GMS fixed income portfolios, unless otherwise specifically noted:

The GMS Program allows investments in securities across the fixed income universe. The universe includes, but is not limited to, sovereign debt, corporate credit, structured products, currency, leveraged loans, distressed debt and other investments made on a global basis.

The GMS Fixed Income Program’s managers shall take a flexible, best idea approach and may tactically move the portfolio in response to market conditions, allowing for the incorporation of broad, macroeconomic-level views into portfolio construction. This includes flexible duration management.

The Program’s managers are responsible for making an independent analysis of the credit worthiness of securities and their suitability as investments for the Plan. Therefore, managers...
shall adhere to any administrative guidelines and specific investment, security, liquidity, diversification limits, use of leverage and performance objectives established in their specific investment management agreement(s).

Diversification
The Program seeks to manage risk through appropriate diversification by investment strategy, geography, investment management firm, and instrument.

Decisions as to the number of issues held and the allocation across instruments within the portfolio shall be the responsibility of the investment manager. This includes diversification of fixed income and credit securities by maturity, quality, sector, coupon and geography. Active bond management is encouraged, as deemed appropriate by the investment managers.

Evaluation and Selection
The criteria for selecting GMS Fixed Income managers should include but are not limited to:

- Broad resources and experience across the fixed income and credit landscape
- A global multi-sector fixed income track record or a track record across the individual sectors and strategies included in the product
- Sound quantitative and qualitative processes for constructing portfolios, including skills in identifying the ideal implementation of a particular credit investment through capital structure analysis
- An ability to blend macroeconomic capital market themes with fundamental, bottom-up credit analysis
- A robust risk management process and discipline for controlling risk
- Attractive fee arrangements
- Commitment to work with LASERS staff

Performance Objectives
Fixed income and credit focused benchmarks, in addition to internally generated qualitative and quantitative measures, will be used to judge the efficacy of each manager’s performance. Note that internal benchmarks may differ slightly from how a manager evaluates performance.

The GMS Fixed Income Program may invest in managers with distinctly different approaches and objectives. Such that the establishment of individualized performance objectives and guideline limits for each manager may be appropriate.

Guidelines/Limits
- No more than 6% of the market value plus uncalled committed capital of LASERS GMS assets may be invested in the securities of any one issuer, excluding securities of the U.S.
Government, its Agencies and Instrumentalities  It is understood that during initial funding this may occur until the portfolio reaches its target size

- GMS fixed income managers may invest up to 10% of portfolio market value in Equity securities
- These limits may be exceeded with consent from LASERS staff and Consultant

Alternative Investment Program Guidelines

LASERS Alternative portfolios will include but are not limited to Private Markets, Absolute Return, Risk Parity and Real Assets. The Board recognizes that alternative assets are potentially more risky than other investments of the Fund. As such, extra care shall be taken in evaluating and fully understanding all aspects of an alternative investment opportunity. In general, alternatives should add value to the total plan either through return enhancement and/or risk diversification.

Because of the unique nature of this asset class this Policy is not applicable to the Alternative Investment Program managers. Each investment manager shall be governed by the fund’s documents, which outline/delineate the specific objectives.

Private Markets

This section sets out the general policies and guidelines for the Private Markets Program. The Program consists of privately traded investments, both equity and debt, made on a global basis in limited partnership or other fund vehicles and direct investments in operating or holding companies through strategic partnerships or as co-investments.

Diversification

The program shall seek to reduce risk through appropriate diversification by investment strategy, geography, industry, and when appropriate by vintage year.

Investment Strategy

The investment strategies may include, but are not limited to:

- Buyouts or Corporate Restructuring
- Venture Capital
- Secondary Investments
- Distressed Securities
- Mezzanine
- Energy and Natural Resources
- Special Situations
LASERS
Statement of Investment Objectives
Section A – General Issues

- Private Credit

**Geography**
The private-markets portfolio should be broadly diversified by geographic region.

**Industry**
The portfolio should be diversified across a broad cross-section of opportunities in different industries.

**Vintage Year**
Based on the target commitment amounts for a given vintage year, commitments will be made on a consistent basis from vintage year to vintage year, assuming the best opportunities can be found. The Program should strive to capitalize on the most attractive opportunities over time, while improving portfolio balance and diversification.

