

AGENDA

A SPECIAL MEETING OF THE AUDIT COMMITTEE
OF THE BOARD OF RETIREMENT AND BOARD OF INVESTMENTS*
LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION
300 N. LAKE AVENUE, SUITE 810, PASADENA, CALIFORNIA 91101

9:00 A.M., WEDNESDAY, DECEMBER 12, 2018**

***Although the meeting is scheduled for 9:00 a.m., the meeting will start at the conclusion of the Board of Investments Meeting scheduled for the same time.*

2018 AUDIT COMMITTEE MEMBERS

Michael S. Schneider, Chair
Vivian Gray, Vice Chair
Herman Santos, Secretary
Shawn R. Kehoe
Joseph Kelly

AUDIT COMMITTEE CONSULTANT

Rick Wentzel

I. CALL TO ORDER

II. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Audit Committee Meeting of September 12, 2018.

III. PUBLIC COMMENT

IV. NON-CONSENT ITEMS

- A. Recommendation, as submitted by Richard Bendall, Chief Audit Executive, that the Audit Committee review and discuss the following engagement report to take the following action(s):
1. accept and file report and/or,
 2. instruct staff to forward report to Boards or Committees and/or,
 3. provide further instruction to staff.
(Memo Dated: November 30, 2018)
 - a. Wire Transfer Audit
Kathryn Ton, Senior Internal Auditor
(Report Issued: October 02, 2018)
- B. Recommendation, as submitted by Richard Bendall, Chief Audit Executive, that the Audit Committee review and discuss the following engagement report to take the following action(s):
1. accept and file report and/or,
 2. instruct staff to forward report to Boards or Committees and/or,
 3. provide further instruction to staff.
(Memo Dated: November 30, 2018)
 - a. 2018 Information Technology Risk Assessment
George Lunde, Senior Internal Auditor
(Report Issued: July 8, 2018)

IV. NON-CONSENT ITEMS (Continued)

- C. Recommendation, as submitted by Richard Bendall, Chief Audit Executive, that the Audit Committee review and discuss the following engagement report to take the following action(s):
1. accept and file report and/or,
 2. instruct staff to forward report to Boards or Committees and/or,
 3. provide further instruction to staff.
(Memo Dated: November 30, 2018)
 - a. Member Applications Change Control
Gabriel Tafoya, Senior Internal Auditor
(Report Issued: October 30, 2018)
- D. Recommendation, as submitted by Richard Bendall, Chief Audit Executive, that the Audit Committee review and discuss the following engagement report to take the following action(s):
1. accept and file report and/or,
 2. instruct staff to forward report to Boards or Committees and/or,
 3. provide further instruction to staff.
(Memo Dated: November 30, 2018)
 - a. Los Angeles County Rehire Retiree Audit Report
Nathan Amick, Internal Auditor
(Report Issued: November 2, 2018)

V. REPORTS

- A. Plante Moran's Audit Results of the Fiscal Year End June 30, 2018
- Presentation of the Results of the Financial Audit by Jean Young, CPA Partner
 - Required Communications to those Charged with Governance
 - GASB 68 Disclosure Report, Accounting and Financial Reporting for Pensions
 - GASB 75 Disclosure Report, Accounting and Financial Reporting for Post-Employment Benefits Other than Pensions

V. REPORTS (Continued)

- B. Internal Audit Staffing Report
Richard Bendall, Chief Internal Auditor
Leisha Collins, Principal Internal Auditor
(Discussion)
- C. Audit Plan Status Report
Richard Bendall, Chief Audit Executive
(Memo Dated: November 6, 2018)
- D. Internal Audit Goal Report
Richard Bendall, Chief Audit Executive
(Memo Dated: November 30, 2018)
- E. Recommendation Follow-Up Report
Richard Bendall, Chief Audit Executive
(Memo Dated: November 30, 2018)
- F. Additional External Audit Work Requested of Plante Moran
Richard Bendall, Chief Audit Executive
(Memo Dated: November 30, 2018)
(For Information Only)
- G. **Attorney-Client Privilege/Confidential Memo**
Privacy Audit Recommendation Follow-Up
Steven Rice, Chief Legal Counsel
Richard Bendall, Chief Audit Executive
(Memo Dated: November 30, 2018)
(For Information Only)
- H. **Attorney-Client Privilege/Confidential Memo**
Human Resources Compliance Audit [by Liebert Cassidy Whitmore]
Recommendation Follow-Up
Steven Rice, Chief Legal Counsel
Richard Bendall, Chief Audit Executive
(Memo Dated: November 30, 2018)
(For Information Only)
- I. Status of Other External Audits Not Conducted at the Discretion of
Internal Audit
Richard Bendall, Chief Audit Executive
(For Information Only) (Discussion)

December 12, 2018

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VI. CONSULTANT COMMENTS

Rick Wentzel, Audit Committee Consultant
(Verbal Presentation)

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

VIII. EXECUTIVE SESSION

- A. Performance Evaluation – CAE Goals Report
[Pursuant to Government Code Section 54957(b)(1)]
Title: Chief Audit Executive

IX. ADJOURNMENT

**The Board of Retirement and Board of Investments have adopted a policy permitting any member of the Boards to attend a standing committee meeting open to the public. In the event five (5) or more members of either the Board of Retirement and/or the Board of Investments (including members appointed to the Committee) are in attendance, the meeting shall constitute a joint meeting of the Committee and the Board of Retirement and/or Board of Investments. Members of the Board of Retirement and Board of Investments who are not members of the Committee may attend and participate in a meeting of a Board Committee but may not vote on any matter discussed at the meeting. Except as set forth in the Committee's Charter, 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 9:00 a.m., it can start anytime thereafter, depending on the length of the Board of Investment meeting and Committees preceding it. Please be on call.*

Documents subject to public disclosure that relate to an agenda item for an open session of the Board and/or Committee that are distributed 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 members of any such Board and/or Committee at LACERA's offices at 300 N. Lake Avenue, Suite 820, Pasadena, CA 91101 during normal business hours [e.g., 8:00 a.m. to 5:00 p.m. Monday through Friday].

Persons requiring an alternative format of this agenda pursuant to Section 202 of the Americans with Disabilities Act of 1990 may request one by calling Cynthia Guider at (626)-564-6000 extension 3327, from 8:00 a.m. to 5:00 p.m. Monday through Friday, but no later than 48 hours prior to the time the meeting is to commence. Assistive Listening Devices are available upon request. American Sign Language (ASL) Interpreters are available with at least three (3) business days notice before the meeting date.

MINUTES OF THE SPECIAL MEETING OF THE AUDIT COMMITTEE OF THE
BOARD OF RETIREMENT AND BOARD OF INVESTMENTS*

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, SUITE 810, PASADENA, CA

9:00 A.M., WEDNESDAY, SEPTEMBER 12, 2018

PRESENT: Michael S. Schneider, Chair

Vivian Gray, Vice Chair

Herman Santos, Secretary

ABSENT: David Green

Shawn R. Kehoe

Joseph Kelly

STAFF, ADVISORS, PARTICIPANTS

Steven P. Rice, Chief Legal Counsel

Rick Wentzel, Audit Committee Consultant

Quoc Nguyen, Principal Internal Auditor

Leisha Collins, Principal Internal Auditor

Christina Logan, Senior Internal Auditor

Gabriel Tafoya, Senior Internal Auditor

Kathryn Ton, Senior Internal Auditor

I. CALL TO ORDER

The meeting was called to order at 12:52 p.m., in the Board Room of Gateway Plaza.

II. APPROVAL OF THE MINUTES

A. Approval of the Minutes of the Regular Meeting of March 21, 2018.

Mr. Schneider made a motion, Mr. Green seconded, to approve the minutes of the regular Audit Committee meeting of March 21, 2018. The motion passed unanimously.

B. Approval of the Minutes of the Regular Meeting of July 18, 2018.

Mr. Schneider made a motion, Mr. Green seconded, to approve the minutes of the regular Audit Committee meeting of July 18, 2018. The motion passed unanimously.

III. PUBLIC COMMENT

There were no requests from the public to speak.

IV. NON-CONSENT AGENDA

A. Recommendation that the Audit Committee approve the Audit Plan for Fiscal Year End 2019 as submitted by Leisha Collins, Principal Internal Auditor (Memo Dated on August 31, 2018)

Mr. Santos made a motion to approve the agenda item, Mr. Green seconded, to approve the agenda item, The motion passed unanimously.

Leisha Collins, Roxana Castillo & Quoc Nguyen were present to answer questions from the Committee.

IV. NON-CONSENT AGENDA (Continued)

B. Recommendation as submitted by Leisha Collins, Principal Internal Auditor:
That the Committee review and discuss the Securities Lending Program and take
the following action(s):

1. Accept and file report and/or,
2. Instruct staff to forward report to Boards or Committees and/or,
3. Provide further instruction to staff. (Memo Dated on August 31, 2018)

Mr. Santos made a motion, Mr. Green
seconded, to accept and file the report.
The motion passed unanimously.

C. Recommendation as submitted by Leisha Collins, Principal Internal Auditor:
That the Committee review and discuss the Tier II Retiree Healthcare Program
report and take the following actions(s):

1. Accept and file report and/or,
2. Instruct staff to forward report to Boards or Committees and/or,
3. Provide further instruction to staff. (Memo Dated on August 31, 2018)

Mr. Santos made a motion, Mr. Green
seconded, to accept and file the report.
The motion passed unanimously.

IV. NON-CONSENT AGENDA (Continued)

D. Recommendation as submitted by Leisha Collins, Principal Internal Auditor:
That the Committee review and discuss the Contract Monitoring Program Status Update report and take the following action(s):

1. Accept and file report and/or,
2. Instruct staff to forward report to Boards or Committees and/or,
3. Provide further instruction to staff. (Memo Dated on August 31, 2018)

Mr. Santos made a motion, Mr. Green seconded, to accept and file the report. The motion passed unanimously.

V. REPORT ON STAFF ACTION ITEMS

There was nothing to report.

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

Committee members thanked staff for their hard work.

VII. ADJOURNMENT


There being no further business to come before the Committee, the meeting was adjourned at 1:09 p.m.



November 30, 2018

TO: Each Member
2018 Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Principal Internal Auditor

Kathryn Ton 
Senior Internal Auditor

FOR: December 12, 2018 Audit Committee Meeting

SUBJECT: **Wire Transfers Audit**

RECOMMENDATION

In accordance with your current Audit Committee Charter, staff recommends that the Audit Committee review and discuss the following engagement report to take the following action(s):

- 1. accept and file report and/or,**
- 2. instruct staff to forward report to Boards or Committees and/or,**
- 3. provide further instruction to staff.**

ENGAGEMENT REPORTS

- a. Wire Transfers Audit
Kathryn Ton, Senior Internal Auditor
(Report issued: October 2, 2018)

Please note: attached to the report is another version of the report that includes questions and comments that staff received from your Committee as well as Internal Audit's responses.

Attachments

KT



LACERA INTERNAL AUDIT DIVISION

Wire Transfers Audit

October 2, 2018

AUDIT PERFORMED BY:

Kathryn Ton, CPA, CFE
Senior Internal Auditor

EXECUTIVE SUMMARY

We reviewed LACERA's electronic wire transfers process as part of the fiscal year 2018 audit plan. Wire transfers, which are made through State Street Bank and Bank of America, pose a financial risk to LACERA because inadequate controls can lead to transmission errors or opportunities for fraud. Internal Audit performs routine wire transfer audits to assess the effectiveness of LACERA's internal controls and to identify areas where controls could be strengthened to minimize risks.

In 2015, we performed a wire transfers audit on the State Street Bank accounts, and found no instances of fraud or abuse. Since the 2015 wire transfers audit only included State Street Bank wires, Internal Audit focused on the Bank of America wires for this audit. We assessed the internal controls over LACERA's operations to determine whether wires were documented, authorized, and processed accurately. In addition, we evaluated the security controls for wires processed through the Bank of America treasury management system (CashPro), which is used exclusively by LACERA for the real estate and debt program.

LACERA manages a \$56 billion retirement fund, and invests \$6 billion in real estate assets. LACERA's real estate portfolio contains real property and a debt program, and accounts for \$898 million in wire transfers annually. For fiscal year 2017, Bank of America processed 765 wire transfers for LACERA. \$877 million or 752 wires were for LACERA's real estate program (98%), and \$21 million or 13 wires were for LACERA's debt program (2%).

In general, the internal controls over LACERA's wire operations are adequate. FASD processes wire transfers timely and accurately. In addition, the Investments Office ensures that wire transfers are documented and authorized by appropriate LACERA personnel for the real estate and debt program. We did note two areas where the Investments Office can strengthen their operating procedures. The details of our observations and recommendations are addressed in the report. We thank the LACERA advisors, Investments Office, and Financial and Accounting Services Division (FASD) for their assistance and cooperation with this audit.

WIRE TRANSFERS AUDIT

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INTRODUCTION

We reviewed LACERA's electronic wire transfers process as part of the fiscal year 2017/18 audit plan. Wire transfers, which are made through State Street Bank and Bank of America, pose a financial risk to LACERA because inadequate controls can lead to transmission errors or opportunities for fraud. Internal Audit performs routine wire transfer audits to assess the effectiveness of LACERA's internal controls and to identify areas where controls could be strengthened to minimize risks.

In 2015, we performed a wire transfers audit on the State Street Bank accounts, and found no instances of fraud or abuse. Since the 2015 wire transfers audit only included State Street Bank wires, Internal Audit focused on the Bank of America wires for this audit. We assessed the internal controls over LACERA's operations to determine whether wires were documented, authorized, and processed accurately. In addition, we evaluated the security controls for wires processed through the Bank of America treasury management system (CashPro), which is used exclusively by LACERA for the real estate and debt program.

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BACKGROUND

Bank of America and State Street Bank have provided LACERA wire transfer services since 1991 and 2013, respectively. Collectively, Bank of America and State Street Bank process close to \$5.7 billion or 2,025 wire transfers for LACERA annually. For fiscal year 2017, Bank of America processed 38% (765 wires) and State Street Bank processed 62% (1,261 wires) of LACERA's annual wire transfers. LACERA uses Bank of America to process wire transfers in connection with the real estate and debt program. Conversely, LACERA uses State Street Bank to process wire transfers in connection with member, retiree healthcare, and investment-related services. Investment-related services include fees paid to real estate, private equity, and hedge fund managers. LACERA also uses wire transfers to move funds between the Bank of America and State Street Bank accounts.

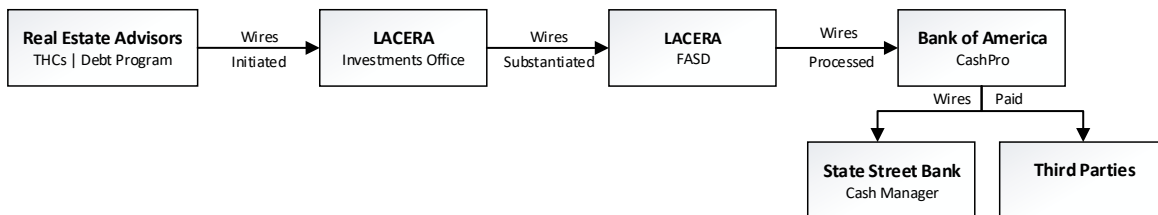
BANK OF AMERICA ACCOUNT SETUP

A wire transfer refers to the direct movement of funds between banks and other financial institutions. For the fiscal year ended June 30, 2018, LACERA worked with 13 advisors to manage the Bank of America accounts for the real estate and debt program. For every new real estate acquisition, LACERA opens a Bank of America account to facilitate the transfer of funds between LACERA and the newly acquired property. The advisor prepares and administers an annual business plan and budget for the property. When the advisor requests a capital call, funds are

transferred from the LACERA operating account at State Street Bank to the LACERA property account at Bank of America. Conversely, when an advisor returns excess capital, the advisor deposits funds into the LACERA property account at Bank of America. Excess funds are transferred from the LACERA property account at Bank of America to the LACERA operating account at State Street Bank.

