

**Los Angeles County Employees  
Retirement Association**

**Investment Risk Management  
Policy Statement**

# INVESTMENT RISK MANAGEMENT POLICY STATEMENT

## CONTENTS

<u>INTRODUCTION.....</u>	<u>1</u>
<u>ASSUMPTIONS.....</u>	<u>2</u>
<u>ASSETS DO NOT SUPPORT LIABILITIES.....</u>	<u>4</u>
<u>ASSETS DO NOT BEHAVE AS EXPECTED .....</u>	<u>5</u>
<u>EXTERNAL RISKS .....</u>	<u>5</u>
<u>MARKETS FAIL TO ACHIEVE EXPECTED RETURNS .....</u>	<u>5</u>
<u>LEGISLATED ACTIONS .....</u>	<u>7</u>
<u>INHERENT RISKS .....</u>	<u>8</u>
<u>INTERNAL RISKS .....</u>	<u>9</u>
<u>STRATEGIC RISKS.....</u>	<u>9</u>
<u>POOR GOVERNANCE .....</u>	<u>11</u>
<u>IMPLEMENTATION RISK.....</u>	<u>18</u>
<u>TACTICAL FAILURE .....</u>	<u>18</u>
<u>PORTFOLIO DRIFT .....</u>	<u>18</u>
<u>UNDER PERFORMANCE.....</u>	<u>19</u>
<u>STRATEGIC DECISIONS:</u>	<u>19</u>
<u>MANAGER MISFIT:</u>	<u>19</u>
<u>MANAGER UNDER PERFORMANCE:</u>	<u>19</u>
<u>OPERATIONAL FAILURE.....</u>	<u>24</u>
<u>EXTERNAL MANAGERS.....</u>	<u>25</u>
<u>CUSTODIAL BANKS .....</u>	<u>27</u>
<u>INTERNAL OPERATIONS.....</u>	<u>30</u>
<u>INTERNAL ASSET MANAGEMENT:</u>	<u>30</u>
<u>CASH MANAGEMENT:</u>	<u>30</u>
<u>OPERATING SYSTEMS:</u>	<u>30</u>

# INTRODUCTION

LACERA faces a number of risks in undertaking necessary investment activities. Some risks, such as normal market volatility, are generally unavoidable. Some risks, such as investing in emerging markets, are knowingly assumed and are necessary to implement certain investment policies. Other risks, such as legal exposure to some forms of liability, are unnecessary and avoidable.

Controlling or eliminating these risks is important to the fiduciaries of LACERA. The Investment Risk Management Policy Statement identifies the key investment risks associated with public pension funds and the common practices used by public funds to address those risks. In addition, the policy statement specifically describes what procedures, processes, or policies LACERA has in place to manage, and to the extent possible, control these risks.

The key risks and common practices discussed in this policy statement were extracted from a nationally published document entitled “Public Pension Systems—Statement of Key Risks and Common Practices to Address Those Risks.” That document was developed by a committee of public pension system Chief Investment Officers (CIO) and Internal Auditors and has been endorsed by the Association of Public Pension Fund Auditors, the National Association of State Retirement Administrators, the National Council on Teacher Retirement, and the Government Finance Officers Association.

Please note that this policy statement is not intended to be an exhaustive list of all risks that LACERA may potentially encounter. Nor is it intended to be a comprehensive checklist of all the procedures that LACERA should incorporate to address the identified risks. The practices listed in this policy statement are simply common and proven approaches to risk management. They are called “points of focus for action.” They are actions that can be used to mitigate risk; but there may be alternative methods and procedures to address the identified risks effectively.

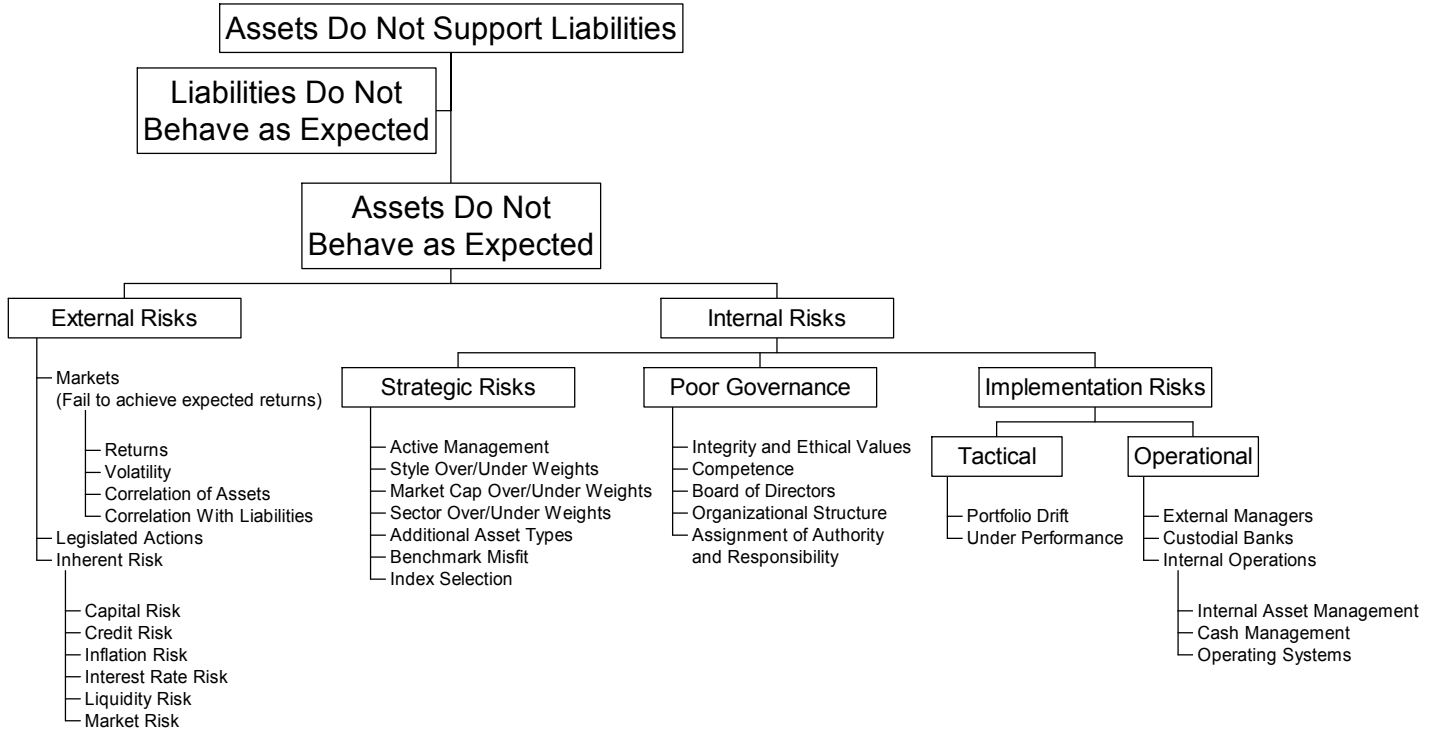
# ASSUMPTIONS

The content of this document is based on the following assumptions regarding public pension funds:

1. Public pension systems use common basic investment approaches – primarily, the core discipline of developing a long-term asset allocation and adhering to that asset allocation over long periods of time.
2. Public pension systems are long-term investors, not short-term traders and are, therefore, able to commit to their asset allocations and ride out fluctuations in the financial markets.
3. Public pension systems rarely have substantial short or leveraged positions and typically hold “long” positions in public securities and private investments.
4. Public pension systems diversify by using a number of asset classes, styles, managers, and approaches.
5. Public pension systems generally attempt to maximize investment return while minimizing or eliminating exposure to unintended or uncompensated risk.

The organization of this document takes a “top down” or tiered approach to identifying investment risks within public pension systems. The broadest and most significant risk (or primary risk) is stated first and then the subordinate risks are identified in order of decreasing importance until some level of immateriality is reached. The risks identified at the top “tier” are universal within the public pension system universe and, as we work our way down, become less common. The following chart outlines the key risks identified in this document:

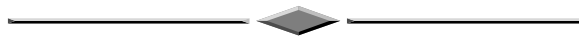
# KEY RISK FRAMEWORK



## ASSETS DO NOT SUPPORT LIABILITIES

The primary risk to LACERA is that the fund's assets will not support the liabilities. After all, the underlying purpose of any defined benefit pension system is to pay current and future benefits to its members. These benefit obligations cannot be met without the appropriate level of available assets. All other investment risks associated with LACERA are ultimately just a sub-category of this primary risk.