**Evaluation and Selection**
The selection process of private markets managers shall include, but are not limited to the following:

- Quality, experience, and the integrity of the manager
  - References on a general partner must be checked prior to investing in a private-markets fund
- History of success as demonstrated by investment returns and value creation
- Firm’s due diligence process
- Alignment of interest between the System and the manager
- Quality control processes including, but not limited to, investment monitoring and risk control
- Quality of reporting
- Attractive fee arrangements
- Commitment to work with LASERS staff

**Performance Objective**
To earn, over the long term, a total return that exceeds those of traditional markets and that is commensurate with the risk and illiquidity that is present in this asset class. It is understood that,
in the early years of funds structured as a drawdown vehicle, investment returns may be zero or even negative after considering expenses.

The return objective is to achieve an IRR and/or money multiple that ranks in the top quartile of comparable investments.

**Investment Parameters**

- LASERS shall endeavor to systematically commit additional funds to this asset class over time as it becomes under-represented relative to LASERS target asset allocation. LASERS shall attempt to commit up to 200% of its target weighting to private -markets investments to help ensure that the funded portion of the investments approximate the target allocation

- LASERS initial investment in a partnership/fund shall not exceed 25% of the committed capital of that partnership/fund

- No more than 25% of the alternative asset investment allocation may be invested with a single manager, general partner, or single fund, with the exception of a fund-of-funds

- Preference will be given to those funds where the general partner is contributing at least 1% of total fund

- All investments must have a mechanism for exit

**Absolute Return/Risk Parity**

This section sets out the general policies and guidelines for the Absolute Return/Risk Parity Program. The Program consists of absolute return (hedge funds) and risk parity investments made on a global basis in limited partnership or other fund vehicles. The Absolute Return Program shall complement the investment portfolio by capitalizing on opportunities not available in the traditional public markets. The Risk Parity Program shall complement the investment portfolio through risk-weighted asset allocation across multiple diversifying asset classes.

**Diversification**

The program will seek to minimize risk through appropriate diversification by investment strategy, geography, investment management firm, thorough due diligence and qualitative/quantitative risk management.

**Investment Strategy**

The investment strategies may include, but are not limited to:

- Commodity Trading Advisors
• Convertible Arbitrage
• Distressed Securities
• Fixed Income Arbitrage
• Long/Short Credit
• Long/Short Equity
• Market Neutral
• Merger Arbitrage
• Statistical Arbitrage
• Global Macro
• Market or Alternative Risk Premiums
• Derivative and Cash Market Instruments

Evaluation and Selection
The process for including Absolute Return/Risk Parity managers should include but are not limited to:

• Sound quantitative and qualitative process for constructing portfolios
• Multiple senior personnel with significant experience in the Absolute Return/Risk Parity Industry
• Breadth of experience across many fund strategies
• Robust discipline for controlling risk
• Attractive fee arrangements
• Commitment to work with LASERS staff

Performance Objectives
The Absolute Return/Risk Parity Program will make specialized investments requiring the establishment of individualized performance objectives for each fund/manager. The Hedge Fund Research, Inc. (HFRI) strategy benchmarks in addition to internally generated qualitative and quantitative measures will be used to judge the efficacy of each fund/manager’s performance.
Investment Parameters

- The terms of each investment should be aligned with LASERS and include lock up periods, fee structures, liquidity provisions and performance objectives/incentives

- Absolute Return Funds may use leverage, however Program investments may only be made in investment vehicles that provide limited liability and protect LASERS from losses exceeding the invested capital

- Each investment manager is required to provide access and make available all necessary documentation and records so LASERS may account for performance, fees, expenses, invested capital, and any other items affecting the investments

- All investments must have a mechanism for exit

Real Assets/Inflation Protection Investment

This section sets out the general policies and guidelines for the Real Assets Program. The Program consists of Real Asset investments in a variety of different investment vehicles including, but not limited to, closed-end and open-ended funds. Real Assets typically exhibit low correlation to equities and fixed income markets and provide diversification benefits to the overall investment portfolio. Real Assets also provide inflation-adjusted or positive “real” return. The inflation protection provided by Real Asset investments can help the overall investment portfolio meet liabilities during periods of rising inflation.

Diversification

The Real Assets Program will endeavor to create a diversified strategy by investing in liquid and illiquid investments across managers and strategies.