WIRE TRANSFER APPROVAL PROCESS

Generally, there are three parties involved in a wire transfer request: (1) LACERA’s real estate advisors, (2) LACERA’s Investments Office, and (3) LACERA’s Financial and Accounting Services Division (FASD). The wire transfers process starts with the real estate advisors. The real estate advisors notify LACERA about upcoming cash needs (capital calls) and cash returns (capital distributions) affecting the LACERA property accounts. Once an advisor initiates a wire transfer request, the Investments Office ensures that all necessary information has been collected. The Investments Office reviews the documentation for accuracy and substantiates the wire transfer request. Subsequently, the Investments Office forwards the wire transfer request to FASD. FASD records the wire transfer request in the general ledger and sets up the wire at Bank of America. FASD management then approves the wire, and the wire is sent through the Federal Reserve Bank Fedwire System. Generally, Fedwires are immediate, final, and irrevocable once processed. The diagram below illustrates the process flows and parties involved when administering electronic wire transfers.



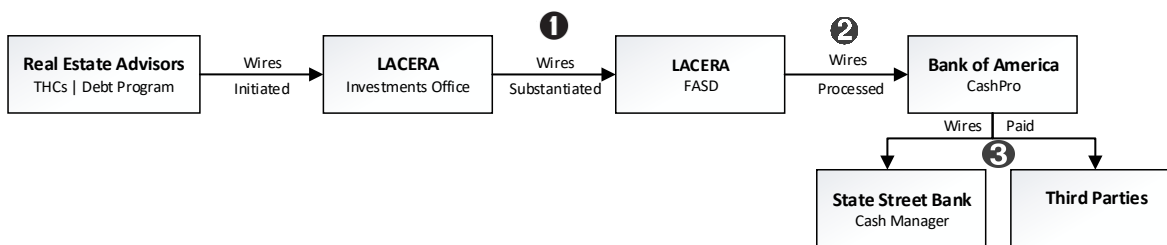
REAL ESTATE AND DEBT PROGRAM

LACERA’s real estate program is comprised of 11 account managers and 160 title holding companies (THCs). Each real estate property is titled through a Bank of America account, and generates rental income and profits through price appreciation. Conversely, LACERA’s debt program is comprised of 2 account managers, and generates interest income through commercial loans. 65% of LACERA’s wire transfers are for capital returns related to rental income. The remaining 35% of LACERA’s wire transfers are for capital calls related to building improvements and other services.

AUDIT OBJECTIVES

The audit objectives were to assess the controls over LACERA's operations to determine whether wires were documented, authorized, and processed accurately. In addition, we evaluated the security controls for wires processed through the Bank of America CashPro system, which is used exclusively by LACERA for the real estate and debt program. Specifically, we reviewed the following:

1. **WIRE DOCUMENTATION AND AUTHORIZATION.** An Investments Office responsibility.
2. **WIRE PAYMENT PROCESSING AND ACCOUNTING.** A FASD responsibility.
3. **SECURITY OF ASSETS.** A shared Investments Office and FASD responsibility.



AUDIT SCOPE

The audit scope covered:

1. Discussions with Investments Office and FASD staff about administering wire transfer requests.
2. Analysis of internal wire records maintained by the Investments Office and FASD.
3. Review of the Bank of America CashPro treasury management system as it relates to:
 - Operating procedures
 - User access privileges and limits
 - Wire transfer templates
4. Review of the Bank of America accounts for LACERA's 160 title holding companies.
5. Controls and transactions testing to determine whether operations are performed according to established procedures. The testing period covers fiscal year 2017, and is limited to LACERA's real estate and debt program.

AUDIT METHODOLOGY

1. To test for wire documentation and authorization:
 - Sampled 55 wire transactions from fiscal year 2017, and included at least 1 transaction from each of the 13 advisors. See audit results section of the report for more details.
 - Evaluated legal setup of the Bank of America accounts. Verified bank accounts as LACERA-owned properties during fiscal year 2017.

2. To test for wire payment processing and accounting:
 - Observed proper controls and approvals by FASD to process wire requests.
 - Reconciled 100% of the internal wire records between the Investments Office and FASD.
 - Analyzed 100% of the Bank of America wires for the real estate and debt program (765 wires totaling \$898 million).
 - Traced 100% of the Bank of America wires transferred between the LACERA property accounts based on their ownership structures (266 wires totaling \$132 million). Verified that each wire was made to and from an actual LACERA property account.
 - Reconciled 100% of the State Street Bank wires deposited into the Bank of America property accounts (254 wires totaling \$453 million). Verified that each wire was made from State Street Bank to an actual LACERA property account.

3. To test for security of assets:
 - Compared authorization list for the CashPro system with current LACERA staff. This control test was to ensure that only authorized users can access the CashPro system.
 - Observed good segregation of duties between the Investments Office and FASD.
 - Observed good security controls within the CashPro system for FASD staff who input and verify wires.
 - Reviewed wire templates and system parameters in CashPro to ensure that only current and functioning templates are available for use.

AUDIT RESULTS

Overall, Internal Audit observed good practices with LACERA's administration of wire transfers. We recognize that LACERA separates divisional responsibilities between the Investments Office and FASD when handling wire requests. In addition, LACERA enforces transaction dollar limits and dual authorization for wires over \$2.5 million. In general, good internal controls exist to ensure that LACERA's assets are secure.

From our audit work, we sampled 55 wire transactions from the Investments Office and FASD, and 11 wire transactions from the advisors. Internal Audit contacted several advisors to check on the validity of the wire payments, independent of what was provided to us from the Investments Office and FASD. We contacted 6 advisors, (1) Barings, (2) Clarion Partners, (3) Invesco, (4) RREEF, (5) TA, and (6) Vanbarton, and all six advisors responded to our requests. We received confirmation that the wires were initiated by the advisors, and obtained sufficient work papers related to those requests. In addition, we learned that the Investments Office relies on the advisors to monitor the cash flows for the LACERA properties in accordance with the annual business plan and budget. The Investments Office discusses upcoming project costs with the advisors as it relates to the LACERA properties. However, the Investments Office does not track amounts paid-to-date against total project costs, making it difficult to verify the accuracy of the costs over the life of a project. To test the accuracy of advisor calculations, we sampled 11 transactions. We reviewed the supporting documentation associated with each funding request,

and tied the wire payments back to the source documents. Based on the transactions sampled, there are no issues to report.

While there are no issues to report, we did identify two opportunities for the Investments Office to further strengthen their processes.

Convey specific instructions or develop a standard template for advisors to use when submitting wire requests.

It is good business practice to have proper supporting documentation. Documentation should clearly describe how funds are utilized and authorized. During our audit, we noticed that wire requests were submitted by advisors timely and appropriately. However, the level of detail captured on each request varied from advisor to advisor. In performing our audit work, at times it became difficult to discern when an advisor was making a first time request or a repeat request because of a last minute change to the fund date or fund amount. We also found it difficult to tell if the amount funded falls within the annual operating budget. To ensure that wire requests are adequately documented, LACERA should dictate specific terms, or provided a template for advisors to use when initiating a wire request. In doing so, LACERA can control the type and amount of information shared. For example, LACERA can ask advisors to fill-in the template, which could capture contact and bank information and project cost breakdowns.

RECOMMENDATION

1. The Investments Office should convey specific instructions or develop a standard template for advisors to use when initiating wire requests. The template should capture the components and level of detail that LACERA needs to make informed decisions on whether to approve or reject incoming requests.

Management Response

Management agrees with the recommendation. A wire request template will be developed by December 31, 2018.

Update operating procedures for documenting, reviewing, and storing payment requests.

A good business practice includes consistent and reliable procedures to ensure that wire requests are coming from legitimate sources and properly authorized. Although the Investments Office has desk procedures for wire requests, the current procedures could be enhanced with more details. For example, the Investments Office independently verifies new bank accounts to ensure that funds are wired to the correct recipient, but this is not explicitly documented in the operating procedures. In addition, the Investments Office stores original copies of wire files in an offsite location. It may be more practical and cost effective for LACERA to scan and maintain electronic copies of the wire files in-house.

RECOMMENDATION

2. The Investments Office should update operating procedures for documenting, reviewing, and storing payment requests. Investments Office staff have due diligence responsibilities, and should have procedures consistently implemented without exception.

Management Response

Management will comply with the recommendation. Operating procedures for wire instructions will be updated for documenting, reviewing and storing payment requests. The update will be completed by December 31, 2018.

We thank the LACERA advisors, Investments Office, and FASD for their assistance and cooperation with this audit.

NOTED AND APPROVED



Date: October 2, 2018

Richard Bendall
Chief Audit Executive

REPORT DISTRIBUTION

2018 Audit Committee
Rick Wentzel
Steven Rice
Internal Audit Staff

Robert Hill
James Brekk
Bernie Buenaflor
JJ Popowich

Beulah Auten
Ted Granger
Jon Gabel
John McClelland



LACERA INTERNAL AUDIT DIVISION

Wire Transfers Audit

Version with Audit Committee Comments & Internal Audit Responses

October 2, 2018

AUDIT PERFORMED BY:

Kathryn Ton, CPA, CFE

Senior Internal Auditor

EXECUTIVE SUMMARY

We reviewed LACERA's electronic wire transfers process as part of the fiscal year 2018 audit plan. Wire transfers, which are made through State Street Bank and Bank of America, pose a financial risk to LACERA because inadequate controls can lead to transmission errors or opportunities for fraud. Internal Audit performs routine wire transfer audits to assess the effectiveness of LACERA's internal controls and to identify areas where controls could be strengthened to minimize risks.

In 2015, we performed a wire transfers audit on the State Street Bank accounts, and found no instances of fraud or abuse. Since the 2015 wire transfers audit only included State Street Bank wires, Internal Audit focused on the Bank of America wires for this audit. We assessed the internal controls over LACERA's operations to determine whether wires were documented, authorized, and processed accurately. In addition, we evaluated the security controls for wires processed through the Bank of America treasury management system (CashPro), which is used exclusively by LACERA for the real estate and debt program.

LACERA manages a \$56 billion retirement fund, and invests \$6 billion in real estate assets. LACERA's real estate portfolio contains real property and a debt program, and accounts for \$898 million in wire transfers annually. For fiscal year 2017-2018, Bank of America processed 765 wire transfers for LACERA. \$877 million or 752 wires were for LACERA's real estate program (98%), and \$21 million or 13 wires were for LACERA's debt program (2%).

AC QUESTION: What is the LACERA debt program?

IA RESPONSE: LACERA's debt program was established in 2011 to provide commercial loans to borrowers. Currently, the program is comprised of 2 account managers with an \$800 million allocation. One account manager offers bridge loans, or temporary short-term loans, and the other account manager offers traditional, long-term loans to borrowers. More details on the debt program are referenced on page 5 of this report.

In general, the internal controls over LACERA's wire operations are adequate. FASD processes wire transfers timely and accurately. In addition, the Investments Office ensures that wire transfers are documented and authorized by appropriate LACERA personnel for the real estate and debt program. We did note two areas where the Investments Office can strengthen their operating procedures. The details of our observations and recommendations are addressed in the report. We thank the LACERA advisors, Investments Office, and Financial and Accounting Services Division (FASD) for their assistance and cooperation with this audit.

WIRE TRANSFERS AUDIT

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INTRODUCTION

We reviewed LACERA's electronic wire transfers process as part of the fiscal year 2017/18 audit plan. Wire transfers, which are made through State Street Bank and Bank of America, pose a financial risk to LACERA because inadequate controls can lead to transmission errors or opportunities for fraud. Internal Audit performs routine wire transfer audits to assess the effectiveness of LACERA's internal controls and to identify areas where controls could be strengthened to minimize risks.

AC QUESTION: I think it is important to note that wires made through the Federal Reserve Wire Network are credited to the receiver instantaneously (real time) and have no right of revocation, as opposed to Automated Clearing House (ACH) transactions which have recall rights.

IA RESPONSE: We agree. Wires made through Fedwire are transferred instantaneously and have no right of revocation.

In 2015, we performed a wire transfers audit on the State Street Bank accounts, and found no instances of fraud or abuse. Since the 2015 wire transfers audit only included State Street Bank wires, Internal Audit focused on the Bank of America wires for this audit. We assessed the internal controls over LACERA's operations to determine whether wires were documented, authorized, and processed accurately. In addition, we evaluated the security controls for wires processed through the Bank of America treasury management system (CashPro), which is used exclusively by LACERA for the real estate and debt program.

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BACKGROUND

Bank of America and State Street Bank have provided LACERA wire transfer services since 1991 and 2013, respectively. Collectively, Bank of America and State Street Bank process close to \$5.7 billion or 2,025 wire transfers for LACERA annually. **AC QUESTION: "...processes close to ..." suggests both incoming and outgoing wires. Is this figure inclusive of both? If not, I would clarify.** **IA RESPONSE: Correct, it is both.** For fiscal year 2017, Bank of America processed 38% (765 wires) and State Street Bank processed 62% (1,261 wires) of LACERA's annual wire transfers. LACERA uses Bank of America to process wire transfers in connection with the real estate and debt program. Conversely, LACERA uses State Street Bank to process wire transfers in connection with member, retiree healthcare, and investment-related services. Investment-related services include fees paid to real estate, private equity, and hedge fund managers. LACERA also uses wire transfers to move funds between the Bank of America and State Street Bank accounts.

BANK OF AMERICA ACCOUNT SETUP

A wire transfer refers to the direct movement of funds between banks and other financial institutions. **AC QUESTION: This definition includes ACH. The important characteristic of a wire transfer is use of the Federal Reserve Wire Network. IA RESPONSE: Wires for LACERA's real estate and debt program all use Fedwire.** For the fiscal year ended June 30, 2018, LACERA worked with 13 advisors to manage the Bank of America accounts for the real estate and debt program. **AC QUESTION: Reads awkwardly – why are external advisors managing the agency's Bank of America accounts? IA RESPONSE: LACERA uses Bank of America as its bank for real estate transactions. The real estate advisors use the Bank of America accounts established by LACERA for capital draws and sale proceeds related to the properties.** For every new real estate acquisition, LACERA opens a Bank of America account to facilitate the transfer of funds between LACERA and the newly acquired property. The advisor prepares and administers an annual business plan and budget for the property. When the advisor requests a capital call, funds are transferred from the LACERA operating account at State Street Bank to the LACERA property account at Bank of America. Conversely, when an advisor returns excess capital, the advisor deposits funds into the LACERA property account at Bank of America. Excess funds are transferred from the LACERA property account at Bank of America to the LACERA operating account at State Street Bank.

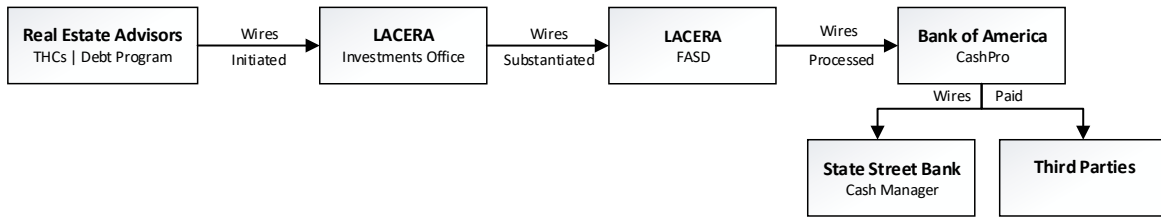
AC QUESTION: It is not clear to me why the funds need to flow through the Bank of America account as opposed to going straight to and from State Street.

IA RESPONSE: The funds are transferred from State Street Bank, LACERA's custodian bank, to the title holding company accounts, which are created at Bank of America. As a control measure, the funds still need to go from the LACERA operating account at State Street Bank to the LACERA-owned title holding company accounts.