Two major sub-categories of risk fall directly below the primary risk identified above. The first is that the liabilities of the pension fund will not behave as expected, and the second is that the assets will not behave as expected. Numerous factors, ranging from market volatility to demographic changes to policy changes that increase benefits, can cause the assets and liabilities of a pension system to behave unexpectedly. Without proper planning and management, these unexpected behaviors may ultimately affect whether or not LACERA's assets will support its liabilities.



### Points of Focus for Action

- LACERA uses three basic procedures at the highest level to address and manage the risk of assets not supporting liabilities.
- **Actuarial reviews:** Reviews periodically performed by an actuary mainly to evaluate the trends of the liability components of the system and their relationship to existing assets. It should be noted that while not yet a common practice, it is becoming increasingly more common for public pension systems to hire an additional independent actuary to review or audit the work performed by the original actuary (actuarial audits).

**LACERA Policy:** LACERA retains a qualified independent actuary firm to conduct an annual “actuarial valuation” and a comprehensive actuarial review every three years (triennial). In addition, a separate independent actuary periodically reviews (audits) the work of the retained actuary.

- **Asset/liability studies:** Studies generally performed periodically to identify changes in the relationships between the assets and liabilities of a pension fund.

**LACERA Policy:** Asset/liability studies are periodically performed by LACERA's general consultant prior to the development of an asset allocation model.

- **Asset allocation models:** Models generally constructed by the System's investment staff and/or investment consultant and approved by the Board of Trustees to achieve diversification among asset classes in the most appropriate way to provide the best opportunity for producing sufficient returns to meet the expected liabilities. In many instances, the asset allocation exercise is part of a comprehensive asset/liability study.

**LACERA Policy:** With the assistance of LACERA'S general consultant and investment staff, the Board of Investments has established an asset allocation policy to ensure diversification of assets. The policy and strategic allocations are documented in LACERA's Investment Policy Statement. The Board reviews the asset allocation policy at least every five years.

# ASSETS DO NOT BEHAVE AS EXPECTED

Simply stated, this is the risk that the return needed to meet the liabilities is not produced due to unexpected behavior of the investment chosen. This unexpected behavior could result from a wide variety of factors, ranging from internal operational issues to external market forces.

In fact, all the investment risks that could have a material effect on LACERA stem from assets not behaving as expected or planned. Therefore, all the risks identified in the remainder of this document focus on risks that can cause assets not to behave as expected.

The specific risk that may ultimately cause assets to not behave as expected can be placed into two general categories: external and internal influences.

## EXTERNAL RISKS

### Markets Fail to Achieve Expected Returns

With the assumption that LACERA is a long-term investor and employs standard asset allocation methodology to build a diversified portfolio of assets, this risk is not that the actual **annual** returns of any given asset class will not meet the expected **annual** returns. This particular risk is intrinsic to the assets themselves and mitigated by using such factors as expected volatility and correlation in diversifying the portfolio. In fact, it is assumed that all classes of assets will perform significantly different than expectations over particular periods of time.

Instead, this is the risk that the long-term behavior of one or more of the asset types turns out to be significantly different than expected due to unforeseen market, economic, or political factors. These deviations from expectations may result from any or all of the following:

- The long term returns of the asset type.
- The long term volatility of the asset type.
- The asset type's correlation or behavior in relation to other asset types.
- The behavior of the entire asset allocation in relation to the liabilities of the plan.

Failures in base assumptions could, over time, result in a significant under funding of LACERA.

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### Points of Focus for Action

LACERA uses three primary vehicles to address these risks.

**Asset Allocation Reviews:** Periodic asset allocation reviews take a prospective approach to managing market risk by examining the appropriateness of the set of assumptions that are being used in the allocation model.

**LACERA Policy:** At least every five years, LACERA conducts an asset allocation study. The results of this study establish an asset allocation policy which is expected to generate returns in excess of the “assumed actuarial rate of return” to pay the current liabilities. The general consultant provides LACERA with return, volatility, and correlation assumptions, which investment staff reviews for reasonableness and compares them to assumptions made by other qualified entities. Please note that the current asset allocation policy and strategic allocations were documented in the Board memorandum entitled “Asset Allocation Policy” dated April 20, 2000 and are contained in the latest Investment Policy Statement.

**Long-term Performance Measurement:** This is conducted for each asset type and the portfolio as a whole. Performance measurement can be referred to as a retrospective approach to managing the risk because it evaluates the historical returns and volatility of each asset type, as well as the historical correlation among the asset types. By evaluating the historical performance numbers, market trends may be identified which could help LACERA avoid long-term unexpected market behavior.

**LACERA Policy:** LACERA’s external investment managers and custodial bank calculate performance on a monthly basis. All performance numbers are reviewed and reconciled by the investment staff. Staff then uses these performance calculations to prepare a quarterly performance report that is formally presented to the Board

On an annual basis, Investment staff conducts a formal review of the portfolio structure of each asset class to determine the appropriateness of the existing portfolio strategy.

**Periodic Actuarial Reviews:** These studies track the actual behavior of the assets as matched against the actual behavior of the liabilities and quantify the ongoing difference of the impact of any unexpected behavior.

**LACERA Policy:** LACERA retains a qualified independent actuary firm to conduct an annual “actuarial valuation” and a comprehensive actuarial review every three years (triennial). In addition, a separate independent actuary periodically reviews (audits) the work of the retained actuary.

## **Legislated Actions**

LACERA is predicated on assumptions regarding long-term rates of return and the application of present value concepts to promised future benefits. Any change to the realization or fulfillment of these assumptions by virtue of legislated action may substantially impact the financial health and economic viability of the system. Examples include laws that limit what asset types public pension systems may own and legislation that increases benefit formulas without considering available assets.

Another example that could seriously affect the assets of LACERA is legislation that artificially increases the interest rate assumption, with the intended effect of a reduced contribution from the employer. A shortage in the expected contributions can obviously upset the balance between assets and liabilities and ultimately cause LACERA to be under funded. The added risk of this type of legislation is that it would most likely require a higher level of investment risk be taken in order to support the new assumptions.

The key risk in any of these examples is that a radical change is made without understanding the effects on the program being changed, with the attendant risks of trend chasing, confusion, and lack of long-term focus.

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## Points of Focus for Action

Sudden adverse legislative changes are sometimes unavoidable; however, LACERA can take certain steps to minimize the likelihood that such situations will occur.

**Investment Policy:** A well-organized and documented investment policy that has been approved by an appropriate governing body is key to avoiding sudden and frequent overhauls of the investment program by various political bodies. An unorganized and haphazardly executed investment program will likely find itself subject to periodic overhauls initiated by outside sources as it experiences intermittent periods of poor performance.

**LACERA Policy:** LACERA's Investment Policy Statement is a "living" document that is continually updated and annually reviewed by the CIO and various members of the Investment Staff. The Board of Investments approves all revisions to the policy. The most recent revision to the policy statement was adopted by the Board on April 11, 2001.

**Education:** Educating the Los Angeles County Board of Supervisors, and its constituents about the system is also an effective mechanism for managing this risk. The more knowledgeable these groups are about the key investment concepts employed by a public pension system the less likely they are to pursue adverse changes that may negatively affect the investment plan. This education is often accomplished through regular communications from the System. In addition, other educational materials, such as the investment policy and strategy of the system, are often made available.

**LACERA Policy:** LACERA provides regular communications concerning the status of the association to its plan sponsor, the County of Los Angeles and the Los Angeles County Board of Supervisors. The Board receives copies of LACERA's comprehensive annual financial report, annual popular financial reports, actuarial reports, Board meeting agendas, newsletters, and personnel actions. General information about benefits, healthcare, investments, and publications is available on LACERA's website: [www.lacera.com](http://www.lacera.com).

**Legislative Liaison:** Most public pension systems have some sort of monitoring and communication process in place to keep in touch with proposed legislation or other actions that may affect the System's assets. Early awareness and effective communication enables the System to educate the public and lawmakers on the potential effects of the legislation before its passage.