Investment Strategy

The investment strategies may include, but are not limited to:

- Treasury Inflation Protected Securities (TIPS)
- Global Inflation Linked Bonds
- Commodities (CTAs)
- Global Natural Resources
- Diversified, multi-strategy funds that invest both long and short in some or all of the above investments

Evaluation and Selection

The process for including Real Asset managers should include but are not limited to:
LASERS
Statement of Investment Objectives
Section A – General Issues

- Multiple senior personnel with significant experience in the Real Asset space
- History of success as demonstrated by investment returns and value creation
- Robust discipline for controlling risk
- Attractive fee arrangements
- Commitment to work with LASERS staff

Performance Objectives
Real Asset investments are meant to generate a real return (a return above the level of inflation during the investment term) that will serve as a diversifier for the portfolio during time periods when inflation increases leading to revaluations of traditional public market securities. Recognizing that individual managers and products may have specific and different benchmarks, the long-term benchmark for the Real Assets composite portfolio shall be Consumer Price Index (CPI) +2.0% or strategy appropriate index.

Investment Parameters
- Manager risk consists of the exposure to a specific manager or organization within investments and is controlled by diversifying across managers, limiting the commitment sizes to any one manager or fund, and performing thorough due diligence
- Real Asset managers may use leverage; however, program investments may only be made in investment vehicles that protect LASERS from losses exceeding the invested capital
- All investments must have a mechanism for exit

Derivatives Guidelines
This derivatives policy statement identifies and allows common derivative investments and strategies, which are consistent with applicable law and the Investment Policy Statement. Managers are required to petition for the inclusion of additional derivative instruments and strategies. The following guidelines apply to those managers not participating in LASERS Alternative Investment Program. These guidelines also require investment managers to follow certain controls, documentation and risk management procedures.

Allowed Uses of Derivatives
1) Hedging. To the extent that the non-derivative component of a portfolio is exposed to clearly defined risks and derivative contracts exist that can be used to reduce those risks, investment managers are permitted to use such derivatives for hedging purposes, including cross-hedging of currency exposures, subject to the documentation requirements listed later.
2) **Creation of Market Exposures.** Investment managers are permitted to use derivatives to gain exposure to assets and asset classes if such exposure would be allowed if created with the underlying assets.

3) **Management of Country and Asset Allocation Exposure.** Managers charged with tactically changing the exposure of their portfolio to different countries and/or asset classes are permitted to use derivative contracts for this purpose.

**Prohibited Uses of Derivatives**

The use of any derivative not listed above by any manager not participating in LASERS Alternative Investment Program is prohibited without written approval of the Board. Investment managers are encouraged to solicit such approval if they believe the list of allowable derivative instruments is too restrictive. By way of amplification, it is noted that the following uses of derivatives are prohibited:

**Leverage.** Derivatives shall not be used to magnify exposure to an asset, asset class, interest rate, or any other financial variable beyond which would be allowed by a portfolio’s investment guidelines if derivatives were not used.

**Unrelated Speculation.** Derivatives shall not be used to create exposures to securities, currencies, indices, or any other financial variable, unless such exposures would be allowed by a portfolio’s investment guidelines if created with non-derivative securities.

**Transaction Risk Control Procedures and Documentation Requirements**

For each over-the-counter derivative transaction, except foreign exchange forward contracts, investment managers are required to obtain at least two competitive bids or offers.

For all derivative transactions, investment managers should maintain appropriate records to support that all derivative contracts used are employed for allowed strategies.

**Portfolio-Level Risk Control Procedures and Documentation Requirements**

**Counterparty Credit Risk:** Managers are required to measure and monitor exposure to counterparty credit risk.

**Ongoing Monitoring of Risk Exposures:** The duration and other risk exposure limits specified in the managers’ guidelines are expected to be satisfied on an ongoing basis. Thus, managers must monitor changing risk exposures. Fixed income managers investing in CMOs should pay particular attention to the changing duration of their CMOs, and should anticipate potential changes in duration at the time CMOs are purchased. This is to ensure that interest rate and prepayment rate changes do not inadvertently move the portfolio out of compliance.
XI. INVESTMENT MANAGER MONITORING

General Guidelines
LASERS shall monitor and evaluate manager performance using the following resources:

- Monthly performance reports
- Quarterly Investment Performance and Portfolio Analysis
- Comprehensive Manager Reviews at the end of a manager’s contract with LASERS
- Other analyses as needed

Monitoring and Verification
Certain guidelines lend themselves to straightforward manager compliance monitoring. These guidelines will be monitored using daily holdings and transaction information provided by the Fund’s custodian bank. The custodian will monitor manager compliance by way of their investment policy reporting software and shall be responsible for alerting the Staff if a manager is out of compliance.