WIRE TRANSFER APPROVAL PROCESS

Generally, there are three parties involved in a wire transfer request: (1) LACERA's real estate advisors, (2) LACERA's Investments Office, and (3) LACERA's Financial and Accounting Services Division (FASD). The wire transfers process starts with the real estate advisors. The real estate advisors notify LACERA about upcoming cash needs (capital calls) and cash returns (capital distributions) affecting the LACERA property accounts. Once an advisor initiates a wire transfer request, the Investments Office ensures that all necessary information has been collected. **AC QUESTION: In cashpro? Or on paper? IA RESPONSE: The wire requests are made through email, usually on company letterhead as an attachment.** The Investments Office reviews the documentation for accuracy and substantiates the wire transfer request. Subsequently, the Investments Office forwards the wire transfer request to FASD. FASD records the wire transfer request in the general ledger and sets up the wire at Bank of America. **AC QUESTION: It is important to note that the type of wire you establish in Cashpro is an important part of the control system. I refer specifically to repetitive or non-repetitive wires. IA RESPONSE: We agree. The use of repetitive or non-repetitive wires are an important part of the internal control system.** FASD management then approves the wire, and the wire is sent through the Federal Reserve Bank Fedwire System. Generally, Fedwires are immediate, final, and irrevocable once

processed. The diagram below illustrates the process flows and parties involved when administering electronic wire transfers.



REAL ESTATE AND DEBT PROGRAM

LACERA’s real estate program is comprised of 11 account managers and 160 title holding companies (THCs). Each real estate property is titled through a Bank of America account, and generates rental income and profits through price appreciation. Conversely, LACERA’s debt program is comprised of 2 account managers, and generates interest income through commercial loans. 65% of LACERA’s wire transfers are for capital returns related to rental income. The remaining 35% of LACERA’s wire transfers are for capital calls related to building improvements and other services.

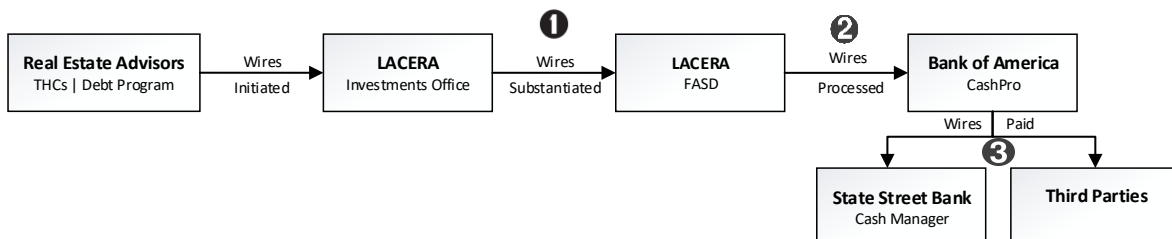
AC QUESTION: What does “titled” though a Bank of America account mean?

IA RESPONSE: In this context, we mean that LACERA opens a new operating bank account for each real estate property that it acquires in the name of the title holding company.

AUDIT OBJECTIVES

The audit objectives were to assess the controls over LACERA’s operations to determine whether wires were documented, authorized, and processed accurately. In addition, we evaluated the security controls for wires processed through the Bank of America CashPro system, which is used exclusively by LACERA for the real estate and debt program. Specifically, we reviewed the following:

1. **WIRE DOCUMENTATION AND AUTHORIZATION.** An Investments Office responsibility.
2. **WIRE PAYMENT PROCESSING AND ACCOUNTING.** A FASD responsibility.
3. **SECURITY OF ASSETS.** A shared Investments Office and FASD responsibility.



AUDIT SCOPE

The audit scope covered:

1. Discussions with Investments Office and FASD staff about administering wire transfer requests.
2. Analysis of internal wire records maintained by the Investments Office and FASD.
3. Review of the Bank of America CashPro treasury management system as it relates to:
 - Operating procedures
 - User access privileges and limits
 - Wire transfer templates
4. Review of the Bank of America accounts for LACERA's 160 title holding companies.
5. Controls and transactions testing to determine whether operations are performed according to established procedures. The testing period covers fiscal year 2017, and is limited to LACERA's real estate and debt program.

AUDIT METHODOLOGY

1. To test for wire documentation and authorization:
 - Sampled 55 wire transactions from fiscal year 2017, and included at least 1 transaction from each of the 13 advisors. See audit results section of the report for more details.
 - Evaluated legal setup of the Bank of America accounts. Verified bank accounts as LACERA-owned properties during fiscal year 2017.
2. To test for wire payment processing and accounting:
 - Observed proper controls and approvals by FASD to process wire requests.
 - Reconciled 100% of the internal wire records between the Investments Office and FASD.
 - Analyzed 100% of the Bank of America wires for the real estate and debt program (765 wires totaling \$898 million).
 - Traced 100% of the Bank of America wires transferred between the LACERA property accounts based on their ownership structures (266 wires totaling \$132 million). Verified that each wire was made to and from an actual LACERA property account.
 - Reconciled 100% of the State Street Bank wires deposited into the Bank of America property accounts (254 wires totaling \$453 million). Verified that each wire was made from State Street Bank to an actual LACERA property account.
3. To test for security of assets:
 - Compared authorization list for the CashPro system with current LACERA staff. This control test was to ensure that only authorized users can access the CashPro system.
 - Observed good segregation of duties between the Investments Office and FASD.
 - Observed good security controls within the CashPro system for FASD staff who input and verify wires.
 - Reviewed wire templates and system parameters in CashPro to ensure that only current and functioning templates are available for use.

AUDIT RESULTS

Overall, Internal Audit observed good practices with LACERA's administration of wire transfers. We recognize that LACERA separates divisional responsibilities between the Investments Office and FASD when handling wire requests. In addition, LACERA enforces transaction dollar limits and dual authorization for wires over \$2.5 million. In general, good internal controls exist to ensure that LACERA's assets are secure.

AC QUESTION: The average is \$1.173 million.

IA RESPONSE: Noted.

From our audit work, we sampled 55 wire transactions from the Investments Office and FASD, and 11 wire transactions from the advisors. Internal Audit contacted several advisors to check on the validity of the wire payments, independent of what was provided to us from the Investments Office and FASD. We contacted 6 advisors, (1) Barings, (2) Clarion Partners, (3) Invesco, (4) RREEF, (5) TA, and (6) Vanbarton, and all six advisors responded to our requests. We received confirmation that the wires were initiated by the advisors, and obtained sufficient work papers related to those requests. In addition, we learned that the Investments Office relies on the advisors to monitor the cash flows for the LACERA properties in accordance with the annual business plan and budget. The Investments Office discusses upcoming project costs with the advisors as it relates to the LACERA properties. However, the Investments Office does not track amounts paid-to-date against total project costs, making it difficult to verify the accuracy of the costs over the life of a project. To test the accuracy of advisor calculations, we sampled 11 transactions. We reviewed the supporting documentation associated with each funding request, and tied the wire payments back to the source documents. Based on the transactions sampled, there are no issues to report.

While there are no issues to report, we did identify two opportunities for the Investments Office to further strengthen their processes.

Convey specific instructions or develop a standard template for advisors to use when submitting wire requests.

It is good business practice to have proper supporting documentation. Documentation should clearly describe how funds are utilized and authorized. During our audit, we noticed that wire requests were submitted by advisors timely and appropriately. However, the level of detail captured on each request varied from advisor to advisor. In performing our audit work, at times it became difficult to discern when an advisor was making a first time request or a repeat request because of a last minute change to the fund date or fund amount. We also found it difficult to tell if the amount funded falls within the annual operating budget. To ensure that wire requests are adequately documented, LACERA should dictate specific terms, or provided a template for advisors to use when initiating a wire request. In doing so, LACERA can control the type and amount of information shared. For example, LACERA can ask advisors to fill-in the template, which could capture contact and bank information and project cost breakdowns.

RECOMMENDATION

1. The Investments Office should convey specific instructions or develop a standard template for advisors to use when initiating wire requests. The template should capture the components and level of detail that LACERA needs to make informed decisions on whether to approve or reject incoming requests.

Management Response

Management agrees with the recommendation. A wire request template will be developed by December 31, 2018.

Update operating procedures for documenting, reviewing, and storing payment requests.

A good business practice includes consistent and reliable procedures to ensure that wire requests are coming from legitimate sources and properly authorized. Although the Investments Office has desk procedures for wire requests, the current procedures could be enhanced with more details. For example, the Investments Office independently verifies new bank accounts to ensure that funds are wired to the correct recipient, but this is not explicitly documented in the operating procedures. In addition, the Investments Office stores original copies of wire files in an offsite location. It may be more practical and cost effective for LACERA to scan and maintain electronic copies of the wire files in-house.

RECOMMENDATION

2. The Investments Office should update operating procedures for documenting, reviewing, and storing payment requests. Investments Office staff have due diligence responsibilities, and should have procedures consistently implemented without exception.

Management Response

Management will comply with the recommendation. Operating procedures for wire instructions will be updated for documenting, reviewing and storing payment requests. The update will be completed by December 31, 2018.

We thank the LACERA advisors, Investments Office, and FASD for their assistance and cooperation with this audit.

AC QUESTION: I did not see any reference to the controls employed when staff establish wire templates in Cashpro. For example, do FASD staff confirm independently with the receiving bank the information that is on the template?

IA RESPONSE: Yes, there are wire templates in CashPro. FASD has good internal controls on the setup and approval of wire transfers. First, the Investments Office independently confirms wire instructions with the real estate advisors. Second, FASD independently confirms the information on the template with State Street Bank. A separate audit on the controls when staff establish wire templates was completed in July 2015.

NOTED AND APPROVED



Date: October 2, 2018

Richard Bendall
Chief Audit Executive

REPORT DISTRIBUTION

2018 Audit Committee
Rick Wentzel
Steven Rice
Internal Audit Staff

Robert Hill
James Brekk
Bernie Buenaflor
JJ Popowich

Beulah Auten
Ted Granger
Jon Grabel
John McClelland



November 30, 2018

TO: Each Member
2018 Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Chief Audit Executive

George Lunde
Senior Internal Auditor

FOR: December 12, 2018 Audit Committee Meeting

SUBJECT: **2018 Information Technology Risk Assessment**

RECOMMENDATION

In accordance with your current Audit Committee Charter, staff recommends that the Audit Committee review and discuss the following engagement report to take the following action(s):

- 1. accept and file report and/or,**
- 2. instruct staff to forward report to Boards or Committees and/or,**
- 3. provide further instruction to staff.**

BRACKGROUND

This IT Risk Assessment project was part of Internal Audit's Fiscal Year ended June 30, 2018 Audit Plan. A Privacy & Data Security Assessment review conducted in 2016 by Alston & Bird LLP, presented an opinion that a comprehensive Security Risk Assessment based upon United States Department of Commerce, National Institute of Standards and Technology (NIST) guidelines would benefit LACERA's governance framework. Following is a summary description of the project and opportunities for improvement resulting from the project.

Tevora Business Solutions Inc. (Tevora), a full-service firm focused on information security, risk, governance and compliance, conducted the enterprise security risk assessment beginning in May 2018. The assessment was conducted using a modified version of NIST's *Special Publication 800-30, Guide for Conducting Risks Assessments*. Tevora uses the NIST CyberSecurity Framework (NIST CSF) to categorize identified risks.

Through a combination of interviews, documentation reviews, and guided observations, nine risks were identified. For a risk to be included within the risk report, it must have been identified by at least two independent individuals and/or verified through systematic testing of controls (i.e., policy review, configuration review, report review, etc.). No high or critical risks were identified, the majority of risks scored in the low category. Tevora commented; "Overall, discussions with the LACERA team members showed that the importance of information security was well understood. Information security concepts were found to be well understood and implemented at every level of the organization."

Management achieved consensus of the identified risks and related recommendations. Two of three risk issues identified in the moderate risk category will require enhancing current operational procedures as a means to reducing risk exposure. The remaining issue in the moderate risk category is the result of legacy systems architecture decisions. Management has addressed this issue with mitigating controls over the years and intends to include full remediation of the issue as an upcoming strategic planning objective. The remaining low risks need to be addressed as time and technology resources permit. In all instances the associated risk rankings resulted from analysis of mitigating controls in place along with the speed and likelihood that the risk could impact LACERA membership or operations should those controls fail.

Attached is Tevora's project summary report. The detailed assessment report is highly technical and contains information that would compromise LACERA's security if made public.

Internal Audit would like to extend its appreciation to the management and staff of the Systems Division. Their helpful attitude and responsiveness contributed greatly towards the successful completion of this assessment.

Attachments

GL

REVIEWED AND APPROVED



Richard Bendall
Chief Audit Executive

MEMO DISTRIBUTION

2018 Audit Committee

Audit Committee Consultant

Roxana Castillo

Bernie Buenaflores

Robert Hill

JJ Popowich

James Brekk

Mary Phillips

Steven Rice



LACERA

2018 Enterprise Security Risk Assessment

Eric Munz

Delivered July 08, 2018



CONFIDENTIAL

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Summary and Observations

A total of nine risks were identified during the assessment. The following table displays the number of risks by their overall risk rating. The details for the risks can be found within the Risk Summary section of this report.

Overall Risk Rating	Risks Identified
Low	6
Moderate	3
High	0
Critical	0
Total	9

Developing a plan of action to implement the recommendations below will allow LACERA to greatly improve its overall security posture. The risks identified in this report were discussed with relevant teams as part of the initial assessment activities and recommendations. LACERA should find that the recommendations provided in this report align with these discussions.

One moderate risk identified is the incomplete encryption of databases containing LACERA member data. Tevora recommends LACERA implement strong encryption surrounding all databases housing the sensitive member data.

Another moderate risk identified is the lack of annual security awareness training and the limited coverage of their internal penetration test. Tevora recommends LACERA implement an annual training process to provide awareness to all employees regarding current threats. Also, Tevora recommends LACERA expand the scope of their current internal penetration testing.

Overall, LACERA was found to have an effective security program in place that encompasses several requirements and security domains defined by the NIST Cybersecurity Framework. As LACERA is looking to strengthen their security posture, implementing the recommendations identified in this report will allow LACERA to develop a more secure operating environment.

Report Content

The following report has been compiled for the exclusive use of LACERA. Care has been taken to ensure that all report content and recommendations are of the highest quality and are based on sound analysis, research, and experience. Please direct any questions or concerns about the content of this report to Eric Munz at emunz@tevora.com.

Eric Munz
Senior Information Security Consultant

Introduction

Purpose

The objective of this Enterprise Security Risk Assessment was to proactively identify, prioritize, and provide remediation recommendations for relevant risks that pose a threat to the confidentiality, integrity, or availability of LACERA enterprise systems, and to determine whether the controls in the enterprise environment adhere to the standards for the protection of confidential or otherwise sensitive information.

This Assessment was also tasked with ensuring that various enterprise systems and processes comply with privacy, legal and regulatory requirements related to the security of sensitive information, which may include electronic protected health information (ePHI), personally identifiable information (PII), intellectual property (IP), and sensitive employee data.

An Enterprise Security Risk Assessment is the first step in developing a risk management program for any organization. Identifying the assets that are critical to an organization and then identifying the various risks which could affect those assets helps prioritize the allocation of resources to security and IT administrative tasks and determine appropriate control frameworks and control implementations.

Periodic risk assessments are also required as part of compliance with several security standards including the Health Insurance Portability and Accountability Act (HIPAA) and standards published by the National Institute of Standards and Technology (NIST). Performing these types of assessments with the assistance of a third-party familiar with those standards ensures that organizations remain in compliance with the requirements for risk assessments in each of those standards.

Scope

LACERA engaged Tevora to conduct an enterprise security risk assessment of the LACERA enterprise environment in accordance with NIST CyberSecurity Standard requirements. This assessment was conducted onsite at the LACERA office from May 29, 2018 to June 1, 2018. The risk assessment was tasked with identifying all potential enterprise risks that pose a threat to the LACERA environment.

In Scope

The following business areas were determined to be in scope and were covered by this assessment:

Business Areas	
<ul style="list-style-type: none"> ▪ Human Resources ▪ Asset Management ▪ Business Continuity Plan ▪ Legal and Compliance ▪ Management ▪ Incident Response ▪ Risk Management ▪ Internal Audit 	<ul style="list-style-type: none"> ▪ Network & Systems Management ▪ IT and Security Management ▪ Product & Service Development ▪ Facilities ▪ Database Administration ▪ Change Management ▪ Legal and Privacy ▪ Data Analytics

Technologies	
<ul style="list-style-type: none"> ▪ Information Technology <ul style="list-style-type: none"> ○ Cloud ○ Microsoft Office 365 ▪ Software Development ▪ Internal Applications ▪ Endpoint Security 	<ul style="list-style-type: none"> ▪ Databases ▪ Logging and Monitoring ▪ Email filtering and Data Loss Prevention ▪ Data Backup ▪ Web Servers ▪ Mainframe

Out of Scope

For the purposes of this assessment, all enterprise wide systems supporting LACERA's infrastructure and processes were deemed in scope to ensure comprehensive analysis of privacy and data security techniques employed.