**LACERA Policy:** Executive and legal staff continuously monitor proposed state and federal legislation affecting LACERA. LACERA contracts with a legislative consultant/advocate who serves as a liaison between LACERA, members of the state legislature, legislative committees, legislative staff, unions, and other retiree organizations. In addition, LACERA retains a professional lobbyist who actively promotes legislation sponsored by LACERA, and works against legislation that LACERA actively opposes.

At the national level, various members of LACERA's staff actively participate and share information about LACERA with several professional organizations, including the Government Finance Officers Association, National Association of State Retirement Administrators, National Conference on Public Employee Retirement Systems, Public Pension Coordinating Council, and the National Association of Public Pension Attorneys. Most of these organizations provide federal legislative advocacy services for their membership.

## Inherent Risks

All investments are subject to one or more types of inherent risk. It is expected and necessary to assume some level of risk in order to achieve needed returns. For example, some inherent risks present in common investment vehicles follows:

- Capital Risk - The risk of losing the original investment.
- Credit Risk - The risk that the issuer will not make scheduled payments.
- Inflation Risk - The risk that the investment will return below the rate of inflation.
- Interest Rate Risk - The risk that changes in interest rates will decrease values.
- Liquidity Risk - The risk that the investment cannot be readily converted to cash at prevailing or assumed prices.
- Market Risk - The risk that adverse market shifts will cause losses.

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### Points of Focus for Action

As indicated, these risks are inherently present and are usually knowingly assumed when investing. Usually, they cannot be avoided; however, one way to mitigate these risks is by utilizing the principle of diversification. This way, for example, if one company or industry falters, the threat to the overall fund will be minimized.

**LACERA Policy:** As stated in the Investment Policy Statement, “LACERA’s Investment Policy has been designed to allow the fund to achieve a long-term total return. Consequently, prudent risk-taking is warranted within the context of overall portfolio diversification to meet this goal”. As a result, LACERA has constructed a well-diversified portfolio comprised of strategic and tactical investments in:

- **Public Equities:** Domestic, international, and emerging markets.
- **Fixed Income:** Domestic and international investment grade and non-investment grade bonds.
- **Real Estate:** Direct investments and commingled funds.
- **Alternative Assets/Private Equity:** Fund of funds, limited partnerships (corporate finance, venture capital, mezzanine and distressed) and direct investments.
- **Cash and equivalents**

**In addition to asset class diversification, LACERA employs multiple managers within each asset class to insure firm and style diversification.**

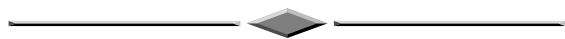
# INTERNAL RISKS

## Strategic Risks

Strategic decisions, as they pertain to public pension investment plans, can be defined as decisions, usually made by the Board, to move away from underlying policy benchmarks. For example, assume a pension fund employs a simplified asset allocation model of 50% domestic equities, 35% fixed income, and 15% international equities and adopts the Russell 3000, Lehman Aggregate Bond, and MSCI EAFE, respectively, as the policy benchmarks for this base allocation. This fund could meet its asset allocation objective and policy benchmarks by simply indexing the appropriate percentage of all its funds into the Russell 3000, the Lehman Aggregate Bond, and MSCI EAFE.

Using this strategy, the risk of not achieving the policy benchmark returns less transaction costs, would be minimal, almost non-existent. However, any decision to move away from this strategy increases the risk that returns will not meet the returns of the policy benchmark, which may ultimately result in assets not meeting the expected long-term performance assumptions. Examples include decisions to overweight or underweight particular styles (e.g., a bias toward a value or growth style in U.S. equities), and overweight or underweight to market capitalization (e.g., over-weighting small capitalization stocks) and sectors or regions (e.g., underweight a particular country in an international equity portfolio). Despite the risk involved in moving away from policy benchmarks, most systems do take actions to deviate from the policy for the simple reason that it believes the rewards of achieving incremental return exceed the incremental risk of performing below benchmark returns.

Another issue is a potential flaw in the underlying benchmarks themselves. No benchmark is a perfect reflection of the underlying general market. Even the S&P 500, often used as a reflection of large cap U.S. stocks, has substantial international exposure. The choice of a particular small cap U.S. index can result in widely different returns over periods of time, such as differences in the performance of the S&P 500 and the Russell 2000. Potential problems in this area are magnified as the indices being used to replicate markets which are less liquid and more inefficient (such as international emerging markets) are utilized. While over longer periods of time these differences in performance may become less significant; they are an area of potential concern over shorter time periods.



## Points of Focus for Action

**Manage the Risk:** Ultimately, most Systems do not choose to avoid the risk associated with strategic decisions. Instead, they elect to manage the risk. Managing the risk begins with clearly defining the policy benchmarks established for the fund and the acceptable level of deviation from these established benchmarks. Some Systems establish benchmarks at the strategic level as well as the policy level. Again, using the Russell 3000 as a policy benchmark, a fund may strategically decide to own a disproportionate number of value stocks in their portfolio and therefore, decide to incorporate a tailor-made benchmark to reflect their decision to be overweight with value stocks. Benchmarks may be further defined at the specific manager level. Regardless of the number of benchmarks established on different levels, they normally are clearly defined and should ultimately roll up into the overall policy benchmarks.

**LACERA Policy:** LACERA has established benchmarks at the total fund, asset class, and individual investment manager level. The current benchmarks are as follows:

**Total Fund**

**Custom Total Fund Benchmark**

**Domestic Equity**  
**International Equity**  
**Domestic Fixed Income**  
**Real Estate**  
**Alternative Assets**

**Russell 3000**  
**MSCI All Country World ex U.S. Free**  
**Custom Index**  
**Target Return Benchmark**  
**Target Return Benchmark**

**Long-term Performance:** Monitoring the long-term performance of the strategic decisions is another way Systems manage the risk that the strategies will not provide the anticipated returns for the System. The impact of strategic decisions usually only becomes apparent over a period of years. Individual annual returns for strategies may be volatile when compared to the returns of the underlying asset class or policy benchmarks. For example, a decision to overweight small cap equities may under perform the general equity market for several years in a row. A long-term performance measurement system can monitor these return variances or risks by simply tracking the impact of these particular strategies over time and comparing them to the alternative of investing in the broad asset class or policy benchmark. Performance measurement is usually conducted by a pension fund's outside consultants and/or staff in formal periodic reports to the board.

**LACERA Policy:** LACERA's custodial bank calculates the monthly performance for equity and fixed income investment managers that is carefully reviewed by investment staff. Investment staff uses these monthly performance calculations to prepare a quarterly performance report that is formally presented to the Board. This quarterly report contains one- quarter, one-year, two-year, three-year, four-year, five-year, and since inception manager returns compared against appropriate benchmarks.

LACERA's alternative asset consultant calculates private equity performance on a quarterly basis, and prepares a report that is thoroughly reviewed by investment staff and presented to the Board. Unlike public equity portfolios that are marked-to-market on a daily basis, private equity portfolios are traditionally valued on a quarterly basis.

LACERA's real estate consultant calculates real estate performance on a quarterly basis, and prepares a report that is thoroughly reviewed by investment staff and presented to the Board. This report contains one-year, three-year, five year, and since inception manager returns for each real estate investment style. Unlike public equity portfolios that are marked-to-market on a daily basis, real estate portfolios are typically valued/appraised on an annual basis.

## **Poor Governance**

Governance risk, in this context, refers to the risk that the board, staff, or agents of a public pension system will, either intentionally or unintentionally through their management actions or lack thereof, cause the assets of LACERA to under perform expectations. Agents of a public pension system include external consultants, money managers, auditors, actuaries, and legal counsel.

Characteristics of poor governance may include incompetence, poorly or improperly defined roles, poor communications, failure to meet fiduciary responsibilities, lack of ethical standards, and inconsistency.

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## **Points of Focus for Action**

The focus here is the control environment, which is the foundation for the entire internal control system within the organization. The control environment defines the character of the organization and affects the attitudes of all individuals towards governance and control. It consists of several elements including:

integrity and ethical values, competence, a qualified board of directors and executive staff, a rational organizational structure, and proper assignment of authority and responsibility. Without this foundation, other components of the control system often fail.