Guidelines which do not lend themselves to straightforward manager compliance monitoring shall rely on manager supplied attestations of compliance. A guideline compliance checklist shall be reviewed every quarter to ensure that all managers have reported guideline compliance, and note instances where managers claim to be out of compliance.

Manager Evaluation
- LASERS portfolios shall be measured over various and appropriate time periods
- A horizon of 3-7 years shall be used in measuring the long-term success of the manager
- Shorter time periods shall be evaluated as appropriate and necessary. LASERS shall make every effort to look at all factors influencing manager performance, and attempt to discern market cyclicality from manager over/underperformance
- On a timely basis, at least quarterly, the Board will review actual investment results achieved by each manager (with a perspective toward a three- to five-year time horizon or a peak-to-peak or trough-to-trough market cycle) to determine whether the investment managers performed satisfactorily when compared with the objectives set and in relation to other similarly managed funds
- Investment managers will periodically, upon request, present to the Board a portfolio review. This should include an update of the firm, current investments, their investment process, performance and their outlook for the market
The Board will periodically assess the continued appropriateness of: (1) the manager structure; (2) the allocation of assets among the managers; and (3) the investment objectives for LASERS assets.

The Board may appoint investment consultants to assist in the ongoing evaluation process. The consultant(s) selected by the Board are expected to be familiar with the investment practices of similar retirement plans and will be responsible for suggesting appropriate changes in LASERS investment program over time.

XII. REPORTING REQUIREMENTS

MANAGER REPORTING
Managers are expected to meet all of the reporting requirements outlined below.

Monthly Reporting Requirements:

1 - Performance Comparison Report – compares the market value and return stream reported by the custodian to the managers. These reports will be emailed to the manager’s designated contact and should be completed and returned via email within five business days following receipt.

Quarterly Reporting Requirements:

1 – Quarterly Summary – shall consist of the following information:

- Policy/Guideline compliance*
- Brief review of investment process
- Discussion of any changes to the investment process
- Investment strategy used over the past year and underlying rationale
- Evaluation of strategy's success/disappointments
- Comment on the manager’s assessment of the current liquidity of the portfolio and the market(s) in which the portfolio is invested

*Managers must disclose to the Board any deviation from or violation of the Investment Guidelines described herein as soon as the manager is aware the policy has not been fully complied with. The timing, duration, and resolution to any policy violation must be disclosed.

2 - Performance Review – shall consist of the following information:
LASERS
Statement of Investment Objectives
Section A – General Issues

- Total fund and asset class returns for last quarter, year-to-date, last year, three years and five years, and since inception versus designated benchmarks. All performance data shall be presented in compliance with the CFA Institute’s Global Investment Performance Standards (GIPS)
- Discussion of performance relative to benchmarks
- Portfolio characteristics relative to benchmark

3 - Derivatives Review – shall consist of the following information:
- A list of all derivative positions as of quarter-end*
- An assessment of how the derivative positions affect the risk exposures of the total portfolio
- An explanation of any significant pricing discrepancies between the manager and custodian bank
- An explanation of any non-compliance
- For all managers of commingled funds, a list of derivative positions and assessment of the effect on the risk exposure of the portfolio
*For those managers who do not use derivatives, a letter stating such is required.

4 - Portfolio Holdings – shall include the following information:
- Present book value and current market value for all securities held
- List of individual securities by:
  o Standard and Poor’s sectors for domestic equities
  o Country and by sector or industry within country for international equities
  o Sector for domestic fixed income
  o Country for emerging market debt and global bonds

Quarterly Reporting Requirements 1 through 4 are due 30 calendar days following quarter-end. These four reports may be combined into one document and should be sent via email.

5 – Attribution Comparison Report - compares manager attribution to the benchmark. These reports will be emailed to the manager’s designated contact and should be completed and returned within five business days following receipt.

6 – Data for LASERS Report to its Board of Trustees – shall include the following information:
- LASERS percent of ownership of the assets under management (AUM) for the specific product in which LASERS is invested
• The number of clients (relative to the product in which LASERS is invested) that have been gained and/or lost during the quarter

• A three-month recap of LASERS portfolio performance and market conditions for the most recent quarter-end

• A six-month outlook for LASERS portfolio and market conditions

• Three or four short bullet points detailing the portfolio’s performance for the quarter; specifically how overweighting or underweighting in a particular stock, sector, currency, or country helped or hurt performance

This information will be requested via email and should be completed and returned within 21 calendar days following receipt.

