

## AGENDA

### A REGULAR MEETING OF THE PORTFOLIO RISK COMMITTEE

### AND THE BOARD OF INVESTMENTS\*

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, SUITE 810, PASADENA, CALIFORNIA 91101

8:00 A.M., THURSDAY, NOVEMBER 8, 2018\*\*

*The Committee may take action on any item on the agenda,  
and agenda items may be taken out of order.*

I. CALL TO ORDER

II. APPROVAL OF THE MINUTES

A. Approval of the Minutes of the Portfolio Risk Committee Meeting of August 8, 2018.

III. PUBLIC COMMENT

IV. NON-CONSENT ITEM

A. Recommendation as submitted by Jude Perez, Principal Investment Officer: That the Committee advance a recommendation to conduct a Request for Information for a Total Fund risk system search for approval by the Board of Investments.  
(Memo dated October 30, 2018)

V. ITEMS FOR STAFF REVIEW

VI. GOOD OF THE ORDER  
(For Information Purposes Only)

VII. ADJOURNMENT

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\*The Board of Investments has adopted a policy permitting any member of the Board to attend a standing committee meeting open to the public. Members of the Board of Investments who are not members of the Committee may attend and participate in a meeting of a Committee but may not vote on any matter discussed at the meeting. The only action the Committee may take at the meeting is approval of a recommendation to take further action at a subsequent meeting of the Board.

\*\*Although the meeting is scheduled for 8:00 a.m., it can start anytime thereafter, depending on the length of the Board of Investment meeting preceding it. Please be on call.

***Documents subject to public disclosure that relate to an agenda item for an open session of the Board of Investments that are distributed to members of the Board of Investments less than 72 hours prior to the meeting will be available for public inspection at the time they are distributed to a majority of the Board of Investments Members at LACERA's offices at 300 N. Lake Avenue, Suite 820, Pasadena, CA 91101, during normal business hours of 9:00 a.m. to 5:00 p.m. Monday through Friday.***

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MINUTES OF THE REGULAR MEETING OF THE PORTFOLIO RISK  
COMMITTEE AND THE BOARD OF INVESTMENTS  
LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION  
300 N. LAKE AVENUE, SUITE 810, PASADENA, CA 91101  
WEDNESDAY, AUGUST 8, 2018

PRESENT: Joseph Kelly, Chair  
David Muir, Vice Chair  
Shawn Kehoe  
Wayne Moore

ABSENT: Ronald Okum, Alternate

MEMBERS AT LARGE: Herman Santos

STAFF, ADVISORS, PARTICIPANTS

Jonathan Gabel, Chief Investment Officer  
Jude Perez, Principal Investment Officer  
John McClelland, Principal Investment Officer  
Meketa Investment Group  
Stephen McCourt, Managing Principal  
Tim Filla, Vice President  
MSCI  
Andy Sparks, Managing Director  
Bryan Murphy, CFA

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I. CALL TO ORDER

The meeting was called to order by Chair Kelly, at 1:05 p.m. in the Board Room of Gateway Plaza.

II. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Meeting of May 9, 2018.

Mr. Kelly made a motion, seconded by Mr. Muir, to approve the Minutes of the Regular Meeting of May 9, 2018. The motion passed with Mr. Kehoe abstaining.

III. PUBLIC COMMENT

There were no requests from the public to speak.

IV. REPORTS

A. Risk Budgeting for Pension Plans  
Andy Sparks, Managing Director, MSCI  
Bryan Murphy, CFA, MSCI  
(Presentation dated August 8, 2018)

Messrs. Sparks, Murphy were present and answered questions from the Committee.

B. Investment-Related Services Procurement Process Update  
John McClelland, Principal Investment Officer-Real Estate  
(Memo dated July 24, 2018)

Mr. McClelland was present and answered questions from the Committee.

V. REPORT ON STAFF ACTION ITEMS

There were no items to report.

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VI. GOOD OF THE ORDER  
(For information purposes only)


There were no comments made during Good of the Order.

VII. ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at 1:55 p.m.

October 30, 2018

TO: Each Member  
Portfolio Risk Committee

FROM: Jude Pèrez  
Principal Investment Officer 

FOR: November 8, 2018 Portfolio Risk Committee Meeting

SUBJECT: **RISK SYSTEM SEARCH MINIMUM QUALIFICATIONS  
AND SCOPE OF WORK**

### **RECOMMENDATION**

Advance a recommendation to conduct a Request for Information (“RFI”) for a total Fund risk system search for approval by the Board of Investments.

### **DISCUSSION**

A good risk management program is multidimensional and includes a wide range of aspects such as good decision-making, sound governance, good processes, sound operations, compliance monitoring, and investment monitoring and measuring. The purpose of this RFI is to focus on the latter, which should be viewed as a tool to be used within a risk management program and should not be looked at as risk management in itself.

A risk analysis software system allows for better understanding of a complex portfolio such as LACERA’s, and allows for a total Fund view by aggregating data, such as position level holdings, across the various asset categories. This type of information will add context around every decision that is made and not made. Also, as discussed at the August Portfolio Risk Committee meeting, one of the goals for the investment division is to develop a risk budget. Risk budgeting helps pensions control their risk-return profiles by incorporating risk tolerance into the asset allocation process. This process would allow LACERA to better understand and control the active risk the Fund is willing to bear. To accomplish this, a comprehensive risk software system is needed to allow for better measuring and monitoring of the total Fund. Accordingly, a risk system can assist in the implementation of the new strategic asset allocation and with resulting structure reviews. It will also provide the tools for quantitative measurement of environmental, social, and governance factors. Such a system may also serve as the execution and portfolio modeling system for an internal asset management program if LACERA decides to implement in that fashion at a later date.