Risk Assessment Methodology

Framework

This Enterprise Security Risk Assessment was conducted using a modified version of NIST's *Special Publication 800-30, Guide for Conducting Risks Assessments*. The assessment steps are as follows:

- Asset Characterization
- Threat Identification
- Vulnerability Identification
- Control Analysis
- Likelihood Determination
- Impact Analysis
- Risk Determination
- Control Recommendation
- Result Documentation

The framework consists of five main functions:

- Identify
- Protect
- Detect
- Respond
- Recover

Additionally, Tevora uses the NIST CyberSecurity Framework (NIST CSF) to categorize identified risks.

Risk Identification

The first step in any risk assessment is to identify the scope, or context, of the risk assessment. Tevora, in conjunction with the Project Sponsor(s), established the scope of the risk assessment prior to conducting any interviews.

The assessment continued by interviewing relevant business unit employees to obtain asset information and documentation. Following asset identification, subject matter experts (SMEs) for each asset area were interviewed. Interviews focused on the processes and technical controls used to meet HIPPPA requirements and NIST CSF controls. Documentation, such as policies, standards, and procedures, were gathered at this time and reviewed by Tevora. SMEs also assisted in the guided observation of system configurations or technical processes at the request of Tevora.

Through a combination of these interviews, documentation reviews, and guided observations, multiple risks were identified. For a risk to be included within the risk report, it must have been identified by at least two independent individuals and/or verified through systematic testing of controls (i.e., policy review, configuration review, report

review, etc.).

Risk Measurement

Once a risk was identified, Tevora, in conjunction with the Project Sponsor(s), analyzed the risk based on a set of defined criteria to establish the level of severity or opportunity for exploitation. Tevora uses an intelligent risk decision framework known as HydraRisk for measuring and quantifying risk. This five-factor methodology incorporates a quantitative-qualitative hybrid approach to risk decisioning, with an emphasis on quantitative. Tevora’s HydraRisk scoring provides a consistent and measurable risk analysis over time, which is critical to tracking risks throughout their life cycle.

HydraRisk Factors

The following chart describes the elements used within Tevora’s HydraRisk Methodology.

Consequence	• The financial impact of the risk if an event were to occur
Velocity*	• Estimate of how quickly a risk event would impact the organization given failure of existing controls
Probability*	• The likelihood of a risk event actually occurring
Criticality	• The depth and breadth of the impact and overall visibility to the company
Responsiveness	• The likelihood of a successful response to a risk event

**Velocity and probability ratings are based on a subjective analysis of the effectiveness of mitigating controls in place and the speed and likelihood that the risk could impact the organization should those controls fail.*

The following table outlines the ratings scheme for each of the five HydraRisk factors. Each HydraRisk factor is measured on a scale of 1 through 5, with 1 being the lowest risk and 5 being the highest risk. The higher a risk scores, the more serious a risk becomes, and the more attention an organization should focus on it.

The following conditions are used to measure each risk:

Risk Factor	1	2	3	4	5
Consequence	Trivial: <\$50,000	Tolerable: \$50,000-\$250,000	Significant: \$250,000-\$500,000	Intolerable: \$500,000-\$1M	Major: >\$1M
Velocity	Excellent: Within months.	Good: Within weeks.	Fair: Within days.	Poor: Within hours.	Could not detect or respond if an event took place.
Probability	Rare: 0-15%	Low: 16-35%	Moderate: 36-65%	High: 66- 85%	Very High: >85%
Criticality	Trivial: Almost no impact on customers or reputation.	Tolerable: Small impact on customers or reputation.	Significant: Moderate impact on customers or reputation.	Intolerable: Severe impact on customers or reputation.	Major: The survival of the business is in jeopardy.
Responsiveness	Excellent: There are controls and capabilities in place that are viable and tested.	Very Good: There are viable controls and capabilities, but they are not tested or fully formalized.	Good: There are some controls and capabilities, but not enough to complete mitigate the risk impact.	Fair: The organization has some capabilities to respond, but mitigation efforts will be ad hoc or best effort.	Poor: The organization will be unable to effectively mitigate the impact of a risk event that occurs.

Once the risk factors have been scored on a scale from 1 to 5, all five scores are added to create the Composite Risk Score, which determines the Overall Risk Rating:

Composite Risk Score	Overall Risk Rating
5 – 10	Low
11 – 15	Moderate
16 – 20	High
21 – 25	Critical

Executive Summary

Client Overview

The Los Angeles County Employees Retirement Association (LACERA) is an independent Los Angeles County agency that administers and manages the retirement fund for the County.

LACERA's Data Environment

LACERA gathers full personally identifiable information (PII) from county employees. Processing this sensitive information requires a collection of tools to run day-to-day operations. Those tools include:

- Data Management System
- Office Productivity Software
- Cloud Environment
- Intrusion Detection System (IDS)
- Intrusion Prevention System (IPS)
- Logging and Monitoring

IT Infrastructure

LACERA's environment is hosted in Pasadena, California. The environment is made up of the following technologies:

- Microsoft Windows
- Servers
- Web Application Servers
- Mainframe
- Databases

Top Risks

A total of nine risks were identified during the assessment. The following table outlines the number of risks by the Overall Risk Rating. The details for each risk can be found within the Risk Summary section of this report.

Overall Risk Rating	Risks Identified
Low	6
Moderate	3
High	0
Critical	0
Total	9

The following table shows the scored risks for LACERA across all areas of the assessment:

Rank	Area	Risk Name	C	V	P	C	R	Total
1	Process/Technology	Encryption Posture	1	2	2	4	2	11
2	Process	Formal Annual Security Awareness Training	2	2	2	3	2	11
3	Process	Internal Penetration Test Scope	2	2	3	2	2	11
4	Technology	Security Event Management & Logging Improvements	1	3	1	2	3	10
5	Process/Technology	Network Equipment Change Control Process	1	2	2	2	2	9
6	Process	Risk Management Improvements	1	2	2	2	2	9
7	Technology	Production Data in Testing/Staging Environment	1	1	2	3	2	9
8	Process	Lack of Tabletop Exercise for IRP	1	2	1	2	2	8
9	People/Process	Lack of Secure Code Training (Developers)	1	1	1	1	1	5

LACERA’s risk distribution can be considered moderate for the ranking of risks identified. A low number of risks were identified with three of the nine risks falling into the moderate measurement. Tevora recommends that efforts are performed to remediate all moderate ranked risks where feasible and move forward with implementing solutions for the low findings that were identified.

General Observations

Overall, discussions with the LACERA team members showed that the importance of information security was well understood. Information security concepts were found to be well understood and implemented at every level of the organization. While a security culture was found to be well imbedded, it was found that much of this culture was self-motivated by individuals rather than being managed and organized centrally by the organization. This can be accounted for due to the limited resources that LACERA must operate with. Due to this limitation, security has imbedded itself into most of the organizations practices, however under limited oversight and management to ensure that security objectives are being met in a consistent manner.

To address this concern, Tevora highly recommends that LACERA work to define and develop a dedicated information security department. At a minimum, this department should be headed up by an information security manager, or CISO, who would report directly to the CIO. This role would be responsible for ensuring that overall security objectives are being met as well as serving as a primary resource for internal information security consulting. Under this role, a few information security analysts are recommended to fulfill information security operation activities which include incident response management, vulnerability management, patch management and logging and monitoring responsibilities. This type of structure would help standardize information security across the organization, ensure that implementation of information security initiatives are consistent and provide the resources required to mature the LACERA information security program from a primary reactive state to a proactive state.

Also, it was noted that LACERA uses legacy operating systems on machines within their infrastructure. These machines are used for their internal printing solution. Although LACERA does not use these legacy operating systems elsewhere, Tevora recommends they develop a plan to migrate to current environments.

2018 Information Technology Risk Assessment

Questions and comments received from Audit Committee and Internal Audit's responses

Reference Page: 4

AC QUESTION: Do we get to see a list of what those enterprise systems are?

RESPONSE: On page 9, the report refers to data and technology systems. However, specific information on system names and vendor products would compromise LACERA's security if made public.

AC QUESTION: an IT risk management program, no?

RESPONSE: Yes, it is the IT risk management program. Alston & Bird suggested that creating designated management positions and a more formalized enterprise risk management program would benefit LACERA, as well as conducting an enterprise risk assessment. This assessment supports Alston & Bird's observation.

Reference Page: 7

AC QUESTION: I am very surprised the fact that member data is not encrypted was only a moderate risk. The members are sufficient in number to constitute a class.

RESPONSE: The ranking resulted from analysis of mitigating controls in place along with speed and likelihood that the risk could impact LACERA membership or operations should the controls fail. Cyber security insurance is also a factor considered in the risk ranking.

Reference Page: 11

AC QUESTION: LACERA does not have limited resources.


RESPONSE: Staff hiring and retention challenges within the Systems Division combined with progress in deployment of new technology capabilities impacts staff resource availability and management processes.



November 30, 2018

TO: Each Member
2018 Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Principal Internal Auditor

Gabriel Tafoya 
Senior Internal Auditor

FOR: December 12, 2018 Audit Committee Meeting

SUBJECT: **Member Applications Change Control**

RECOMMENDATION

In accordance with your current Audit Committee Charter, staff recommends that the Audit Committee review and discuss the following engagement report to take the following action(s):

- 1. accept and file report and/or,**
- 2. instruct staff to forward report to Boards or Committees and/or,**
- 3. provide further instruction to staff.**

ENGAGEMENT REPORTS

- a. Member Applications Change Control
Gabriel Tafoya, Senior Internal Auditor
(Report issued: October 30, 2018)

Please note: attached to the report is another version of the report that includes questions and comments that staff received from your Committee as well as Internal Audit's responses.

Attachments



LACERA INTERNAL AUDIT DIVISION

MEMBER APPLICATIONS CHANGE CONTROL AUDIT

October 30, 2018

AUDIT PERFORMED BY:

Gabriel Tafoya, CISA
Senior Internal Auditor

EXECUTIVE SUMMARY

As part of our fiscal year 2017-18 Audit Plan, we performed a change management controls review of LACERA's Membership applications. These applications are used to maintain active and retired membership data and historical records.

LACERA's Change Management (CM) process helps ensure that only authorized and tested changes to member applications are introduced to the production environment in an orderly and controlled manner. Internal Audit found that in general, controls and procedures related to the CM process to be effective and functioning as intended. Notably, we observed the following good practices:

- LACERA uses the lifecycle utility application to manage membership application changes. All development activities, design, and testing is formally documented and followed by staff in the lifecycle application
- Changes are tested and approved by authorized staff prior to being moved to production
- Access to development, testing, and production environments is restricted to appropriate staff

While we observed good control practices, we identified some areas where Management could further strengthen controls which include:

- Strengthening the segregation of duties over administrator access to some systems used during the change process
- Enhancing segregation of duties controls related to review and approval for movement of code between development, testing, and production
- Improving submission of documentation into the lifecycle management environment

The following report highlights our findings, recommendations, and management's responses. However, specific details were omitted to preserve security of LACEAR's data processing environment.

Internal Audit would like to thank the Member Applications CM team and Systems Division staff for their assistance and cooperation with this audit.

MEMBER APPLICATIONS CHANGE CONTROL AUDIT

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INTRODUCTION

As part of our fiscal year 2017-18 Audit Plan, we performed a review of the CM process for LACERA's member applications. CM is a process that helps ensure that application changes are introduced to the production environment in an orderly and controlled manner. To accomplish this, CM activities include controls which help to ensure that changes are properly documented, tested, and approved prior to implementation to production. Additionally, proper segregation of duties is established to ensure that key activities are performed by more than one person to mitigate the risk of unauthorized or inappropriate changes. The Systems Division is solely responsible for all changes that affect Member applications.

BACKGROUND

LACERA's Membership applications are used by staff to manage and process member related data and retirement transactions. The Systems Division's applications team makes changes to Membership applications for various reasons, which include updating existing processes, adding new features, complying with regulatory requirements, and requests from end users.

The member applications CM process includes the following phases:



- (1) Application Development Requests and Approvals - The team manager and systems analysts review and approve requests and assign requests to available programmers for development
- (2) Development - Programmers develop the required changes in the development region. Systems analysts review and approve changes before being moved to testing
- (3) Testing - Functional analysts test changes in the testing environment before the changes are moved into production. Changes are reviewed and approved by the team manager and signed off by the appropriate business owners/stakeholders before a change can be deployed to live production
- (4) Production - Production support staff are responsible for moving the code from the testing region to live production

AUDIT OBJECTIVES

Our audit objectives were to determine whether the change control environment is operating effectively by verifying the following:

- Procedures that address key activities and controls that are well-defined, documented, and followed
- Monitoring of change activities are in place
- Segregation of duties controls exist over key control activities
- Changes to Membership applications are properly documented, tested, and approved prior to release to production
- Access to development, testing, and production environments are restricted to authorized personnel

The audit was performed in accordance with the Control Objectives for Information Technology (COBIT) created by the Information Systems Audit and Control Association (ISACA). COBIT is an industry recognized guideline that can be applied to any organization across industries. Adherence to COBIT helps to ensure quality, as well as control and reliability of information systems in organizations.

AUDIT SCOPE

The audit included a review of:

- Changes to the member applications completed in calendar year 2017

AUDIT METHODOLOGY

To review the controls and procedures surrounding the Membership Applications CM process, we:

- Interviewed Systems Division staff to understand controls related to the change process
- Performed a walk through to obtain an understanding of the CM process
- Reviewed a sample of changes that were categorized with a high level of importance in the lifecycle application utility. Changes were selected from a population of changes identified as “completed” between January 1, 2017 through December 31, 2017. We verified the following:
 - Changes were reviewed and approved prior to movement to production
 - Documentation was evident in the lifecycle application utility
 - Business Owner/Management tested and approved Changes that were moved to production
 - Segregation of duties existed for each of the changes made

AUDIT RESULTS

Overall, we found that many areas of the member applications CM process were effective and functioning as intended. Notably, we observed the following good practices:

- Member Application CM team meet monthly to discuss the status of changes
- Procedures that describe change control process activities are adequately documented
- Documentation created during the development of changes are maintained in lifecycle application utility
- Changes are authorized by appropriate CM staff for movement between the development, testing, and production environments
- Access to development, testing, and production environments is restricted to appropriate staff, including enforcement of proper segregation of duties to authorized personnel
- Application changes are approved by business owners prior to and after movement to the production environment
- Access to the lifecycle application utility is properly restricted to authorized personnel

While we observed these positive observations, we identified some opportunities for management to further strengthen controls, as discussed below:

SEGREGATION OF DUTIES

Strong segregation of duties in a CM process is important to ensure that proper checks and balances exist. In a well-controlled CM process, a programmer that develops code should be restricted from deploying code into production and should be limited to only programming tasks. This prevents the opportunity for the programmer to write erroneous or malicious code and deploy it into production.

We noted that:

One staff person was responsible for developing code and sometimes responsible for deploying code into production. These two roles should be segregated. Management indicated that the reason this person had dual responsibilities was due to staffing shortages. During the audit, management transitioned this person to just system administrator/deployment responsibilities.

The manager/team lead reviews a manually prepared listing of production deployments. However, we suggest an automated “deployment monitoring report” would enhance the integrity of the review. This would serve as a detective control to identify all instances when code is deployed into production to ensure that the deployed code was approved and appropriate.

AUDIT RESULTS (Continued)

We also noted one staff person who has programming responsibilities also has administrator rights to the CM Control application. Administrator rights allow full control of the application. This should only be available to assigned administrators as referenced by COBIT best practices. This was brought to the attention of management during the audit, and as a result, administrator access rights were removed for this person.