## **Integrity and Ethical Values**

**Code of Ethics:** Public pension systems often develop and adopt their own code of ethics to address the need for ethical standards within the organization. Others may recognize a more general set of ethics from their state government or other organization. Some Systems may not officially “adopt” a code of ethics but may address many of the ethical issues in personnel manuals, trustee handbooks, and other internal policies and documents.

**LACERA Policy:** LACERA has adopted an official “Code of Ethics” for Board members and a “Code of Ethical Conduct” for staff. The Code of Ethics was adopted to “ensure the proper administration of LACERA, and to foster unquestioned public confidence in LACERA’s institutional integrity as a prudently-managed and fiduciarily-governed public pension system, operated for the sole and exclusive purpose of providing benefits to LACERA’s participants and beneficiaries”. The Code specifically addresses fiduciary duties, conflicts of interest, incompatible activities, limitations on the acceptance of gifts, prohibition on acceptance of honoraria, public disclosure of economic interests, and communications with service providers.

The purpose of the Code of Ethical Conduct is “to ensure that LACERA staff members comply with relevant federal and state laws regulating conduct and to avoid any conduct which is, or may be perceived to be, detrimental to LACERA and its members and beneficiaries”. The Code outlines ethical standards, prohibited transactions, restrictions and prohibitions applicable to gifts, and nepotism.

**Fiduciary Responsibility:** Good governance of public pension systems also includes the understanding of fiduciary responsibilities by boards, staff, and agents of the system. For most boards, fiduciary responsibilities are defined and imposed through state laws and regulations pertaining to the system (including direct or indirect references to trust law). Mission statements, plan documents, and other internal documents may further define the fiduciary responsibility of the board. Many times the fiduciary responsibility of staff members and agents are also defined and imposed in state laws and regulations and other methods similar to the boards’. Staff’s fiduciary responsibilities may also be defined through written policies and guidelines approved by the board. In the case of agents to the system, their fiduciary responsibilities are normally defined and acknowledged in writing. This is usually accomplished through contracts and written agreements between the system and its agents.

**LACERA Policy:** The fiduciary duties of LACERA’s boards, officers and employees are defined in Article XVI, Section 17 of the California Constitution and California Government Code Section 31595, a provision of the County Employees Retirement Law of 1937. Section 31595 provides in part:

“The board and its officers and employees shall discharge their duties with respect to the system:

- (a) Solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system,
- (b) With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- (c) Shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.

**The fiduciary responsibility of LACERA's agents is defined in contracts and written agreements. All investment managers must sign an Investment Management Agreement that contains language acknowledging the manager's fiduciary responsibility to LACERA. The external investment consultant and custody bank contracts also contain similar clauses.**

## **Competence**

**Hiring Practices:** Methods used to help ensure a competent staff include establishing good hiring practices, conducting effective periodic evaluations, and providing an attractive working environment. Most public pension systems operate under public rules and personnel policies or have their own defined standards and procedures.

**LACERA Policy:** LACERA's fundamental hiring practices are explained in the Los Angeles County Code, Appendix I to Title 5:

- **Rule 6 – Applications and applicants.**
- **Rule 7—Competitive examinations.**
- **Rule 10—Eligible Lists.**
- **Rule 11—Certification and Appointment.**
- **Rule 12—Probation.**

New investment office employees are required to undergo a probationary period of six months. At the end of this period, the candidate's immediate supervisor prepares a "Report on Probationer" to confirm/deny their appointment.

**The Chief Investment Officer prepares annual performance appraisals (MAP) for asset class heads, while each asset class head composes a MAP or performance evaluation (P/E) for each member of their staff. At the beginning of each rating period, the CIO meets with senior investment staff to establish department goals for the year. Semi-annually, the CIO meets with investment staff to discuss their progress towards completion of these goals and to provide feedback to employees regarding work performance.**

**LACERA offices are located in an attractive Class A, Investment-Grade, handicap- compliant office building. Staff is provided with large, ergonomically designed work areas. Amenities include a convenience store, lunchroom, auto detailing service, employee running track, concierge, and extensive landscaping around the building**

**Training:** Another method to help ensure the competency of staff and trustees is to provide an appropriate orientation for new board members and staff and continuing education for all board members and staff. New board members are often initially educated through an orientation process and receive on-going education by attending appropriate conferences and seminars. In addition, the investment staff and agents of the system may use portions of board meetings to further educate the board on investment-related issues.

**LACERA Policy:** LACERA issues a "Board Member Orientation Handbook" to each new Board member. This handbook identifies responsibilities, functions, and fiduciary duties of the Board, outlines the organizational structure of LACERA, explains LACERA's funding policy, and contains LACERA's Code of Ethics. In addition, each new Board member is given a copy of the Investment Policy Statement and is encouraged to meet one-on-one with the Chief Executive Officer, Chief Investment Officer, and other key staff members to discuss LACERA's investment philosophy. The Board is also provided with continuing education on various investment topics by external investment consultant(s) and internal investment staff

**making formal presentations to the Board. Finally, the Board is provided with ongoing opportunities to attend workshops, conferences, and seminars related to investments.**

**LACERA encourages investment staff to continue their education by providing opportunities to attend conferences, seminars, and workshops that relate to the employee's career development. In addition, LACERA offers financial assistance to staff members who wish to obtain career-related certifications such as the Chartered Financial Analyst (CFA), and will also pay for job-related professional dues and memberships.**

**Outside Experts:** Another method of managing the risk of poor governance is by hiring outside experts. Most Systems rely on outside experts such as actuaries, attorneys, auditors, authorities on governance issues, and consultants, when necessary.

A structured and methodical evaluation process, often involving the advice of consultants, is often used to ensure the competency of agents hired by public pension systems. In addition, other agents of the same profession may be hired to periodically review the work of the agent retained by the public pension system.

**LACERA Policy: LACERA retains the following outside experts to help manage investment-related risks:**

- **Actuaries (see policies on pages 6,9)**
- **Attorneys (see policy on page 10)**
- **Auditors (see policy below)**
- **Investment Consultants (see policies on pages 6,7,8,13,14,23,24,25)**
- **Money Managers (see policies on pages 8,23,24,25,29,32)**
- **Custodial Bank (see policies on pages 8,13,25,30)**

**LACERA retains a qualified independent auditor to perform an annual audit of financial statements. The auditor conducts the audit in accordance with generally accepted auditing standards in the United States, and the Government Auditing Standards issued by the Comptroller General of the United States.**

**The audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation.**

**Staff reviews the services rendered and capabilities of the external auditor at the end of each auditing cycle. Every five years, staff performs a formal evaluation of the relationship. At least once every seven years, staff conducts a search for a new auditor.**

**Whenever a search for a new auditor is warranted, staff issues a request for proposal (RFP) and evaluates the responses submitted by the prospective auditing firms. Responses to RFP's will include a report describing:**

- 1. The firm's internal quality control procedures.**
- 2. Any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues.**
- 3. All relationships between the independent auditor and LACERA's trustees, officers, and employees (to assess the auditor's independence).**

**In addition, meetings (in-house and off site) with LACERA staff and the auditor's representatives are held to provide a more in-depth evaluation of the auditor candidates.**

**All auditor candidates/firms must meet the following minimum qualifications:**

- 1. The firm must be a professional public accounting firm that provides audit and other attest services.**
- 2. The firm must have conducted, within the last five years, at least two audits of defined benefit pension plans with assets that exceed five billion dollars.**
- 3. The firm must have experience in auditing the following classes of investments: equity securities (domestic and international), fixed income securities, real estate, alternative investments, and securities lending.**
- 4. The firm must have an established office within the United States.**
- 5. The firm must be independent, licensed by and in good standing with the State of California.**

6. **The Principal/Partner responsible for the LACERA account must have at least ten years of experience in public accounting, and be a Certified Public Accountant licensed by and in good standing with the State of California.**
7. **The Audit Manager responsible for the LACERA account must have at least five years of experience in public accounting and be a Certified Public Accountant licensed by and in good standing with any state(s) in the United States of America.**
8. **The On-Site Supervisor directly overseeing the LACERA account must have at least three years of professional auditing experience.**
9. **When auditing LACERA, the firm must agree that during the term of its contract with LACERA, it will not provide services to the County of Los Angeles (1) in connection with the preparation or audit of the County's comprehensive financial report, or (2) in connection with actuarial, audit, consulting, investigation or valuation services pertaining to LACERA or to other retirement-related benefits administered by LACERA.**

**When evaluating RFP's for audit services, consideration will be given to the following:**

**Whether to assure continuing auditor independence, there should be regular rotation of the lead audit partner, or the audit firm.**

**Whether other business relationships between LACERA and the auditing firm would compromise the firm's independence.**

**Contracts for auditing services shall be awarded by the Board of Retirement, based on staff's recommendations and following presentations by two or more candidates.**

### **Board of Directors**

Good governance of a public pension system usually begins with a competent governing board. The criteria for the selection of most public pension boards are usually set by the governing statute or other authority establishing the public pension system.