7 – Broker-Dealer Information – certain information is legislatively required by R.S. 11:266.1 and is referenced under other Statutory Provisions in Section III of these guidelines. The requirement only applies to domestic equities in separately, actively managed accounts and domestic investment grade fixed income investments in separately managed accounts. When available LASERS gathers this information from its custodian bank’s records. Managers are responsible for providing necessary trade data, if requested. The following information is to be submitted by email within 14 days of such a request:

• Trade date
• Security description
• Side (buy or sell)
• Shares/Quantity
• Price
• Commission
• Executing broker
• For fixed income, trades sent to Louisiana incorporated and domiciled broker-dealers for bid/offer

Semi-Annual Reporting Requirements:

1 – Conflicts of Interest Report – This report is legislatively required by R.S. 11.269. The legislation requires that consultants and managers provide to LASERS full disclosure of conflicts of interest, including non-pension sponsor sources of revenue. Consultant shall also provide full
disclosure of any payments it receives from money managers, in hard or soft dollars, for any services they provide, including but not limited to performance measurement, business consulting, and education.

Consultant and money managers shall submit a written disclosure report to LASERS. Such report shall be submitted regardless of whether the consultant or money manager has any conflict or payment to report. The due dates for these reports are January 15th for the period July 1 through December 31 and July 15th for the period January 1 through June 30.

Between the semiannual reports, should a reportable event take place (e.g., a change in business practices that would have to be disclosed in the subsequent report) during any reporting period, the consultant or money manager shall notify LASERS of the event within seven business days.

2 – Prohibited Nations Report – This report is legislatively required by R.S. 11:312. The legislation requires that managers review the holdings contained in LASERS portfolio to determine if any holdings were issued by companies having operations in a “prohibited nation” as defined in the legislation (Iran, North Korea, Sudan, or Syria) and report any such holdings by providing the name of each company, the asset allocation class and sector to which it belongs, and the amount of funds invested therein. If requested these reports shall be submitted to LASERS via email.

3 – Financial Disclosure Report – This report is legislatively required by R.S. 42:1114.2. The legislation requires that any individual who spends $500 or more during a calendar year providing gifts, payments, promotional items, food, drink, refreshment, or any type of entertainment toward one or more or our retirement officials must file these reports by August 15th covering January 1st through June 30th and February 15th covering the period of July 1st through December 31st. A late fee of $100 per day will be assessed for any report which has not been timely filed. The form for these reports can be found at http://www.ethics.state.la.us/pub/campfinan/forms/form406s.pdf and are submitted directly to the Louisiana Ethics Administration whose address can be found on the form.

Annual Reporting Requirements:

1 - Commissions/Trading Report – this report shall cover all trades executed during the prior calendar year. Each annual commission report should include the following:

- **Broker Selection Policy**: Discussion of the firm’s policy for selecting brokers, reviewing brokers, and negotiating brokerage commissions. This should include identification of any situations where the investment manager has a financial interest in brokers used to execute trades in the portfolio as well as a list of all broker-dealers used by the firm.

- **Commission Expense**: Provide a review of the portfolio’s actual commission expenses over the prior year. At minimum, this should be broken down by broker and include a
distinction between commissions on listed versus unlisted securities, average commission per share, total shares traded, total commission expense, and total trading volume.

- **Transaction Cost Analysis:** If the firm has a system for monitoring total transaction costs, commissions plus market impact, a copy of this analysis should be provided. If no such system is being used, the commission report should include complete explanation of how the firm monitors selected brokers for best execution.