RECOMMENDATION

- 1. The Systems Division management should develop a system generated Deployment Monitoring Report and use it to monitor all deployments to production. This will ensure that all code deployed into production are approved and appropriate.**

Management Response

We agree that the above recommendation is a good automated detective control. We plan to develop a system generated Deployment Monitoring Report that will identify any instances when code is deployed into production. Management plans to complete an analysis and evaluation to determine if feasible based on current project priorities and resources. This evaluation is planned for completion by the end of June 2019, and if feasible will be planned for implementation by the end of December 2019.

Administrator Group Membership

Users that are members of administrator groups are granted elevated privileges required to perform certain system tasks. A COBIT best practice is to keep the membership of administrator groups to the absolute minimum necessary to support systems requirements and limit potential unauthorized use.

We identified several non-administrative staff user accounts within the administrator group that is used to access the membership document management application. Minimizing the number of privileged user accounts decreases the potential for unauthorized use. This was the result of a recent operating system conversion. The group membership was scheduled for an assessment as part of a post conversion review process, which had not been completed at the time of our audit.

We also noted that a formal policy does not exist to provide guidelines for granting staff administrator access and system management privileges. A lack of baseline documentation for privileged group membership makes it impossible to determine if the assigned accounts are consistent with the intended security policy.

AUDIT RESULTS (Continued)

RECOMMENDATIONS

- 2. Systems Division management should evaluate the administrator group membership and configuration and appropriately eliminate users that do not require administrator privileges to perform their job duties.**
- 3. Systems Division management should develop a formal Administrator Access Policy that applies to staff who are granted "Administrator" access on LACERA's systems, and management of privileged group membership.**

Management Response

We will complete a review of all users and system accounts that are members of the administrator group to ensure access is valid and that the administrator group is appropriate. We will also evaluate the possibility of introducing two levels of system administration, one group for system administrators and applications that interact with the application, and a second group for workflow administrators. This is planned for completion by the end of December 2018.

We will also develop a formal Administrator Access Policy that applies to all that are granted administrator access and for the management of privileged group membership. This is planned for completion by the end of June 2019.

Process Control Approvals

A key control in CM is the concept of segregation of approval responsibilities. This process control is a COBIT best practice and is important because it helps ensure that unauthorized changes cannot be made to programs from the time the changes are developed, tested, and approved for movement to production.

Based on our testing, we found that the lifecycle application utility documentation does not reflect appropriate segregation of responsibilities throughout the CM process. Specifically, we found the lifecycle application utility indicated changes were initiated by the same staff who also approved the change for movement into production or the same staff approved a change for movement from development to testing to production.

We learned that application management staff were using the lifecycle application utility as a programming workflow tool without considering the lifecycle application utility for documenting CM process control approvals. As such, there was an opportunity for the current daily management review of new the lifecycle application utility entries, programmer assignments, and review of appropriate segregation of CM process approval responsibilities. Appropriate segregation of responsibilities minimizes the potential for unauthorized or erroneous changes being introduced into production.

AUDIT RESULTS (Continued)

RECOMMENDATION

- 4. While staffing is a current constraint that management continues to work on, at a minimum we recommend that management implement a documented pre-defined approval process for the review and approval of initiated changes and programmer assignments to help ensure that only authorized changes are processed through the CM process.**

Management Response

In the past, the Application Manager of our Membership applications would route work in the lifecycle application utility from one person to another to keep the issues moving through the process. This practice has been changed as of September 24, 2018. The person responsible for this step in the development process now sends the issue to the next step so that segregation of responsibilities is visible in the lifecycle application utility. Additionally, we have created a RACI (Responsible, Accountable, Communicated, informed) matrix that identifies accountable signoffs during each phase of the CM process. This was completed as of September 24, 2018.

Formal Documentation of Business Owner Signoff

Documented evidence of business owner signoff is required to ensure that changes have been accepted and approved upon implementation into production. All documentation should be organized and stored in the lifecycle application utility. A lack of documented signoffs presents a risk that changes do not meet business owner requirements or were unauthorized.

We found the lifecycle application utility did not contain evidence of business owner signoff. During our audit, we observed that business process owners are involved in the review and production approval process. However, this review and approval process was not being captured in the lifecycle application utility CM system. We were informed that email communications were generally used for business owner signoff and approval documentation. However, emails applicable to our audit test selection were contained in a recently retired email system and not accessible during the audit.

RECOMMENDATION

- 5. Systems Division management should record all business owner correspondence/approvals into lifecycle application utility to document that application changes have been tested and approved.**

Management Response

We will include the business owner sign off in all lifecycle application utility issues going forward. The sign off will be in the form of an approval email from the Division Managers approving the release. This started as of September 24, 2018.

AUDIT RESULTS (Continued)

Testing Documentation

Best practices require that testing documentation created during application change development is organized and stored in a secure centralized repository. This helps with tracking change versions and revisions and provides evidence that the movement of the change to production was properly tested and functioning as intended.

The lifecycle application utility did not always contain testing documentation for changes. During our audit, we learned that while testing documentation is part of the CM process it is not necessarily captured to the lifecycle application utility. Testing documentation can take many forms such as transaction logs, screen flows, spreadsheets or narratives describing the results of a test. We found program change testing by the application team is not always included in the lifecycle application utility because it is maintained on a team member's desktop computer, share drive or paper file. As a result, documentation was not readily available for audit review.

RECOMMENDATION

- 6. Systems Division management needs to instruct programming staff to attach all testing related documentation into the lifecycle application utility. This would facilitate post implementation review and provide greater assurance that changes to production have been tested and are functioning as intended.**

Management Response

We will attach all testing related documentation to each lifecycle application utility issue going forward. This started as of September 24, 2018.

NOTED AND APPROVED



RICHARD BENDALL
Chief Audit Executive

Date: October 30, 2018

REPORT DISTRIBUTION

<i>Audit Committee</i>	<i>Robert Hill</i>	<i>Mary Phillips</i>
<i>Rick Wentzel</i>	<i>James Brekk</i>	<i>Roxana Castillo</i>
<i>Steve Rice</i>	<i>Bernie Buenaflor</i>	<i>Kathy Delino</i>
<i>Internal Audit Staff</i>	<i>JJ Popowich</i>	



LACERA INTERNAL AUDIT DIVISION

MEMBER APPLICATIONS CHANGE CONTROL AUDIT

Version with Audit Committee Comments & Internal Audit Responses

October 30, 2018

AUDIT PERFORMED BY:

Gabriel Tafoya, CISA
Senior Internal Auditor

EXECUTIVE SUMMARY

As part of our fiscal year 2017-18 Audit Plan, we performed a change management controls review of LACERA's Membership applications. These applications are used to maintain active and retired membership data and historical records.

LACERA's Change Management (CM) process helps ensure that only authorized and tested changes to member applications are introduced to the production environment in an orderly and controlled manner. Internal Audit found that in general, controls and procedures related to the CM process to be effective and functioning as intended. Notably, we observed the following good practices:

- LACERA uses the lifecycle utility application to manage membership application changes. All development activities, design, and testing is formally documented and followed by staff in the lifecycle application
- Changes are tested and approved by authorized staff prior to being moved to production
- Access to development, testing, and production environments is restricted to appropriate staff

While we observed good control practices, we identified some areas where Management could further strengthen controls which include:

- Strengthening the segregation of duties over administrator access to some systems used during the change process
- Enhancing segregation of duties controls related to review and approval for movement of code between development, testing, and production
- Improving submission of documentation into the lifecycle management environment

The following report highlights our findings, recommendations, and management's responses. However, specific details were omitted to preserve security of LACEAR's data processing environment.

Internal Audit would like to thank the Member Applications CM team and Systems Division staff for their assistance and cooperation with this audit.

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INTRODUCTION

As part of our fiscal year 2017-18 Audit Plan, we performed a review of the CM process for LACERA's member applications.

AC QUESTION: Sometimes member is lower case and sometimes it is UPPER CASE.

RESPONSE: Noted.

AC QUESTION: Is this the first time ever Internal Audit conducted this audit? If not, when was it most recently conducted?

RESPONSE:

- a. Integrated Retirement Information System (IRIS) Change Control Review. Report issued 10-4-2010,
- b. Various external audit reviews have addressed the IT controls including change management.

AC QUESTION: It would be informative to attach a list of the "member applications.

RESPONSE: Specific information on system names and vendor products would compromise LACERA's security if made public.

CM is a process that helps ensure that application changes are introduced to the production environment in an orderly and controlled manner. To accomplish this, CM activities include controls which help to ensure that changes are properly documented, tested, and approved prior to implementation to production. Additionally, proper segregation of duties is established to ensure that key activities are performed by more than one person to mitigate the risk of unauthorized or inappropriate changes. The Systems Division is solely responsible for all changes that affect Member applications.

BACKGROUND

LACERA's Membership applications are used by staff to manage and process member related data and retirement transactions. The Systems Division's applications team makes changes to Membership applications for various reasons, which include updating existing processes, adding new features, complying with regulatory requirements, and requests from end users.

The member applications CM process includes the following phases:



(1) Application Development Requests and Approvals - The team manager and systems analysts review and approve requests and assign requests to available programmers for development

(2) Development - Programmers develop the required changes in the development region. Systems analysts review and approve changes before being moved to testing

AC QUESTION: You referred previously to the development, testing, and production “environments.” Is a region an “environment”?

RESPONSE: This is an “environment”. Region and environment are the same in this context.

(3) Testing - Functional analysts test changes in the testing environment before the changes are moved into production. Changes are reviewed and approved by the team manager and signed off by the appropriate business owners/stakeholders before a change can be deployed to live production

(4) Production - Production support staff are responsible for moving the code from the testing region to live production

AUDIT OBJECTIVES

Our audit objectives were to determine whether the change control environment is operating effectively by verifying the following:

- Procedures that address key activities and controls that are well-defined, documented, and followed
- Monitoring of change activities are in place
- Segregation of duties controls exist over key control activities
- Changes to Membership applications are properly documented, tested, and approved prior to release to production
- Access to development, testing, and production environments are restricted to authorized personnel

The audit was performed in accordance with the Control Objectives for Information Technology (COBIT) created by the Information Systems Audit and Control Association (ISACA). COBIT is an industry recognized guideline that can be applied to any organization across industries. Adherence to COBIT helps to ensure quality, as well as control and reliability of information systems in organizations.

AUDIT SCOPE

The audit included a review of:

- Changes to the member applications completed in calendar year 2017

AC QUESTION: A list would be informative.

RESPONSE: Specific information on system names and vendor products would compromise LACERA’s security if made public.

AUDIT METHODOLOGY

To review the controls and procedures surrounding the Membership Applications CM process, we:

AC QUESTION: Here a third variation – Sentence Case.

RESPONSE: Noted.

- Interviewed Systems Division staff to understand controls related to the change process
- Performed a walk through to obtain an understanding of the CM process
- Reviewed a sample of changes that were categorized with a high level of importance in the lifecycle application utility. Changes were selected from a population of changes identified as “completed” between January 1, 2017 through December 31, 2017. We verified the following:
 - Changes were reviewed and approved prior to movement to production
 - Documentation was evident in the lifecycle application utility
 - Business Owner/Management tested and approved Changes that were moved to production
 - Segregation of duties existed for each of the changes made

AC QUESTION: How many? Judgmental sample?

RESPONSE: This was a judgmental sample of 12 from a population of 367 changes. We avoided changes that were for minor bugs or only cosmetic in nature. We preferred a judgmental sample across the various change types was sufficient to test that CM process controls were functioning in accordance with good CM practices.

AUDIT RESULTS

Overall, we found that many areas of the member applications CM process were effective and functioning as intended. Notably, we observed the following good practices:

- Member Application CM team meet monthly to discuss the status of changes

AC QUESTION: Were these meetings documented?

RESPONSE: Yes, they are documented.

- Procedures that describe change control process activities are adequately documented
- Documentation created during the development of changes are maintained in lifecycle application utility
- Changes are authorized by appropriate CM staff for movement between the development, testing, and production environments

AC QUESTION: What level of CM staff did you consider to be “appropriate”? I assume the CM software itself classifies staff into various roles (worker bee, supervisor, etc.) Did your definition align with that in the software itself?

RESPONSE: This did align with the software. Lead staff and supervisors are considered appropriate and are responsible for approval for movement to the next CM process phase.

- Access to development, testing, and production environments is restricted to appropriate staff, including enforcement of proper segregation of duties to authorized personnel
- Application changes are approved by business owners prior to and after movement to the production environment
- Access to the lifecycle application utility is properly restricted to authorized personnel

While we observed these positive observations, we identified some opportunities for management to further strengthen controls, as discussed below:

AC QUESTION: Observing an observation?

RESPONSE: Noted.

Segregation of Duties

Strong segregation of duties in a CM process is important to ensure that proper checks and balances exist. In a well-controlled CM process, a programmer that develops code should be restricted from deploying code into production and should be limited to only programming tasks.

AC QUESTION: The CM software should control for that, at a minimum if it allows it, it should only be with a management over-ride. Did the software itself not prevent this?

RESPONSE: Software itself is only used for documenting the management, movement, and approval of changes, between programming, testing, and deployment. Administrator Access privileges control the movement of code into production.

This prevents the opportunity for the programmer to write erroneous or malicious code and deploy it into production.

We noted that:

One staff person was responsible for developing code and sometimes responsible for deploying code into production. These two roles should be segregated. Management indicated that the reason this person had dual responsibilities was due to staffing shortages. During the audit, management transitioned this person to just system administrator/deployment responsibilities.

The manager/team lead reviews a manually prepared listing of production deployments. However, we suggest an automated “deployment monitoring report” would enhance the integrity of the review. This would serve as a detective control to identify all instances when code is deployed into production to ensure that the deployed code was approved and appropriate.

AC QUESTION: Does the CM software produce such a report?

RESPONSE: Not at this time.

We also noted one staff person who has programming responsibilities also has administrator rights to the CM Control application. Administrator rights allow full control of the application. This should only be available to assigned administrators as referenced by COBIT best practices. This was brought to the attention of management during the audit, and as a result, administrator access rights were removed for this person.

AC QUESTION: You do not include this as a Recommendation because management said they fixed the issue?

RESPONSE: Yes, this was remediated during the audit and validated.

AC QUESTION: Also, the reasons you believe the access rights were removed is not stated. Did you simply believe management, or did you verify the statement by reviewing user profiles, etc.? The auditor is responsible for “obtaining sufficient appropriate evidence to corroborate management's explanations or representations concerning important matters” but as a reader I do not know what you considered to be sufficient.

RESPONSE: Noted. User profiles were validated during the audit.

RECOMMENDATION

- 1. The Systems Division management should develop a system generated Deployment Monitoring Report and use it to monitor all deployments to production. This will ensure that all code deployed into production are approved and appropriate.**

Management Response

We agree that the above recommendation is a good automated detective control. We plan to develop a system generated Deployment Monitoring Report that will identify any instances when code is deployed into production. Management plans to complete an analysis and evaluation to determine if feasible based on current project priorities and resources.

AC QUESTION: How hard is it? and why does it take 14 months to implement?

RESPONSE: Management considered application programming demands and scheduled quarterly release dates in their response.

This evaluation is planned for completion by the end of June 2019, and if feasible will be planned for implementation by the end of December 2019.

Administrator Group Membership

Users that are members of administrator groups are granted elevated privileges required to perform certain system tasks. A COBIT best practice is to keep the membership of administrator groups to the absolute minimum necessary to support systems requirements and limit potential unauthorized use.

We identified several non-administrative staff user accounts within the administrator group that is used to access the membership document management application.

AC QUESTION: Your reference to “non administrative staff user accounts” is confusing. Just so I am clear. The group is an “administrator group” let’s call it Administrator Group 1. You found members of that specific group who were “non-administrative” staff.? How many? Seven (70%) of ten, or 3 (1%) of 300? And what is non-administrative staff? Systems staff are “non administrative staff”, no? If they were all Systems staff isn’t that okay? Does COBIT offer up a best practice on what type of staff should constitute this group?