**LACERA Policy: The California Government Code, Section 31520.2 entitled "Board of Investments in certain counties" contains criteria for the selection of members of the Board of Investments.**

### **Organizational Structures**

Organizational structures will vary among public pension systems, depending upon their approach (e.g., whether investments are managed externally, internally or a combination of both). Regardless of the approach, the structure should be clearly defined and key positions identified.

**LACERA Policy: LACERA clearly defines the organizational structure in the Comprehensive Annual Financial Report and the "duties of responsible parties" (the Board, Investment Staff, Investment Managers, Master Custodian, and Consultants) in the Investment Policy Statement.**

### **Assignment of Authority and Responsibility**

**Written Policy:** Another practice used to reduce the risk of poor governance is the development and adoption of written policy statements. For example, investment policy statements often address some or all of the following issues:

**Legal and Statutory Framework**

Sole Interest of Beneficiaries, Prudence Standards, Fiduciary Duty

**Investment Goals**

General Return Goals, Specific Risk and Return Objectives, Risk Tolerance, Identification of Liabilities, Asset Allocation Procedures and Principles, Allocations, Limits, and Rebalancing.

**Investment Structure**

Overall Standards, Direct Board Responsibilities, Delegated Board Functions, Employees, Consultants, Advisors, Asset Managers, Custodians and other Support Groups, Standards for Selection, Fees, Procedure for Selection, Monitoring and Review Procedures, Risk Controls, Policies, and Procedures.

**Asset Class Policies**

Objectives, Allowable Investments, Prohibited Activities, Styles, Benchmarks, Derivatives.

**Other Policies**

Proxy Voting, Corporate Governance Policies, Ethics, Disclosures, Soft Dollar, Securities Lending, Personnel, etc.

Written and approved policy statements serve as an educational tool for new investment staff and board members and help ensure seamless transitions during staff and board turnover. In addition, having written and approved policy statements in place helps prevent sudden inappropriate changes to the investment plan in reaction to temporary or transient events.

**LACERA Policy: LACERA's Investment Policy Statement specifically addresses the majority of the issues listed above.**

**Implementation Risk**

This is the risk that policies and procedures may not be implemented properly. LACERA may develop and adopt the ideal asset/liability mix, asset allocation model, and investment policies and strategies, but if staff or agents of LACERA do not effectively implement the mix and strategies, then assets may ultimately not support the liabilities generated. Causes of ineffective implementation fall into two general categories: tactical failure and operational failure. Implementation risk and common practices to address the risk are discussed below in terms of these two general categories.

## Tactical Failure

Two general sources of tactical failure may prevent LACERA from achieving the benefits that would accrue from following its long-term investment strategy. First is the risk that the actual allocation of assets does not conform to the asset allocation strategy. Second is the risk that the actual return experienced through investment in specific assets does not meet the returns of the asset classes of which they are a part.

### **PORTFOLIO DRIFT**

For various reasons, LACERA may not follow the underlying asset allocation defined in its investment plan. For example, let's assume that LACERA's current policy asset allocation is 50% U.S. equities, 25% international equities, and 25% diversification pool. Due to market movements (for example, a significant stock market decline), the assets may shift to 40% U.S. equities, 15% international equities, and 45% diversification pool. Particularly after a significant change in the market, a fund may remain in this overweight to the diversification pool position for a prolonged period of time and, as a result, realize returns far below that expected from the policy asset allocation. As discussed below, the primary discipline used to address this concern is the process of rebalancing.

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## **Points of Focus for Action**

The primary discipline used here is an expressed rebalancing procedure. For example, many Systems incorporate ranges around an expressed policy asset allocation that, when violated, will trigger either a direct reallocation of assets to more closely align with the policy asset allocation or trigger a review of conditions to determine whether a rebalancing of assets should occur. As part of this process, most Systems will include a direct comparison of the actual allocation with the policy allocation, with associated ranges, in the formal board reports.

### **LACERA Policy: LACERA's rebalancing policy as stated in the Investment Policy Statement:**

- **Cash flows into and out of the fund will be used to rebalance back to asset class targets whenever possible (this ensures that the actual asset allocation does not drift too far from the strategic asset allocation).**
- **The Fund's actual asset allocation should be reviewed at the end of each month when asset valuations become available. More frequent reviews may be undertaken, if appropriate. Rebalancing will take place if the weight to any asset class exceeds the policy range.**
- **When rebalancing occurs, the portfolio will be rebalanced back toward the strategic asset allocation target.**
- **Rebalancing should be implemented by the most cost-effective means available**
- **LACERA's quarterly investment performance report includes a direct comparison of the portfolio's actual asset allocation to the target asset allocation.**

## UNDER PERFORMANCE

Three types of tactical decisions may cause the actual returns of specific assets to under perform the asset class of which they are a part. First, as discussed above, strategic decisions may be undertaken; second, the actual allocation of assets to managers or accounts may not reflect the strategic allocations, which creates a misfit between the individual account benchmarks and the overall strategic objective, and third, the managers may under perform the asset class.

**Strategic Decisions:** The risks associated with strategic decisions discussed above may be the result of decisions to:

- Add asset types not included in the underlying asset classes (e.g., private equity, private debt, or emerging markets).
- Tilt the characteristics of an asset class (e.g., more or less small capitalization stocks).
- Take actions to try to reduce risk (e.g., hedging international currency risk).

**Manager Misfit:** LACERA may hire the wrong manager or type of manager to fulfill a particular segment of the asset allocation strategy. For example, a manager is hired to implement a strategic decision of overweighting small value stocks and the manager turns out to be a small growth manager. Another example would be where a manager is given a particular benchmark and that benchmark does not reflect the segment of the asset allocation strategy for which it was intended (Benchmark Misfit).

**Manager Under Performance:** The external or internal managers hired by LACERA to actively attempt to gain returns higher than those available by passively investing in the markets themselves may under perform the asset class. The actual returns could be significantly different, and lower, than those in the general market due to the manager's investment decisions.

A public pension system may hire three general types of managers to manage funds: managers of publicly traded securities, managers of private equity and debt, and managers of derivative securities.

- **Managers of Publicly Traded Securities**

Public pension systems often hire active managers (both on-staff and outside institutions) to manage public and private investments. These managers are hired to outperform the alternative passive investment. This adds another level of potential disparity, and risk, in achieving the desired long-term returns: the difference in performance and results of the active managers from that achieved by the passive alternative investment in that asset type. In particular, it could lead to substantial under performance over a period of time from that contemplated by the underlying investment strategy.

This risk could arise in four ways: First, the active managers could be true to their style or discipline, but the results of that style or discipline could have unintended consequences (such as performance significantly different than the benchmark used for that manager). Second, the actual benchmark used, when combined with other similar managers or accounts, does not fit the profile of the overall strategic objective or benchmark for that portion of the fund. Third, managers could drift from their particular style when making individual investment decisions and thereby, achieve returns that are different, and lower, than that of the benchmark they were assigned. A fourth way is through operational failure and is discussed later.

Unlike the long-term nature of the asset allocation and strategic policy risks, the impact on the value of the portfolio as a result of adverse events due to an individual manager's investment activities can occur relatively quickly, sometimes in a matter of days or weeks. Unusual market conditions could invalidate a manager's underlying assumptions by which they choose stocks, bonds, or other individual investments. This "quicker" pace of adverse valuation consequences usually affects only those managers who deal in the public markets, with its liquidity and daily pricing. Private investment portfolios usually have a more leisurely time frame for recognizing changes in valuation, as discussed in the next section.