2 - **Soft Dollar Report** – as stated previously, LASERS prohibits its public market investment managers from utilizing any form of soft dollar trading arrangements. A written attestation of the exclusion of soft dollars in the LASERS portfolio is required annually. However, should soft dollars be used in other portfolios within the strategy of which LASERS participates, a report outlining the following is required:

- A discussion of the firm’s soft dollar policy, including how the investment manager ensures its clients of full disclosure, record keeping, and consistency of soft dollar information

- A discussion on how the investment manager determines that a service can be paid with soft dollars and how the investment manager allocates mixed-use research (services that are not 100% used in the investment decision-making process). If less than 100% of the research and/or services are used in the investment decision-making process, the investment manager should only pay for the portion attributed to assisting in the investment decision-making process

- A discussion of the procedures in place to assure that any research and/or services purchased by the firm with soft dollars are used for the benefit of soft dollar participants

- A listing of all soft dollar brokers and their payout ratios

- A report identifying any goods and services, including proprietary research purchased by the manager with soft dollars over the past year. This should include soft dollars generated by agency and principal transactions, as well as any soft dollar credit given to manager due to principal transactions that do not have an overt commission per share cost. This report should provide, at a minimum, the cost and description of the goods and services purchased

3 - **Ethics Report** – includes the following:
Managers shall annually report compliance with the CFA Institute Code of Ethics. Managers shall disclose if any Chartered Financial Analyst (CFA) charter holders employed by the firm are disciplined by the CFA Institute. Managers shall disclose all pertinent information regarding any and all regulatory findings and/or litigation in which it is involved.
LASERS
Statement of Investment Objectives
Section A – General Issues

4- Form ADV Part II
Managers shall provide a disclosure statement (Form ADV part II) annually pursuant to Rule 204-3 of the Investment Advisors Act of 1940, the Securities and Exchange Commission. Annual Reporting Requirements are due 45 calendar days following year-end and are to be submitted to both Investment staff and the Investment Consultant.

OTHER REPORTING

Proxy Voting Report
Staff will report to the Board on an annual basis a summary of Proxy Voting over the previous fiscal year. The report shall detail any changes that have occurred in LASERS Proxy Voting policies, a discussion of the proxy voting agent and the votes made during the year.

Annual Trading Study
The Board will annually review a trading analysis performed by an independent third-party. The analysis shall cover:

- Brokerage Usage
- Commissions Paid
- Trading Effectiveness
- Any other relevant trading-related information

Securities Lending Report
The securities lending vendor shall report on a quarterly basis or grant online access to the following items:

- The annual lending activity and income earned, an average volume of securities lent by broker, asset category, and manager account, summarized for each month during the quarter (including year-to-date statistics)
- A list of portfolio holdings, with portfolio-level statistics, for each month-end, including market values, cost, maturity, days to reset, book yield, and credit quality
- The monthly net income earned as a percentage of the average loan balances, designed to measure the return on loans by asset category
- The net income earned as a percentage of the lending asset base in each category
- The average monthly gross spread in each asset category. The gross spread shall be calculated as the yield earned on the collateral portfolio minus the rebate paid to the
broker-dealer, which represents the earnings available for dividing between the lending agent or principal borrower or both and the LASERS Fund

- The average market value of the assets available for lending each month (lending asset base) by asset category
- The monthly average maturity of the collateral portfolio and the broker loan portfolio
- A review of the loan spreads and volume available in the market segments in which the System lends

**Internally Managed Portfolios Review**

The Board will annually review an analysis of any internally managed portfolios. The analysis shall cover:

- Performance versus the underlying benchmark
- Tracking error versus the underlying benchmark
- Assets under management
- Any change in process
- Any change in personnel
- Any material events since the previous report
- An independent performance review (with inputs provided by the Fund’s Consultant)
Revision History:

Policy Established  February 21, 1994
Policy Revised      April 27, 1995
Policy Revised      August 24, 1995
Policy Revised      June 20, 1996
Policy Revised      November 21, 1996
Policy Revised      March 26, 1997
Policy Revised      March 25, 2004
Policy Revised      December 15, 2005
Policy Revised      September 28, 2006
Policy Revised      February 26, 2009
Policy Revised      August 26, 2010
Policy Revised      December 16, 2010
Policy Revised      June 21, 2012
Policy Revised      September 27, 2012
Policy Revised      October 24, 2013
Policy Revised      April 24, 2014
Policy Revised      July 23, 2015
Policy Revised      August 27, 2015
Policy Revised      April 21, 2016
Policy Revised      May 19, 2016
Policy Revised      December 14, 2017
Policy Revised      June 21, 2018
Policy Revised      October 25, 2018
Policy Revised      July 18, 2019
Policy Revised      July 23, 2020
Policy Revised      September 2, 2020
Policy Revised      September 28, 2020
Policy Revised      October 26, 2020
Policy Revised      December 16, 2021
Policy Revised      February 17, 2022
Policy Revised      July 14, 2022