RESPONSE: Specific numbers are considered proprietary information. We found systems staff without application administrative job responsibilities within this administrator group.

Minimizing the number of privileged user accounts decreases the potential for unauthorized use.

AC QUESTION: It’s not just whether or not the access is authorized or unauthorized, it also is an issue of core competency. You state these privileges are required to perform certain tasks. If the persons authorized did not have the competencies to perform the tasks, that’s a material concern.

RESPONSE: All system user profiles were validated during the audit. However, these systems staff did not have application administration job responsibilities.

This was the result of a recent operating system conversion.

AC QUESTION: What is “this”? The condition you identified in the first sentence?

RESPONSE: Correct.

The group membership was scheduled for an assessment as part of a post conversion review process, which had not been completed at the time of our audit.

We also noted that a formal policy does not exist to provide guidelines for granting staff administrator access and system management privileges. A lack of baseline documentation for privileged group membership makes it impossible to determine if the assigned accounts are consistent with the intended security policy.

AC QUESTION: The policy could be brief though and consider, 1) required competencies, 2) staff level, 3) staff coverage (vacations, illness, etc.), and 4) separation of duties.

RESPONSE: Noted.

RECOMMENDATIONS

- 2. Systems Division management should evaluate the administrator group membership and configuration and appropriately eliminate users that do not require administrator privileges to perform their job duties.**
- 3. Systems Division management should develop a formal Administrator Access Policy that applies to staff who are granted "Administrator" access on LACERA's systems, and management of privileged group membership.**

Management Response

We will complete a review of all users and system accounts that are members of the administrator group to ensure access is valid and that the administrator group is appropriate.

AC QUESTION: Appropriate would be a better word choice.

RESPONSE: Noted.

We will also evaluate the possibility of introducing two levels of system administration, one group for system administrators and applications that interact with the application, and a second group for workflow administrators. This is planned for completion by December 31, 2018.

We will also develop a formal Administrator Access Policy that applies to all that are granted administrator access and for the management of privileged group membership. This is planned for completion by June 30, 2019.

AC QUESTION: This could be done as part of the year end report.

RESPONSE: Noted.

Process Control Approvals

A key control in CM is the concept of segregation of approval responsibilities. This process control is a COBIT best practice and is important because it helps ensure that unauthorized changes cannot be made to programs from the time the changes are developed, tested, and approved for movement to production.

Based on our testing, we found that the lifecycle application utility documentation does not reflect appropriate segregation of responsibilities throughout the CM process. Specifically, we found the lifecycle application utility indicated changes were initiated by the same staff who also approved the change for movement into production or the same staff approved a change for movement from development to testing to production.

AC QUESTION: As I asked with another comment, does the software not control for this and require a manager override?

RESPONSE: Software itself is only used for documenting the management, movement, and approval of changes, between programming, testing, and deployment. Administrator Access privileges control the movement of code into production.

We learned that application management staff were using the lifecycle application utility as a programming workflow tool without considering the lifecycle application utility for documenting CM process control approvals. As such, there was an opportunity for the current daily management review of new the lifecycle application utility entries, programmer assignments,

and review of appropriate segregation of CM process approval responsibilities. Appropriate segregation of responsibilities minimizes the potential for unauthorized or erroneous changes being introduced into production.

RECOMMENDATION

- 4. While staffing is a current constraint that management continues to work on, at a minimum we recommend that management implement a documented pre-defined approval process for the review and approval of initiated changes and programmer assignments to help ensure that only authorized changes are processed through the CM process.**

Management Response

In the past, the Application Manager of our Membership applications would route work in the lifecycle application utility from one person to another to keep the issues moving through the process. This practice has been changed as of September 24, 2018. The person responsible for this step in the development process now sends the issue to the next step so that segregation of responsibilities is visible in the lifecycle application utility. Additionally, we have created a RACI (Responsible, Accountable, Communicated, informed) matrix that identifies accountable signoffs during each phase of the CM process. This was completed as of September 24, 2018.

Formal Documentation of Business Owner Signoff

Documented evidence of business owner signoff is required to ensure that changes have been accepted and approved upon implementation into production. All documentation should be organized and stored in the lifecycle application utility. A lack of documented signoffs presents a risk that changes do not meet business owner requirements or were unauthorized.

We found the lifecycle application utility did not contain evidence of business owner signoff. During our audit, we observed that business process owners are involved in the review and production approval process. However, this review and approval process was not being captured in the lifecycle application utility CM system. We were informed that email communications were generally used for business owner signoff and approval documentation. However, emails applicable to our audit test selection were contained in a recently retired email system and not accessible during the audit.

RECOMMENDATION

- 5. Systems Division management should record all business owner correspondence/approvals into lifecycle application utility to document that application changes have been tested and approved.**

Management Response

We will include the business owner sign off in all lifecycle application utility issues going forward. The sign off will be in the form of an approval email from the Division Managers approving the release. This started as of September 24, 2018.

Testing Documentation

Best practices require that testing documentation created during application change development is organized and stored in a secure centralized repository. This helps with tracking change versions and revisions and provides evidence that the movement of the change to production was properly tested and functioning as intended.

The lifecycle application utility did not always contain testing documentation for changes. During our audit, we learned that while testing documentation is part of the CM process it is not necessarily captured to the lifecycle application utility. Testing documentation can take many forms such as transaction logs, screen flows, spreadsheets or narratives describing the results of a test. We found program change testing by the application team is not always included in the lifecycle application utility because it is maintained on a team member's desktop computer, share drive or paper file. As a result, documentation was not readily available for audit review.

RECOMMENDATION

- 6. Systems Division management needs to instruct programming staff to attach all testing related documentation into the lifecycle application utility. This would facilitate post implementation review and provide greater assurance that changes to production have been tested and are functioning as intended.**

Management Response

We will attach all testing related documentation to each lifecycle application utility issue going forward. This started as of September 24, 2018.

AC QUESTION: I didn't see any comments on an evaluation of the appropriateness of the life cycle software in place. I believe COBIT lists the characteristics a best practice solution should have in place and it would be good to know if the system we are using scores well or not.

RESPONSE: Noted. The CM lifecycle utility software is appropriate and meets the needs for managing the modification of existing programs or applications maintained by LACERA.

NOTED AND APPROVED



RICHARD BENDALL
Chief Audit Executive

Date: October 30, 2018

REPORT DISTRIBUTION


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


November 30, 2018

TO: Each Member
2018 Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Principal Internal Auditor

Nathan Amick 
Internal Auditor

FOR: December 12, 2018 Audit Committee Meeting

SUBJECT: **Los Angeles County Rehired Retirees Audit**

RECOMMENDATION

In accordance with your current Audit Committee Charter, staff recommends that the Audit Committee review and discuss the following engagement report to take the following action(s):

- 1. accept and file report and/or,**
- 2. instruct staff to forward report to Boards or Committees and/or,**
- 3. provide further instruction to staff.**

ENGAGEMENT REPORTS

- a. Los Angeles County Rehired Retirees Audit
Nathan Amick, Internal Auditor
(Report issued: November 2, 2018)

Please note: attached to the report is another version of the report that includes questions and comments that staff received from your Committee as well as Internal Audit's responses.

Attachments



LACERA INTERNAL AUDIT DIVISION

LOS ANGELES COUNTY REHIRED RETIREES AUDIT

November 2, 2018

AUDIT PERFORMED BY:

Nathan Amick
Internal Auditor

EXECUTIVE SUMMARY

The State of California's County Employees Retirement Law (CERL) provides that if Los Angeles County believes its retirees possess special skills or knowledge, the County has the option to employ those retirees. Under Government Code Section 31680.3, rehired retirees may work up to and not exceed 960 hours per fiscal year, on a strictly temporary basis, without affecting their retirement status or benefits. In addition, IRS regulations require a "bona fide" break in service after retirement before rehire. To comply with the IRS regulation, LACERA's Board of Retirement adopted a resolution in 2006 stating that a member under the "normal retirement age," as defined in the body of this present report, may not return to temporary County service within 90 days of his or her retirement date.

The California Public Employees' Pension Reform Act of 2013 ("PEPRA") added additional restrictions to the employment of retirees. The PEPRA regulations reinforced the 960-hour limit, and notwithstanding the 90-day break in service requirement, added a 180-day continuous break in service after the retirement date before allowing for rehire.

PEPRA specifies the criteria under which the County may rehire retired employees, those being:

- 1) during an emergency to prevent stoppage of public business, or
- 2) because the retired person has skills needed to perform work of limited duration.

Failure to adhere to the PEPRA regulations and LACERA requirements not only violates the state law governing retirement benefits, but it could also jeopardize the qualified tax deferred status of LACERA under federal tax law.

Our audit was limited to testing only the County's compliance with the rehired retirees' 960-hour limit and break in service requirements for fiscal year ended ("FYE") June 30, 2018. We did not review the County's, or its departments', compliance with having adequate justification for rehiring retirees.

For this fiscal year, as indicated in the table below, we noted an improvement in the County's compliance with the 960-hour limit relative to prior years.

Fiscal Year Ended June 30	Rehired Retirees	Noncompliant Rehired Retirees	Noncompliance as a Percentage	Total Overage Hours	Average Hours Over
2016	502	19	3.8%	597	31.4
2017	513	8	1.6%	121	15.2
2018	602	6	1.0%	145	21

In addition, we noted zero break in service violations for FYE June 30, 2018. This is an improvement from the previous year, where we identified eight rehired retirees who violated the LACERA 90-day break in service requirement and one individual who violated the PEPRA 180-day break in service requirement.

In prior years, LACERA's Internal Audit Division provided the County CEO's Benefits, Classification and Compensation Policy (BCOMP) section with the specific policy violations identified in the audit. BCOMP Management and staff would meet with departments who had audit findings to talk through the findings and assist with a root cause analysis. Prior to the commencement of the FYE June 30, 2018 audit, BCOMP had already identified the six 960-hour violations noted above. Our testwork only confirmed what they already knew. BCOMP has been instrumental in improving the County's compliance with rehired retiree requirements. Their commitment to training and educating HR staff throughout the County has been central to the improved compliance over the last two years. These efforts are described in more detail at the conclusion of this report.

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INTRODUCTION

The State of California's County Employees Retirement Law (CERL) states that if Los Angeles County believes a retiree possesses special skills or knowledge, the County has the option to employ those retirees. Under Government Code Section 31680.3, rehired retirees may work up to and not exceed 960 hours per fiscal year, on a strictly temporary basis, without affecting their retirement status or benefits.

In addition, IRS regulations require a "bona fide" break in service after retirement before rehire. To comply with the IRS regulation, LACERA's Board of Retirement adopted a resolution in 2006 stating that a member under the "normal retirement age", as defined in the "Objectives" section below, may not return to temporary County service within 90 days of his or her retirement date.

The California Public Employees' Pension Reform Act of 2013 ("PEPRA") added additional restrictions to the employment of retirees. The PEPRA regulations reinforced the 960-hours limit, and notwithstanding LACERA's 90-day break in service requirement, added a 180-day continuous break in service after the retirement date before allowing for rehire.

Furthermore, PEPRA specifies the criteria under which the County may rehire retired employees, those being:

- 1) during an emergency to prevent stoppage of public business, or
- 2) because the retired person has skills needed to perform work of limited duration.

Our audit was limited to testing only the County's compliance with the rehired retirees' 960-hour work limit and break in service requirements. We did not review the County's compliance with having adequate justification for rehiring the retirees.

BACKGROUND

In 2009 LACERA's Internal Audit Division began performing tests of the County's compliance with law and policy limits over the rehiring of retirees and reporting the results to the County CEO. The CEO's office has successfully communicated with, educated, and provided direction to the County departments, continually improving compliance, albeit with some minor exceptions noted from year to year.

In 2016 we identified an increase in 960-hour limit violations from the previous year. Violations increased in count from 12 to 19, a violation rate increase from 2.7% to 3.8%. At FYE June 30, 2017, testing results were more favorable with, eight noted 960-hour violations for a rate of 1.6%.

For FYE June 30, 2017, in addition to the eight violations noted above, we identified one individual who violated the PEPRA 180-day break in service requirement. This was an increase over the prior year but primarily due to a modification to the criteria used in identifying the length of the break in service. In years past, we used *the first day of compensated post-retirement work* as the measurement date, but LACERA's Legal Office stated that it should be the *re-employment date in the County's payroll system*. The modified criterion was applied to FYE June 30, 2018 testing, and will continue to be applied in the future until determined otherwise.

AUDIT PROCESS

Objectives

The objectives of this review were:

1. To determine whether all rehired retirees were employed for no more than 960 hours in FYE June 30, 2018, as required by PEPRRA.
2. For all retirees who were newly rehired during FYE June 30, 2018, to determine compliance with LACERA's requirement that all retirees under the "normal retirement age" perform a 90-day break in service prior to their re-employment by the County.
 - Normal retirement age for LACERA members, as determined by LACERA's Board of Retirement, is as follows:
 - Age 57 for general members of Plan A, B, C, D, or G
 - Age 65 for general members of Plan E
 - Age 55 for safety members
3. Notwithstanding the 90-day break in service requirement noted above, for all retirees who were newly rehired during FYE June 30, 2018, to determine compliance with PEPRRA regulations requiring all retirees to meet a continuous 180-day break in service prior to their re-employment by the County.
 - PEPRRA allows two possible exceptions to the 180-day requirement.
 - PEPRRA Exception (1) - The hiring department can certify that it is necessary to fill a critically needed position, and the hiring has been approved by the Board of Supervisors in a public meeting. The appointment may not be placed on a consent calendar; or
 - PEPRRA Exception (2) - The retiree is a public safety officer or firefighter and is returning to perform public safety officer or firefighter duties.

Scope

LACERA's Internal Audit Division reviewed all LACERA retirees who were rehired by the County or were employed by the County during the FYE June 30, 2018.

Note: We did not verify whether the County departments had documentation to justify that the department rehired the retired employee 1) during an emergency to prevent stoppage of public business, or 2) because the retired person has skills needed to perform work of limited duration.

Methodology

We requested and received from the LA County Auditor-Controller a rehired retiree payroll report for the Fiscal Year Ended June 30, 2018, which provides detailed hourly payroll information by payroll period and by days worked, to identify any non-compliance with the 960-hour limit.

To test for the break in service requirements, we isolated all payees who retired on or after January 1, 2017, and compared their retirement date to their re-employment date for the break in service requirements (either PEPRRA-180 day or LACERA-90 day).

Note: anyone on the rehired retiree payroll for FYE June 30, 2018 with a retirement date prior to January 1, 2017 would either meet the break in service requirement if a newly rehired retiree or would have been tested for the break in service in a prior year.

Audit Observations

We identified 602 rehired retirees paid by the County during the FYE June 30, 2018, an increase of 89 over the prior fiscal year. We analyzed 100 percent of the records for possible 960 hour violations and identified six (1%) rehired retirees who violated the 960-hour limit. See details in the table below.

Department	Job Title	Hours worked	Overage Hours
Fire Department	Pilot	1,041.5	81.5
Public Health	Environmental Health Specialist	1,000	40
Assessor’s Office	Appraiser Specialist I	964	4
Children & Family Services	Information Systems Analyst I	962	2
Public Health	P.H.N.	961	1
Probation Department	Management Analyst	961	1

There were 45 rehired retiree payees in FYE June 30, 2018 with retirement dates on or after January 1, 2017, and we reviewed them for compliance with break in service requirements. We found zero violations for either the LACERA 90-day break in service requirement or the PEPRA 180-day break in service requirement. This is an improvement from the previous year, in which we identified eight 90-day violations and one 180-day violation.

CONCLUSION

For FYE June 30, 2018 as indicated in the table below, we noted an improvement in the County’s compliance with the 960-hour limit relative to prior years.

Fiscal Year Ended June 30	Rehired Retirees	Noncompliant Rehired Retirees	Noncompliant Rehired Retirees as a Percentage	Total Overage Hours	Average Hours Over
2016	502	19	3.8%	597	31.4
2017	513	8	1.6%	121	15.2
2018	602	6	1.0%	145	21

In addition, there were zero issues of non-compliance for either the 90-day or 180-day break in service requirements.