### **BACKGROUND**

In 2016, LACERA initiated a project to use TruView, a total Fund risk software system bundled with State Street’s custodial solutions. This was LACERA’s first attempt at using a total Fund

aggregator for risk analysis. TruView has served as a good first step into risk analysis software, but at this time staff would like to conduct an RFI to explore more comprehensive risk systems. It should be noted that these other systems would be at higher cost than what LACERA is currently paying. Due to this, and as mentioned at the April 2018 Portfolio Risk Committee meeting, a recommendation from this RFI may include the elimination of other duplicative software services. The RFI will ascertain if the benefits from a higher cost solution have the potential to add value to the Fund.

### **MANDATE DESCRIPTION**

LACERA will seek a comprehensive, multi-asset class, investment risk analysis software system to assist in systematically identifying, assessing, monitoring and reporting on portfolio risk, including ESG factors, for the total Fund. The solution should cover all the major asset classes within the total Fund and enable a comprehensive view of aggregate total risk and active risk across the portfolios and within each asset class. The software system should inform LACERA's analysis of the performance of existing external asset managers as well as potential new external asset managers. The risk system should also have the ability to serve as an execution management system, at a later date, if the Board wishes to manage assets internally.

Through this search, LACERA seeks to procure software that will enable the investment division to generate risk reports and analysis for the benefit of the Board and staff.

### **SCOPE OF WORK**

1. Integration of manager holdings and benchmark information across all asset classes including: equities, fixed income, private equity, hedge funds, real assets and real estate. The ideal solution would be the ability to integrate position details across all managers, holding all asset classes within a business day,
2. Source and aggregate data from various vendors including custodian, investment managers, fund of funds and various service providers,
3. Value at Risk (VaR): the ability to measure VaR at the manager, sub-asset class, asset class, and total Fund level,
4. Stress Testing: the ability to measure potential losses given certain historical or prospective events,
5. Scenario analysis: the ability to measure potential losses or gains given certain scenarios,
6. Portfolio reporting: risk and exposure with the capabilities of performance reporting,
7. Reporting: asset level detail reports, individual manager level reporting, portfolio level reporting, total Fund level reporting, and the ability to report by user defined groupings, and
8. Ability to create and run reports necessary to perform ad hoc analysis.

## MINIMUM QUALIFICATIONS

1. Must offer a multi-asset class, factor-based risk model appropriate for analyzing the risk and performance of a broad institutional portfolio invested globally in both public and private (liquid and illiquid) markets. The application must enable users to both identify risk and measure investment performance within asset classes and across multi-asset class portfolios.
2. Must have experience providing a comprehensive multi-asset class investment risk analysis software system to institutional investors such as pension funds, endowments or other large asset managers. The Proposing Firm must have at least five (5) such clients each overseeing assets in excess of \$5 billion.
3. Must identify and quantify risk to the following factors:
  - a. Index factors
  - b. Equity style factors
  - c. Interest rates
  - d. Credit spreads
  - e. Inflation factors
  - f. Real assets
  - g. Foreign exchange
4. Must include tools for analyzing the following asset categories:
  - a. Public equities
  - b. Fixed income, including investment grade bonds
  - c. Credit, including high yield, emerging market debt, bank loans, and other illiquid credit strategies
  - d. Private equity
  - e. Private real estate
  - f. Hedge funds
  - g. Real assets, including private infrastructure and natural resources
5. Must offer quantitative measurement of environmental, social, and governance (ESG) factors.
6. Must offer technical support services including guidance in the configuration and use of the proposed product.
7. At least one key professional member of the firm assigned to the LACERA account must have a minimum of five years' experience in assisting clients with the implementation of risk oversight solutions.
8. Must allow for stress testing, scenario analysis, and value at risk at the sub-asset class, asset class, and total Fund level.



### PROPOSED TIMELINE

The proposed RFI timeline (**Table 1**) seeks to ensure a thorough and thoughtful process that efficiently enables LACERA to engage market-leading risk management system providers.

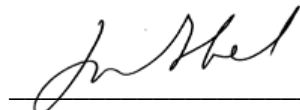
**Table 1 Proposed RFI Timeline**

Phase	Steps	Actions	Firms in Process (Est.)	Timing	Status
I	<b>RFI Design and Launch</b>	- Codify and gain Board approval of Minimum Qualifications, Evaluation Criteria, and Scope of Work - Publish the RFI document	N/A	Nov-Jan/18-19	In process
II	<b>RFI Evaluation</b>	- Staff to review and rank RFI responses, select semi-finalists	3-8	Feb/19	Not started
III	<b>Semi-Finalist Evaluation</b>	- Staff to conduct in-person interviews, complete reference calls - Sandbox exercise	2-3	March/19	Not started
IV	<b>Finalist Recommendations</b>	- Staff presents to the Board a review of the RFI process and finalist selections - Finalists present to the BOI - BOI selects manager	1-2	June-July/19	Not started

### CONCLUSION

Staff anticipates the proposed minimum qualifications and scope of work for the total Fund risk system search will attract qualified candidates. Therefore, with the Committee's approval, the advancement of an RFI for a total Fund risk system will be recommended to the Board of Investments. Staff would report findings and conclusions, and possibly a recommendation, to the Board for consideration.

Noted and Reviewed:



Jonathan Grabel  
Chief Investment Officer