- **Managers of Private Equity and Debt**

Investments in private equities, private real estate, and private commercial mortgages will most likely go awry at a slower pace. This usually happens over periods of months, not days, since the underlying investments in companies or properties are not valued as frequently.

- **Managers of Derivative Securities**

Typically, public pension systems do not have significant exposure to derivative instruments that could swiftly change the risk profile of the fund. Many derivative exposures are simple and direct substitutes for the underlying instrument. For example, the use of certain futures and forwards markets, such as the S&P 500 Futures Market, is practically interchangeable for holdings in the underlying security or securities. As a result, the risk management procedures for managers with publicly traded portfolios would suffice for tracking those positions if they could materially impact the portfolio.

The concern is with exotic instruments that have express or hidden leverage features or significant elements of optionality. These features could make the standard characteristic measurements (such as duration, beta, etc.) inapplicable for large market moves or, through express or implied leverage, result in a cascading effect from relatively small or marginal market moves. The task for a public pension system is to determine if those types of instruments are in the portfolio and, if they are, whether the aggregate exposure to the overall portfolio is such that additional and more detailed tracking mechanisms and other risk control measures are required.



## Points of Focus for Action

Concentrate on hiring quality managers and then monitoring three factors: people, process, and performance. Monitoring should occur on an ongoing basis or through separate periodic evaluations.

**Due Diligence in Hiring:** As it relates to portfolio managers, risk management begins with the good hiring practices. Most public pension systems have a formalized due diligence process in place to determine external manager candidates that will incorporate the desired investment styles and disciplines to meet the objectives of the system's strategies. This process often includes the use of an independent investment consultant to assist in the search for managers that meet the criteria established by the system. The same prudence is usually exercised by public pension systems when hiring staff to internally manage funds.

The hiring process also usually includes the development of a contract that includes guidelines for the management of the specific portfolio. The guidelines usually include language that addresses:

- The objective of the portfolio;
- The benchmark the portfolio will be measured against;
- The desired characteristics of the portfolio; and
- The allowable, and possibly prohibited investments for the portfolio.

Guidelines help to further ensure that the managers adhere to the strategy and discipline for which they were hired. For internally managed portfolios, while there may not be a written contract involved, guidelines are usually documented and approved by members of the management team or the board.

**LACERA Policy:** LACERA's general selection criteria for hiring external investment managers are found in the Investment Management Policy section of the Investment Policy Statement. Specific quantitative and qualitative selection criteria are prepared by staff on a case-by-case basis. These criteria are tailored to the type of investment mandate being considered

The Board has delegated RFP/RFI preparation and the investment manager search process to staff. In addition, LACERA's general consultant assists staff with the evaluation of potential candidates. The manager search process includes an interview at LACERA's offices and, if required, on-site visits to candidate manager offices by investment staff.

After the selection process is completed, the manager is required to sign an investment management agreement that explains the manager's fiduciary status, and their various investment duties. A Statement of Investment Policy developed by investment staff is attached to the agreement. This policy identifies the objectives of the portfolio, the benchmark that the manager will be measured against, the investment management style, the desired characteristics of the portfolio and the allowable and prohibited investments. These guidelines are signed by both parties and become part of the contract.

**People:** Many Systems also meet face-to-face on a periodic basis with the external management team. These meetings are generally conducted by internal staff, the external asset consultant or both. These meetings provide the System with a better understanding of the day-to-day operations of the external manager and the manager's business continuity, including resources and staff turnover. In addition, portfolio theory is often discussed to reassure the System that the manager is still a proper fit for the management niche for which they were originally hired.

**LACERA Policy:** LACERA investment staff generally conducts in-house due diligence meetings with each external management team on an annual basis. LACERA's Manager Monitoring and Review Policy outlines and defines a process for the ongoing review of investment managers. The general consultant conducts periodic evaluations of each investment manager. Whenever a manager outperforms or underperforms their benchmark by a predetermined number of basis points, the firm is requested to appear before the Board to make a formal presentation.

Alternative assets staff or consultant attend, either on-site or electronically, the mandatory annual meetings of the limited partnerships in the private equity portfolio. The general partners of these partnerships are not required to make presentations to the Board because the investments are relatively illiquid and the performance is measured over a ten-year time frame.

On a quarterly basis, real estate staff conducts in-house or on-site face-to-face portfolio review meetings with each real estate manager. Managers make periodic presentations to the Board in accordance with LACERA's Manager Monitoring and Review Policy.

**Monitoring the Process:** Once the hiring process is complete, a key risk management practice is to ensure that a manager is performing in accordance with a desired style or discipline (the reason they were hired in the first place). Also, Systems will normally put measurement systems in place to assure

that the style or discipline is having the expected result (performance in relationship to a benchmark or passive investment alternative).

A public pension system's investment consultant or staff, independent of the portfolio management function, usually tracks a manager's adherence to the guidelines on a periodic basis. Further, they may provide the board with a formal report identifying discrepancies in the portfolios and reasons for, or actions relating to, those discrepancies. The compliance monitoring can be accomplished with special software designed to generate exception reports when a portfolio violates an established guideline or manually by periodically examining portfolio characteristics and trading activity for compliance with guidelines.

**LACERA Policy: On a quarterly basis, investment staff reviews the risk characteristics and portfolio distribution of each fixed income and equity investment manager. Investment guidelines and compliance are also closely monitored. These policies ensure that a manager adheres to its investment style and that the portfolio is in compliance with investment guidelines.**

**In Alternative Assets, whenever LACERA's alternative asset consultant considers a private equity investment, staff conducts an Investment Guidelines Compliance Review to ensure the transaction complies with the investment guidelines established by the Board.**

**In Real Estate, staff reviews each real estate investment for compliance with LACERA's Real Estate Investment Plan. Only investments meeting the Plan requirements are permitted, thus ensuring ongoing compliance.**

**Monitoring Performance:** Even if a manager's portfolio adheres to the guidelines and style expected, the individual securities chosen could under perform the market or sector for which manager was hired. This risk is typically tracked separately, and reasons for under performance are monitored, identified, and discussed with corrective action taken if necessary. This is usually done prospectively (the manager anticipates future events that could impact the style or discipline) and retroactively (analyzes reasons for present and past under performance to determine if the manager is still competent in implementing that discipline).

The retroactive check is accomplished through performance monitoring. In addition to the performance reports generated by the manager, on a regular basis staff and/or the asset consultant may produce their own set of reports for monitoring performance to aid in determining the reasons for over performance or under performance. Formal reports to the board may include such items as performance compared to market benchmarks, the analysis of the performance (attribution analysis), and a comparison to similar managers (peer analysis).

These types of reports should help the board guard against terminating managers simply because their style was "out of favor."

**LACERA Policy: Performance reports that compare each equity and fixed income manager's performance to their established benchmark are prepared at least monthly by each external investment manager and LACERA's custodial bank. Investment staff reconciles these reports to ensure accuracy. Formal performance reports that are presented to the Board are prepared quarterly.**

**An alternative assets performance report, comparing the portfolio to an established benchmark and assessing the performance of the portfolio partnerships, is prepared on a quarterly basis by the alternative asset consultant. Investment staff reconciles this report by sampling the cashflow data provided by LACERA's custodian.**

**A real estate performance report comparing the portfolio to an established benchmark, and reporting the individual performance of each manager by investment style is prepared quarterly by LACERA's real estate consultant. Staff thoroughly reviews this report, evaluates the results, and reports each manager's relative performance to the Board.**

**On a case-by-case basis, investment staff conducts formal evaluations of external managers for various reasons, including underperformance relative to the benchmark. This type of review analyzes the manager's underperformance, including an evaluation of historical performance in up/down markets, a detailed explanation of the underperformance, and a comparison relative to their peers.**

### **Tactical Failure Summary**

Sound hiring practices, periodic compliance monitoring, and continuous performance analysis are usually sufficient to prevent actions by individual managers that may cause material impacts to the overall risk profile of the portfolio. In combination, these practices collectively ensure that the characteristics and performance of the overall portfolio, both as a whole and in its individual parts, will perform in a manner that comports with that expected by the strategic policies adopted by the board.