In prior years, LACERA’s Internal Audit Division provided the County CEO’s Benefits, Classification and Compensation Policy (BCOMP) section with the specific policy violations identified in the audit. BCOMP Management and staff would meet with departments who had audit findings to talk through the findings and assist with a root cause analysis. Prior to the commencement of the FYE June 30, 2018 audit, BCOMP had already identified the six 960-hour violations noted above. Our testwork only confirmed what they already knew. BCOMP has been instrumental in improving the County’s compliance with rehired retiree requirements. Their commitment to training and educating HR staff throughout the County has been central to the improved compliance over the last two years.

Los Angeles County Management Response

BCOMP Management indicated that they are continuing their educational presentations in collaboration with the LACERA and County Counsel that explains the legal aspects and ramifications of not complying with the hours worked regulations and re-enforces an action plan requiring County Departments to monitor the rehiring of retirees to ensure adherence to policy limits. Various presentations are

continually scheduled throughout the year to reach a wide range of personnel that includes Administrative managers and supervisors, Information Technology personnel and Human Resources managers and personnel staff.

In 2016, standardized reports that allow Human Resources staff throughout the County to generate on demand monitoring reports of rehired retirees was created and made available. BCOMP has access to all departmental reports and continues to regularly monitor the reports at a countywide level and contact departments who have employees close to the hours worked limit so appropriate proactive action can be taken to avoid non-compliance issues.

In 2017, an update to the current Rehire-Retiree report logic was made to include an approval action by CEO, Budget division. A warning flag is in place and is initiated before the final hiring approval for a retiree that may not be compliant with both the PEPR 180-day waiting period and with the IRS 90-day waiting period to ensure compliance for a bona-fide break in service. This enhancement has contributed to the mitigation of those employees being re-hired who have not had a bona-fide break in service.

The creation of an electronic and user-friendly checklist to attach to the electronic Personnel Action Request utilized during the hiring process is in progress. BCOMP created a manual checklist as one of the tools introduced to departmental staff in 2017 that provided all the rules and regulations in a single document. While it was well received, departments requested an electronic version. Additional report logic enhancements are continually being reviewed for improvements to the system.

NOTED AND CONCUR:



RICHARD BENDALL
Chief Audit Executive

Date: November 2, 2018

REPORT DISTRIBUTION

Sachi A. Hamai
Los Angeles County Chief Executive Officer
Susan Moomjean
Manager - CEO Benefits, Classification and Compensation Division

2018 LACERA Audit Committee
Robert Hill
James P. Brekk
J.J. Popowich
Bernardo Buenaflor
Steven Rice
Fern Billingsy



LACERA INTERNAL AUDIT DIVISION

LOS ANGELES COUNTY REHIRED RETIREES AUDIT

Version with Audit Committee Comments & Internal Audit Responses

November 2, 2018

AUDIT PERFORMED BY:

Nathan Amick
Internal Auditor

EXECUTIVE SUMMARY

The State of California's County Employees Retirement Law (CERL) provides that if Los Angeles County believes its retirees possess special skills or knowledge, the County has the option to employ those retirees. Under Government Code Section 31680.3, rehired retirees may work up to and not exceed 960 hours per fiscal year, on a strictly temporary basis, without affecting their retirement status or benefits. In addition, IRS regulations require a "bona fide" break in service after retirement before rehire. To comply with the IRS regulation, LACERA's Board of Retirement adopted a resolution in 2006 stating that a member under the "normal retirement age," as defined in the body of this present report, may not return to temporary County service within 90 days of his or her retirement date.

The California Public Employees' Pension Reform Act of 2013 ("PEPRA") added additional restrictions to the employment of retirees. The PEPRA regulations reinforced the 960-hour limit, and notwithstanding the 90-day break in service requirement, added a 180-day continuous break in service after the retirement date before allowing for rehire.

AC Question: "But the BOS can make a finding at a public meeting that the employee's skills are needed prior to that 180 days and then the employee can work earlier, correct?"

Internal Audit Response: Correct. All allowable exceptions to the break in service requirements are detailed on page six of this report.

PEPRA specifies the criteria under which the County may rehire retired employees, those being:

- 1) during an emergency to prevent stoppage of public business, or
- 2) because the retired person has skills needed to perform work of limited duration.

Failure to adhere to the PEPRA regulations and LACERA requirements not only violates the state law governing retirement benefits, but it could also jeopardize the qualified tax deferred status of LACERA under federal tax law.

Our audit was limited to testing only the County's compliance with the rehired retirees' 960-hour limit and break in service requirements for fiscal year ended ("FYE") June 30, 2018. We did not review the County's, or its departments', compliance with having adequate justification for rehiring retirees.

For this fiscal year, as indicated in the table below, we noted an improvement in the County's compliance with the 960-hour limit relative to prior years.

Fiscal Year Ended June 30	Rehired Retirees	Noncompliant Rehired Retirees	Noncompliance as a Percentage	Total Overage Hours	Average Hours Over
2016	502	19	3.8%	597	31.4
2017	513	8	1.6%	121	15.2
2018	602	6	1.0%	145	21

In addition, we noted zero break in service violations for FYE June 30, 2018. This is an improvement from the previous year, where we identified eight rehired retirees who violated the LACERA 90-day break in service requirement and one individual who violated the PEPRA 180-day break in service requirement.

In prior years, LACERA's Internal Audit Division provided the County CEO's Benefits, Classification and Compensation Policy (BCOMP) section with the specific policy violations identified in the audit. BCOMP Management and staff would meet with departments who had audit findings to talk through the findings and assist with a root cause analysis. Prior to the commencement of the FYE June 30, 2018 audit, BCOMP had already identified the six 960-hour violations noted above. Our test work only confirmed what they already knew. BCOMP has been instrumental in improving the County's compliance with rehired retiree requirements. Their commitment to training and educating HR staff throughout the County has been central to the improved compliance over the last two years. These efforts are described in more detail at the conclusion of this report.

LOS ANGELES COUNTY REHIRED RETIREES AUDIT

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INTRODUCTION

The State of California's County Employees Retirement Law (CERL) states that if Los Angeles County believes a retiree possesses special skills or knowledge, the County has the option to employ those retirees. Under Government Code Section 31680.3, rehired retirees may work up to and not exceed 960 hours per fiscal year, on a strictly temporary basis, without affecting their retirement status or benefits.

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The California Public Employees' Pension Reform Act of 2013 ("PEPRA") added additional restrictions to the employment of retirees. The PEPRA regulations reinforced the 960-hour limit, and notwithstanding LACERA's 90-day break in service requirement, added a 180-day continuous break in service after the retirement date before allowing for rehire.

AC Question: "So this is an instance in which State law trumps the LACERA BOR policy? Does the BOR need to take an action to acknowledge that?"

Internal Audit Response: Correct. We discussed this with the Legal Division and it was determined that no action is required by the BOR.

Furthermore, PEPRA specifies the criteria under which the County may rehire retired employees, those being:

- 1) during an emergency to prevent stoppage of public business, or
- 2) because the retired person has skills needed to perform work of limited duration.

Our audit was limited to testing only the County's compliance with the rehired retirees' 960-hour work limit and break in service requirements. We did not review the County's compliance with having adequate justification for rehiring the retirees.

BACKGROUND

In 2009 LACERA's Internal Audit Division began performing tests of the County's compliance with law and policy limits over the rehiring of retirees and reporting the results to the County CEO. The County CEO's office has successfully communicated with, educated, and provided direction to the County departments, continually improving compliance, albeit with some minor exceptions noted from year to year.

In 2016 we identified an increase in 960-hour limit violations from the previous year. Violations increased in count from 12 to 19, a violation rate increase from 2.7% to 3.8%. At FYE June 30, 2017, testing results were more favorable with, eight noted 960-hour violations for a rate of 1.6%.

For FYE June 30, 2017, in addition to the eight violations noted above, we identified one individual who violated the PEPRA 180-day break in service requirement. This was an increase over the

prior year but primarily due to a modification to the criteria used in identifying the length of the break in service. In years past, we used *the first day of compensated post-retirement work* as the measurement date, but LACERA's Legal Office stated that it should be the *re-employment date in the County's payroll system*. The modified criterion was applied to FYE June 30, 2018 testing, and will continue to be applied in the future until determined otherwise.

AC Question: with regard to first day of compensated post-retirement work vs. re-employment date in the County's payroll system... "why would these two be different?"

Internal Audit Response: The "first day of compensated post-retirement work" refers to the first day in which the rehired retiree is on the job recording hours. The "re-employment date in the County's payroll system" refers to the date in which the rehired retiree was rehired by the County.

AUDIT PROCESS

Objectives

The objectives of this review were:

1. To determine whether all rehired retirees were employed for no more than 960 hours in FYE June 30, 2018, as required by PEPRA.
2. For all retirees who were newly rehired during FYE June 30, 2018, to determine compliance with LACERA's requirement that all retirees under the "normal retirement age" perform a 90-day break in service prior to their re-employment by the County.
 - Normal retirement age for LACERA members, as determined by LACERA's Board of Retirement, is as follows:
 - Age 57 for general members of Plan A, B, C, D, or G
 - Age 65 for general members of Plan E
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 - PEPRA allows two possible exceptions to the 180-day requirement.
 - PEPRA Exception (1) - The hiring department can certify that it is necessary to fill a critically needed position, and the hiring has been approved by the Board of Supervisors in a public meeting. The appointment may not be placed on a consent calendar; or
 - PEPRA Exception (2) - The retiree is a public safety officer or firefighter and is returning to perform public safety officer or firefighter duties.

Scope

LACERA's Internal Audit Division reviewed all LACERA retirees who were rehired by the County or were employed by the County during the FYE June 30, 2018.

Note: We did not verify whether the County departments had documentation to justify that the department rehired the retired employee 1) during an emergency to prevent stoppage of public business, or 2) because the retired person has skills needed to perform work of limited duration.

Methodology

We requested and received from the LA County Auditor-Controller a rehired retiree payroll report for the Fiscal Year Ended June 30, 2018, which provides detailed hourly payroll information by payroll period and by days worked, to identify any non-compliance with the 960-hour limit.

To test for the break in service requirements, we isolated all payees who retired on or after January 1, 2017, and compared their retirement date to their re-employment date for the break in service requirements (either PEPRRA-180 day or LACERA-90 day).

AUDIT PROCESS (Continued)

Note: anyone on the rehired retiree payroll for FYE June 30, 2018 with a retirement date prior to January 1, 2017 would either meet the break in service requirement if a newly rehired retiree or would have been tested for the break in service in a prior year.

Audit Observations

We identified 602 rehired retirees paid by the County during the FYE June 30, 2018, an increase of 89 over the prior fiscal year. We analyzed 100 percent of the records for possible 960 hour violations and identified six (1%) rehired retirees who violated the 960-hour limit. See details in the table below.

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Public Health	P.H.N.	961	1
Probation Department	Management Analyst	961	1

AC Question: "The table is above, not below."

Internal Audit Response: It appears that the formatting issue in question may be a result of program compatibility between sender and recipient. We reviewed the original documents sent and they did not reflect the formatting issue.

There were 45 rehired retiree payees in FYE June 30, 2018 with retirement dates on or after January 1, 2017, and we reviewed them for compliance with break in service requirements. We found zero violations for either the LACERA 90-day break in service requirement or the PEPRRA

180-day break in service requirement. This is an improvement from the previous year, in which we identified eight 90-day violations and one 180-day violation.

AC Question: “Not personally. Perhaps you reviewed their payroll records?”

Response: Correct, our testing consisted of document review and analysis. We did not interact with the individuals in question.

CONCLUSION

For FYE June 30, 2018 as indicated in the table below, we noted an improvement in the County’s compliance with the 960-hour limit relative to prior years.

Fiscal Year Ended June 30	Rehired Retirees	Noncompliant Rehired Retirees	Noncompliant Rehired Retirees as a Percentage	Total Overage Hours	Average Hours Over
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2017	513	8	1.6%	121	15.2
2018	602	6	1.0%	145	21

In addition, there were zero issues of non-compliance for either the 90-day or 180-day break in service requirements.

AC Comment: “Same comment re: the table is above, not below.”

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BCOMP Management indicated that they are continuing their educational presentations in collaboration with the LACERA and County Counsel that explains the legal aspects and ramifications of not complying with the hours worked regulations and re-enforces an action plan requiring County Departments to monitor the rehiring of retirees to ensure adherence to policy limits. Various presentations are continually scheduled throughout the year to reach a wide range of personnel that includes Administrative managers and supervisors, Information Technology personnel and Human Resources managers and personnel staff.

CONCLUSION (Continued)

Los Angeles County Management Response

In 2016, standardized reports that allow Human Resources staff throughout the County to generate on demand monitoring reports of rehired retirees was created and made available. BCOMP has access to all departmental reports and continues to regularly monitor the reports at a countywide level and contact departments who have employees close to the hours worked limit so appropriate proactive action can be taken to avoid non-compliance issues.

In 2017, an update to the current Rehire-Retiree report logic was made to include an approval action by CEO, Budget division. A warning flag is in place and is initiated before the final hiring approval for a retiree that may not be compliant with both the PEPRA 180-day waiting period and with the IRS 90-day waiting period to ensure compliance for a bona-fide break in service. This enhancement has contributed to the mitigation of those employees being re-hired who have not had a bona-fide break in service.

The creation of an electronic and user-friendly checklist to attach to the electronic Personnel Action Request utilized during the hiring process is in progress. BCOMP created a manual checklist as one of the tools introduced to departmental staff in 2017 that provided all the rules and regulations in a single document. While it was well received, departments requested an electronic version. Additional report logic enhancements are continually being reviewed for improvements to the system.

AC Comment: "Nice work."

Internal Audit Response: Your recognition is appreciated.

NOTED AND APPROVED



RICHARD BENDALL

Chief Audit Executive

Date: November 2, 2018

REPORT DISTRIBUTION

Audit Committee	Robert Hill
James P. Brekk	
J.J. Popowich	Bernardo Buenarflor
Steven Rice	
Fern Billingsy	
Sachi A. Hamai	
Los Angeles County Chief Executive Officer	

AC Comment: Referencing the Report Distribution list above... "I would break this out as suggested."

Internal Audit Response: Suggestion noted

Susan Moomjean
Manager – CEO Benefits, Classification and Compensation Division



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October 12, 2018

To the Board of Retirement and Board of Investments
Los Angeles County Employees Retirement Association

We have audited the financial statements of Los Angeles County Employees Retirement Association (LACERA) as of and for the year ended June 30, 2018 and have issued our report thereon dated October 12, 2018. Professional standards require that we provide you with the following information related to our audit, which is divided into the following sections:

Section I - Required Communications with Those Charged with Governance

Section II - Report on Internal Control over Financial Reporting

Section I includes information that current auditing standards require independent auditors to communicate to those individuals charged with governance. We will report this information annually to the Board of Retirement and Board of Investments of LACERA.

Section II includes the required communication surrounding LACERA's controls over financial reporting.

We would like to take this opportunity to thank LACERA's staff for the cooperation and courtesy extended to us during our audit. Their assistance and professionalism are invaluable.

This report is intended solely for the use of the board of retirement, board of investments, and management of LACERA and is not intended to be and should not be used by anyone other than these specified parties.

We welcome any questions you may have regarding the following communications, and we would be willing to discuss any of these or other questions that you might have at your convenience.

Very truly yours,

Plante & Moran, PLLC

Michelle Watterworth, CPA
Partner

Jean Young, CPA
Partner

Section I - Required Communications with Those Charged with Governance

Our Responsibility Under U.S. Generally Accepted Auditing Standards

As stated in our engagement letter dated August 29, 2018, our responsibility, as described by professional standards, is to express an opinion about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. Our audit of the financial statements does not relieve you or management of your responsibilities. Our responsibility is to plan and perform the audit to obtain reasonable, but not absolute, assurance that the financial statements are free of material misstatement.

As part of our audit, we considered the internal control of Los Angeles County Employees Retirement Association (LACERA). Such considerations were solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control and not to provide any assurance concerning such internal controls.

We are responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures specifically to identify such matters.