Thus, by LACERA performing these types of checks, it is unlikely that its portfolio performance will drift too far from what would be generated by the strategic allocation without the deviation being identified by one of the independent checks in place. Such a variation must be reflected in one or all of the following: the characteristics of the holdings, the reaction of those holdings to market movements, or deviations from peers with similar mandates.

The practices mentioned above are generally tailored for the management of publicly traded securities; however, they may also be applied to the management of private debt and private equity. In the case of private debt and equity, the monitoring, reporting and due diligence process is more difficult given that no publicly traded exchange exists to set prices and create performance comparatives. In addition, the effect of a longer lifecycle associated with many private investments requires a separate timeline for performance considerations. To address these issues, LACERA has retained an external specialist/consultant to assist staff with the design and monitoring of the private equity program.

### **Operational Failure**

The risk of operational failure is not primarily concerned with investment strategy or tactics, but management and operational issues used in the implementation process of the strategy or tactic. Operational failures often result from a breakdown in systems, procedures, personnel, or processes. One common approach to avoiding potential operational failure is for the management of public pension systems to implement procedures that ensure achievement of the following control objectives (as identified by General Standard 300, **Standards for the Professional Practice of Internal Auditing**):

1. The reliability and integrity of information.
2. Compliance with established policies, procedures, laws, and regulations.
3. The safeguarding of assets.
4. The economical and efficient use of resources.
5. The accomplishment of established objectives and goals for operations and programs.

Operational failure can occur in three major areas: external managers, custodial banks, and internal operations. LACERA takes a consistent approach to managing and monitoring each of these

relationships. The assumption is not made, for example, that internal managers generate less risk simply because they are part of the organization. On the other hand, it should not be assumed that external managers and custodians pose less risk because they are reputable industry experts. Things can go wrong in any environment, and, as a result, LACERA plans to address risk through a systematic and steady approach.

## EXTERNAL MANAGERS

The management of operational risk associated with external managers focuses on activities by the manager that change the assets held in their account, primarily buying or selling securities. Assuming the controls of the custodial bank are functioning properly (an assumption addressed later), then the operational failure of the external manager can basically only be the result of three actions:

- A security is inappropriately sold;
- A security is inappropriately purchased; or
- An intended sale or purchase of a security is not accomplished.

These actions are all the result of the manager not complying with the guidelines and strategies set forth by LACERA.

The possibility always exists that an external manager, either intentionally or unintentionally, will not adhere to the guidelines or strategy for which they were hired. As discussed above, an adequate monitoring process should mitigate the risk of noncompliance by the manager; however, for the monitoring process to be effective, the data monitored must be timely, available, and accurate. Therefore, an operational risk associated with external managers is that timely and reliable information is not available or that the information is inaccurate. Obviously, if LACERA is monitoring inaccurate or outdated holdings and trade data, then the risk of not detecting the noncompliance features of the actual portfolio increases. Generally, the longer a portfolio is allowed to be out of compliance with the established guidelines and strategies, then the more likely the returns of the portfolio will not live up to expectations.

The possibility also exists that an external manager may experience a counterparty default. Development of guidelines for external managers addressing counterparty risk in equity, fixed income, and securities lending portfolios may help to mitigate these risks.

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## Points of Focus for Action

**Separation of Authority from Custody:** The legal custody of a public pension system's assets is usually maintained through a custodial bank. Securities are held at the custodial bank in the custodian's name on the public pension system's behalf. Managers do not have direct control over those assets and must perform their activities through the custodial accounts. When a security is purchased or sold, the custodian must receive instructions from the manager to receive or deliver the security (usually on a "delivery vs. payment" basis). Therefore, it is very difficult for the manager to obtain more funds than authorized by the System. Consequently, each external manager creates a limited amount of operational risk with regard to the overall public pension system because they only have access to the funds assigned them by the System.

If, for example, an external manager's building is destroyed and all records and capabilities are lost, the public pension system still has all of its securities under separate control. In addition, public pension systems can, at any time, "freeze" an external manager's account and prevent future access by the manager, which is often done upon termination of a manager. All that is lost is the opportunity cost of the added value that may have come from future decisions by the manager. Opportunity cost concerns can be limited by immediately transferring the securities to another manager's account, which is also frequently done upon the termination of a manager.

Finally, an external manager does not have the ability to move cash and securities out of the pension system's account to another destination, either within that custodian's system or outside the system. A manager only has control over the movement of securities and cash within the account. An attempt or request for this unauthorized type of movement should automatically trigger a request by the custodian for independent authorization from both the external manager's and public pension system's staff.

**LACERA Policy: Upon termination of an investment manager, investment staff notifies the manager in writing that the relationship has been officially terminated, and confirms the actual date of termination, the last day of access to the account, and instructions regarding whether or not to liquidate the holdings. LACERA's custodian also receives a copy of this letter.**

**In cases where the terminated manager is not required to liquidate, any remaining assets are transferred to another manager for management, liquidation, or restructuring. When applicable, securities may be transferred to LACERA's index fund manager.**

**Reconciliation:** The accuracy of the holdings and transactions is usually assured through a monthly reconciliation of the data by the external manager and custodian or by the pension system from data provided from the external manager and the custodian. The reconciliation process helps to ensure the integrity and timeliness of the data used by the System during the monitoring process.

**LACERA Policy: Each month, LACERA's investment managers reconcile their holdings and transactions data to the master custodian's records, and endorse a reconciliation letter verifying the accuracy of this data. Financial Control Systems (FCS), an off-site proprietary investment auditing service provider, compares these reconciled numbers to their own pricing sources. Then, FCS prepares individual reports for each investment manager and generates an exception report. Finally, investment accounting staff resolves all exceptions reported by FCS and the investment managers.**

**Due Diligence:** Public pension systems also manage the risk of external manager operational failure by incorporating good hiring practices and conducting periodic due diligence reviews as discussed above. During the hiring process the System should take steps to ensure the external manager has adequate resources and qualified personnel to enable them to disseminate timely and accurate information. The on-going due diligence reviews help the System identify significant changes in the manager's organizational structure, ownership, personnel, or available resources that may affect future operational performance.

**LACERA Policy: LACERA's general selection criteria for hiring external investment managers are found in the Investment Management Policy section of the Investment Policy Statement. Certain specific selection criteria are prepared by staff on a case-by-case basis. These criteria are tailored to the type of investment mandate being considered**

The Board has delegated RFP/RFI preparation and the investment manager search process to staff. In addition, LACERA's general consultant assists staff with the evaluation of potential candidates.

**LACERA investment staff generally conducts in-house due diligence meetings with each external management team on an annual basis. The general consultant conducts periodic evaluations of each investment manager. Whenever a manager outperforms or underperforms their benchmark by a predetermined number of basis points, the firm is requested to appear before the Board to make a formal presentation.**

## CUSTODIAL BANKS

A system must be in place to ensure that the assets of a public pension system are maintained safely, securely, and with the appropriate legal protection. This task falls primarily to custodial banks. Therefore, a key component of managing operational risk by public pension systems is the quality of the custodial system. The custodial system needs to be accurate and provide staff the ability to access holdings, pricing, and transaction information on a regular and timely basis.



### Points of Focus for Action

Again, a key to obtaining quality reliable service from a custodial bank begins with the hiring process. While there are noted exceptions, the majority of public pension systems control the selection of their custodian. In those cases, most employ some sort of structured due diligence process when selecting their custodial bank, which could include the use of an independent external consultant. The process, in many cases will be similar to that used to select external managers.

**LACERA Policy: When LACERA conducts a custodian bank search, staff issues a formal request for proposal (RFP) and evaluates subsequent proposals submitted by prospective banks. Several meetings (in-house and off site) between LACERA staff and the bank's representatives also take place to provide a more in-depth evaluation of the bank candidates.**

**Staff periodically reviews the credit ratings of LACERA's custodian and passive asset manager. If a credit rating is severely downgraded or marginally downgraded twice in one year, staff conducts an evaluation to determine if any action is necessary.**

In essence, public pension systems rely on three basic mechanisms to assure the continued viability of the custodial operation once the hiring process is complete. The first is a comprehensive annual financial examination of the custodial records conducted by an independent accounting and/or auditing firm. The second is a thorough process of monthly reconciliation that generally takes place between the individual portfolio managers and the custodian. The third is through the periodic use of the custodial bank system and its key components by internal staff.

**Independent Audit:** The financial statements of virtually all public pension systems are audited annually by an independent auditor. These audits are usually either conducted by a state government's audit agency or an independent certified public accounting firm hired by LACERA. Because the custodial bank plays such a material role in the operations of the System, the auditors must obtain a certain level of assurance that custodial operations are sufficient. The auditor can obtain this level of assurance by physically reviewing and testing the controls and procedures of the custodian's operations or by obtaining an independent report. The independent report should be prepared in accordance with the Auditing Standards Board Statements on Auditing Standards No. 70, "Reports on the Processing of Transactions by Service Organizations" (SAS 70 report).

Because of the expense involved with physically reviewing and testing the controls and procedures of the custodian's operations, most auditors opt to obtain a SAS 70 report from the custodian. It is important to note that a SAS 70 report that only contains descriptions of the policies and procedures at the custodial bank and the auditor's assessment as to whether such policies and procedures are suitably designed is not sufficient to reduce the pension system auditor's assessment of control risk. However, a SAS 70 report that also states that the policies and procedures were tested, and that they were operating effectively to achieve the related control objectives during the period is expressly designed to reduce the assessment of control risk by users of the custodial system. The external auditors of a public pension system are allowed to use this latter type of SAS 70 report as a substitute for performing their own evaluation of the reliability of a custodian's operating system.

**LACERA Policy:** LACERA's investment staff, accounting staff, and external auditors receive and review a copy of the custodial bank's SAS 70 Report (Report on Controls Placed in Operation and Tests of Operating Effectiveness) each year. The report describes the control structure features of the operational areas that process transactions for the custodian's clients. Operational areas include business processes (e.g. securities processing, safekeeping & reconciliation, corporate actions, securities lending), control environment (e.g. organizational structure, risk management & compliance, corporate information security), and transaction processing.

LACERA's Internal Audit Staff, in conjunction with an external consulting firm, periodically performs an audit of custody and securities lending programs. This evaluation focuses on the custodian's internal business controls, policies and procedures, and compliance with the contractual requirements of the Agreement for Securities Lending and the Agreement for Custodial Services.

**Reconciliation:** The second ongoing check of the reliability of the custodial systems is the requirement that each portfolio manager and custodian reconcile the account positions on a monthly basis. This procedure involves the comparison of the custodian's security positions, prices, and valuations with the same information as recorded by each manager. Any discrepancies are duly noted and resolved on a timely basis. Differences in pricing sources may sometimes be allowed once identified, but there is usually no tolerance for any difference in the size of the position (or units held). Many public pension systems often withhold payment for asset managers or custodial services if either party fails to perform its reconciliation function on a timely basis. This monthly reconciliation function is usually monitored independently by the public pension system's internal staff.

The reconciliation process helps to assure that any material breakdown in the custodial system between annual audits will be identified on a timely basis. Corporate governance actions (stock splits, dividends, interest, warrants, etc.) will also be monitored through the valuation and unit holding comparisons.

**LACERA Policy:** Each month, LACERA's investment managers reconcile their account positions to the custodian's records, and endorse a reconciliation letter verifying the accuracy of this data. In addition, investment accounting staff monitors the manager reconciliation letters to ensure all investment managers are following this procedure. Financial Control Systems (FCS), an off-site proprietary investment auditing service provider, compares these reconciled numbers to their own pricing and valuation sources. Then, FCS prepares individual reports for each investment manager and generates an exception report. Finally, investment accounting staff resolves all exceptions reported by FCS and the investment managers.

**Periodic Reviews:** In many cases, where sufficient internal staff are available, many public pension systems also perform periodic reviews of the portfolios and transactions on a periodic basis. The potential benefit of this is to serve as a third check on the reliability and accuracy of the custodial system. These reviews often validate the accuracy of account valuations, currency positions, and periodic transactions. A significant breakdown in the custodial system should be revealed in this type of review and most significant errors in record keeping, corporate governance, and pricing should also be captured. To

accomplish the periodic reviews, the data provided by the custodian should possess certain qualities to enable pension staff to perform their operating, reporting, and compliance functions. The necessary qualities include:

- The data must be relevant to the needs of the pension system staff.
- The data must be current, timely, and accessible to pension system staff.
- The data must be complete and accurate.

**LACERA Policy:** LACERA utilizes its service provider, FCS, as a third party check on the reliability and accuracy of the custodial system. Monthly reconciliations are performed between the bank and the FCS investment auditing system to identify securities transactions, portfolio holdings, and account position differences. FCS also independently researches entitlements, late posting of income, tax reclaims, and corporate actions.

## INTERNAL OPERATIONS

Thus far, we have addressed the operational risks associated with external agents, but internal operations are also exposed to operational risk. Such operational risk is present in areas of internal asset management, cash management, and operating systems to protect data integrity.

**Internal Asset Management:** In a public pension fund where internal staff serves as asset managers, most of the operational risks of internal management would be the same as if the assets were being managed externally. These risks include cash movements in and out of the portfolios and compliance with the portfolio's intended strategy. However, some additional concerns are brought about by the practice of internal management. First, the monthly reconciliation process between external managers and the custodian is no longer naturally present and, thus, a process to help ensure data integrity is lost. Second, a layer of oversight may be eliminated with internal management since the investment officers who were responsible for monitoring the compliance of the external managers may now be managing internal portfolios and obviously cannot monitor the compliance of their own portfolio. LACERA believes it is necessary to address these additional concerns when implementing procedures to internally manage assets.

**Cash Management:** Another internal operational risk involves cash management. Cash management involves the movement of cash between accounts, or into and out of the portfolio either for distribution to beneficiaries or to fund external asset managers at the appropriate level. The risk is that unauthorized movements of cash will be made or that inappropriate amounts of cash will be distributed.

**Operating Systems:** Finally, there is the risk that the internal operating systems necessary to support the investment activity, for both internally and externally managed assets, will fail. For example, a communication link often exists between the pension system and custodian, which allows the pension system instant access to portfolio data. Internal computer systems may go down or the building in which the public pension system is located may suffer a catastrophe.

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## Points of Focus for Action

As stated above, the operational risks of internal asset management are similar to the risks of external management; therefore, many of the risk management practices are similar. Hiring practices are again important. Should an internal asset management program be established, senior management and human resources must diligently pursue competent individuals to ensure the fund is managed in accordance with the intended strategy. In addition, operational guidelines are put in place for each individual internally managed portfolio.

**LACERA Policy: LACERA's entire investment portfolio, with the exception of LACERA's headquarters building, is managed externally by professional investment managers.**

**Business Continuity Plan:** The risk associated with the internal operating systems of a public pension system may be limited because the "official" holdings and books of records are usually maintained off site at custodial banks. Nonetheless, public pension systems usually take steps to minimize the chances of failed internal operating systems. Regular back-ups of important internal data are usually performed and stored off site to preserve the data. In addition, a back-up connection line to the custodial bank and other essential communication links are often installed to ensure reliable data is available at all times. Finally, most pension plans develop some sort of disaster recovery plan to ensure the operating systems can be up and running as soon as possible in the unlikely event of a total breakdown in computer systems, building malfunctions, and other catastrophes.

**LACERA Policy: Systems Division staff performs daily back-ups of LACERA's internal operating systems (the mainframe computers and LAN). The system back-ups are immediately transferred to an off site storage facility. The back-ups are rotated on a daily basis for restoring all data and applications, either locally or remotely, as the situation requires.**

**LACERA's current Disaster Recovery Plan was adopted in August 1998. The Plan is reviewed each quarter by each division manager (or designated staff member) and updated accordingly by the Recovery Coordinator. The Plan ensures that operating systems will continue to function during a disaster by relocating business processing to "hot sites" in Boulder, Colorado (for the mainframe) and Costa Mesa, California (for the LAN).**

**The mission of the Disaster Recovery Plan is to provide LACERA with a basic level of protection for selected critical information systems that are normally processed in the LACERA data center and its divisions. This includes achievement of the following:**

- **To develop, test, and maintain a viable recovery plan for LACERA's Divisions and Information Systems.**
- **To enable Information Systems to perform recovery for critical systems within acceptable time frames in the event of a disaster.**
- **To ensure that key personnel will be trained and prepared at any time to respond to a disaster, and execute effective recovery actions to restore critical business operations.**