Our audit of LACERA's financial statements has also been conducted in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States. Under *Government Auditing Standards*, we are obligated to communicate certain matters that come to our attention related to our audit to those responsible for the governance of LACERA, including compliance with certain provisions of laws, regulations, contracts, grant agreements, certain instances of error or fraud, illegal acts applicable to government agencies, and significant deficiencies in internal control that we identify during our audit. Toward this end, we issued a separate letter dated October 12, 2018 (Section II of this letter) regarding our consideration of LACERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements.

Planned Scope and Timing of the Audit

We performed the audit according to the planned scope and timing previously communicated to you in our letter about planning matters on September 20, 2018.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. In accordance with the terms of our engagement letter, we will advise management about the appropriateness of accounting policies and their application. The significant accounting policies used by LACERA are described in Note B to the financial statements.

No new accounting policies were adopted, and the application of existing policies was not changed during 2018, other than the adoption of GASB 85, *Omnibus 2017*, which only minimally impacted a small disclosure in the required supplementary information section of the financial statements.

**Section I - Required Communications with Those Charged with Governance
(Continued)**

We noted no transactions entered into by LACERA during the year for which there is a lack of authoritative guidance or consensus.

There are no significant transactions that have been recognized in the financial statements in a different period than when the transaction occurred.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most significant estimates surround alternative investments and the assumptions within the pension and OPEB valuations, as more fully explained below:

Alternative Investments: As explained in Note P, the financial statements include investments valued at \$13,991,093,000 (25 percent of net position) at June 30, 2018, whose fair values have been estimated by management in the absence of readily determinable market values. The valuation of alternative investments constitutes a sensitive and significant estimate affecting the financial statements. Management uses various means to estimate the fair value of these investments, including utilizing audited financial statements and quarterly investment manager reports.

Pension and OPEB Valuation Assumptions: Financial statement disclosures and required supplementary information schedules contain information about LACERA's total pension liability and total OPEB liability. In order to determine both of these liabilities, the actuary must apply certain assumptions, which are highly sensitive to estimation. The most sensitive estimates used in the valuations are as follows:

Pension Plan:

- Assumed long-term investment rate of return
- Calculation of the single discount rate
- Mortality assumptions

OPEB Trust:

- Assumed long-term investment rate of return
- Calculation of the single discount rate
- Healthcare cost trend rate
- Mortality assumptions

Long-term Assumed Rate of Return - Pension Plan: For purposes of GASB 67, as of June 30, 2018, LACERA is currently using 7.38 percent for the assumed long-term expected rate of return (gross of administrative expense load of 0.13 percent). The return is based on the results of a 2016 Investigation of Experience. This assumed rate of return has not changed from fiscal year 2017. The use of a 7.38 percent long-term assumed rate of return is based on the current approved asset mix and capital market assumptions.

Section I - Required Communications with Those Charged with Governance (Continued)

Single Discount Rate - Pension Plan: The calculation of the single discount rate under GASB Statement No. 67, which is calculated using the long-term assumed rate of return as one of many inputs, is also highly sensitive to estimates the actuary makes about future contributions and future benefit payments. Given LACERA's funding policy and legal requirements under CERL and PEPRRA, the actuary determined that projected fiduciary net position to be sufficient compared to projected benefit payments.

Long-term Assumed Rate of Return - OPEB Trust: The actuary has used 6.30 percent investment return assumption to project the OPEB liability, based on the OPEB Trust fund target asset allocations and market assumptions for those various asset classes. This assumed rate of return has decreased from 6.66 percent from fiscal year 2017.

Single Discount Rate - OPEB Trust: The calculation of the single discount rate under GASB Statement No. 74, which is calculated using the long-term assumed rate of return as one of many inputs, is also highly sensitive to estimates the actuary makes about future anticipated contributions and future benefit payments. Inherent in those assumptions is significant subjectivity surrounding the projection of future contributions. The actuary relied on the Los Angeles County multi-year OPEB funding plan in determining anticipated future contributions to the Trust. Based on the actuarial projections, the discount rate within the OPEB Trust was set at 5.11 percent as of June 30, 2018.

OPEB Healthcare Cost Trend Rate: For purposes of projecting future OPEB benefit payments, the actuary utilized a medical cost trend rate assumption ranging from 4.50 percent to 6.70 percent based on the Society of Actuaries report entitled "Modeling Long-Term Healthcare Trends" by Professor Thomas E. Getzen.

Mortality Assumptions - Pension and OPEB: The pre- and postretirement mortality assumptions impact the total pension liability related to pension under GASB 67 and the total OPEB liability related to healthcare under GASB 74. The assumptions about mortality were estimated by the actuary based on the results of an experience study that was performed during 2016 utilizing the actuarial experience of LACERA for the period from July 1, 2013 through June 30, 2016. Based on that experience study, in the actuarial valuation, the actuary has used the RP-2014 tables with the MP-2014 generational improvement scales.

Disclosure of these assumptions and resultant sensitivity of the discount rate can be found in Notes E and N to the financial statements.

We believe management's estimates are in accordance with generally accepted accounting principles. We evaluated the key factors and assumptions used to develop these estimates in determining that the estimates are reasonable in relation to the financial statements taken as a whole.

The disclosures in the financial statements are neutral, consistent, and clear. Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements are the disclosures related to GASB Statement Nos. 67 and 74, including the actuarial valuation results, as well as the GASB Statement No. 72 fair value disclosures.

Section I - Required Communications with Those Charged with Governance (Continued)

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Disagreements with Management

For the purpose of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report.

We are pleased to report that no such disagreements arose during the course of our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management.

We did not detect any misstatements as a result of audit procedures.

Significant Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, business conditions affecting the LACERA, and business plans and strategies that may affect the risks of material misstatement, with management each year prior to our retention as LACERA's auditors. However, these discussions occurred in the normal course of our professional relationship, and our responses were not a condition of our retention.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated October 12, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to LACERA's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

**Section I - Required Communications with Those Charged with Governance
(Continued)**

Other Information in Documents Containing Audited Financial Statements

Our responsibility for other information in documents containing the entity's financial statements and report does not extend beyond the financial statements. We do not have an obligation to determine whether or not such other information is properly stated. However, we read the introductory, investment, actuarial, and statistical section of the Comprehensive Annual Financial Report (CAFR) and nothing came to our attention that caused us to believe that such information, or its manner of presentation, is materially inconsistent with the information or manner of its presentation appearing in the financial statements.

Section II - Report on Internal Control over Financial Reporting



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Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of
Financial Statements Performed in Accordance with *Government Auditing Standards*

Independent Auditor's Report

To Management, the Board of Retirement,
and Board of Investments
Los Angeles County Employees Retirement Association

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Los Angeles County Employees Retirement Association (LACERA), which comprise the statement of fiduciary net position as of June 30, 2018 and the related statement of changes in net position for the year then ended, and the related notes to the financial statements and have issued our report thereon dated October 12, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered LACERA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of LACERA's internal control. Accordingly, we do not express an opinion on the effectiveness of LACERA's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the LACERA's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether LACERA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.



To Management and the Board of Retirement,
and Board of Investments
Los Angeles County Employees Retirement Association

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of LACERA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering LACERA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Plante & Moran, PLLC

October 12, 2018



plante moran

Los Angeles County
Employees Retirement
Association

Audit Presentation

December 12, 2018



Introductions



Jean Young, CPA
Partner



Ryan Byrne, CPA
Senior Manager



Agenda

- ✓ Audit timeline
- ✓ Audit areas of focus
- ✓ Results of the audit
 - ✓ Audit opinion letter
 - ✓ Required communications
- ✓ Upcoming pronouncements
- ✓ Questions



Audit timeline

Our involvement began immediately upon contract inception.

- February/March 2018 – Initiated planning procedures
- May/June 2018 – Performed interim procedures, including on-site visit and testing
- July/August 2018 – Performed additional planning and audit procedures remotely
- September/October 2018 – On-site testing and review of financial statements
- October 12, 2018 – Timely issuance of audit opinion



Audit areas of focus

The ultimate goal of the audit is the expression of an opinion on LACERA's financial statements.

- Implementation of GASB 85
- Investment valuations
- Census data testing, particularly at the County level
- Actuarial assumptions and actuarial calculations
- Accuracy of benefit calculations and related payments, including disability payments
- Financial reporting



Results of the audit

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the fiduciary net position of Los Angeles County Employees Retirement Association as of June 30, 2018 and 2017 and the changes in fiduciary net position thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

- ✓ Unmodified Opinion
- ✓ Emphasis of Matter
 - ✓ Valuation of Harder to Value Investments



Results of the audit

Required Communication with Those Charged With Governance

- GASB 85 was adopted during the current year
- Management estimates included within the financial statements
 - Harder to value investments – based upon information obtained from various sources
 - Actuarial assumptions
 - Long-term expected rate of return and discount rate (Pension Plan and OPEB Trust)
 - Mortality assumptions (Pension Plan and OPEB Trust)
 - Healthcare cost trend rate (OPEB Trust)
- No difficulties or disagreements with management in performing the audit
- No corrected or uncorrected misstatements



Upcoming pronouncements

Below is a timeline of upcoming pronouncements that will impact LACERA (or its employers):

- GASB Statement No. 84 – Fiduciary Activities – effective for the 6/30/20 fiscal year
 - This Statement establishes criteria for identifying fiduciary activities, and will require change reporting and add a statement of changes in fiduciary net position related to the OPEB Agency Fund. LACERA will need to assess the new definition of a custodial fund liability under the standard.
- GASB Statement No. 87 – Leases – effective for the 6/30/21 fiscal year.
 - This Statement will require recognition of certain lease assets and liabilities for leases that previously were classified as operating leases



Questions?



Thank you!

For more information contact:

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November 30, 2018

TO: Each Member
2018 Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Chief Audit Executive

FOR: December 2018 Audit Committee Meeting

SUBJECT: FY 2017-2018 Additional Audit Reports

Enclosed for your information are the audit reports related to the GASB 68 disclosure report, *Accounting and Financial Reporting for Pensions*, and GASB 75 disclosure report, *Accounting and Financial Reporting for Post-Employment Benefits Other than Pensions*, for reporting year 2018. These audits were performed by our external auditors, Plante & Moran, PLLC

Plante Moran will be at the December 12, 2018 Audit Committee meeting to present a summary of their work performed during reporting year 2018.

Please let me know if you have any questions.

RB/lc/cl

Enclosures

Los Angeles County Employees Retirement Association

**Schedule of Employer Allocations and
Schedule of Pension Amounts by Employer
As of and for the Year Ended June 30, 2017
With Independent Auditor's Report**

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Independent Auditor's Report

To the Boards of Retirement and Investments
Los Angeles County Employees Retirement Association

We have audited the accompanying schedule of employer allocations of Los Angeles County Employees Retirement Association (LACERA) as of and for the year ended June 30, 2017 and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources (excluding contributions made subsequent to June 30, 2017), total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of LACERA as of and for the year ended June 30, 2017 and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

To the Boards of Retirement and Investments
Los Angeles County Employees Retirement Association

Opinions

In our opinion, the schedules referred to above presents fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities in the Los Angeles County Employees Retirement Association defined benefit pension plan as of and for the year ended June 30, 2017 in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As explained in Note (2) to the financial statements, the financial statements include investments that are part of the calculation of the net pension liability, which are valued at \$12,628,199,000 (24 percent of net position) at June 30, 2017, whose fair values have been estimated by management in the absence of readily determinable market values. Given that publicly listed prices are not available, management uses alternative sources of information, including audited financial statements, unaudited interim reports, independent appraisals, and other similar sources of information, to determine the fair value of investments. Our opinion is not modified with respect to this matter.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of LACERA as of and for the year ended June 30, 2017, and our report thereon, dated October 12, 2017, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of LACERA's management, the Boards of Retirement and Investments, LACERA employers, and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Plante & Moran, PLLC

Southfield, Michigan
July 17, 2018

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION
 Defined Benefit Pension Plan
 Schedule of Employer Allocations
 As of and for the year ended June 30, 2017

Amounts rounded to nearest thousand

Measurement Date June 30, 2017					
Employer	Actual Employer Contribution (1)	Employer Contribution Percentage	Adjusted Contribution Percentage (2)	Employer Proportion	Employer Net Pension Liability
Los Angeles County	\$ 1,300,719,000	96.11816%	96.11894%	96.11894%	\$ 10,849,931,000
Los Angeles County Superior Court (3)	52,430,000	3.87438%	3.87441%	3.87441%	437,344,000
South Coast Air Quality Management District	11,000	0.00081%	0.00000%	0.00000%	-
Los Angeles County Office of Education	-	0.00000%	0.00000%	0.00000%	-
Local Agency Formation Commission	84,000	0.00621%	0.00621%	0.00621%	701,000
Little Lake Cemetery District	6,000	0.00044%	0.00044%	0.00044%	50,000
Total	\$ 1,353,250,000	100%	100%	100%	\$ 11,288,026,000

- (1) Employer contributions exclude any pickup contributions and include contributions from the Metropolitan Transportation Authority (MTA). Our understanding is that the MTA is a nonemployer contributing entity that is not in a special funding situation. We have considered contributions from the MTA as a county contribution in the above table.
- (2) The proportion of total contributions for the fiscal year ended June 30, 2017 has been adjusted to reflect the closed status of South Coast Air Quality Management District (SCAQMD). SCAQMD has one active employee, and the annual required contribution is expected to be reduced to zero in the near future. SCAQMD's employer contribution percentage has been reallocated to the other participating employers in proportion.
- (3) Employer contributions include the County Contribution Credit Reserve amount of \$21,891,000.

See accompanying Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer.

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Schedule of Pension Amounts by Employer

As of and for the year ended June 30, 2017

Amounts rounded to nearest thousand

Employer Name	Deferred Outflows of Resources					Deferred Inflows of Resources			Pension Expense Excluding That Attributable to Employer-Paid Member Contributions		
	Net Pension Liability	Net Differences between Projected and Actual Investment Earnings	Changes of Assumptions	Changes in Proportion and Differences between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences between Expected and Actual Economic Experience	Changes in Proportion and Differences between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences between Employer Contributions and Proportionate Share of Contributions	Total Pension Expense Excluding That Attributable to Employer-Paid Member Contributions
Los Angeles County	\$ 10,849,931,000	\$ 34,706,000	\$ 2,590,314,000	\$ 47,051,000	\$ 2,672,071,000	\$ 797,165,000	\$ -	\$ 797,165,000	\$ 1,393,314,000	\$ 9,079,000	\$ 1,402,393,000
Los Angeles County Superior Court	437,344,000	1,399,000	104,412,000	-	105,811,000	32,133,000	47,021,000	79,154,000	56,162,000	(9,084,000)	47,078,000
South Coast Air Quality Management District	-	-	-	33,000	33,000	-	-	-	-	7,000	7,000
Los Angeles County Office of Education	-	-	-	-	-	-	-	-	-	-	-
Local Agency Formation Commission	701,000	2,000	167,000	119,000	288,000	52,000	214,000	266,000	90,000	(8,000)	82,000
Little Lake Cemetery District	50,000	-	12,000	32,000	44,000	4,000	-	4,000	6,000	6,000	12,000
Total for All Employers	\$ 11,288,026,000	\$ 36,107,000	\$ 2,694,905,000	\$ 47,235,000	\$ 2,778,247,000	\$ 829,354,000	\$ 47,235,000	\$ 876,589,000	\$ 1,449,572,000	\$ -	\$ 1,449,572,000

See accompanying Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer.

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Notes to Schedule of Employer Allocations and

Schedule of Pension Amounts by Employer

As of and for the year ended June 30, 2017

Amounts rounded to nearest thousand

(1) Plan Description

Los Angeles County Employees Retirement Association (LACERA) is a cost-sharing multiple-employer defined benefit pension plan for Los Angeles County and its affiliated Superior Court, plus four outside districts: Little Lake Cemetery District, Local Agency Formation Commission, Los Angeles County Office of Education, and South Coast Air Quality Management District. For additional information, please refer to the Comprehensive Annual Financial Report, which can be found on LACERA's website at www.LACERA.com.

Plan benefits are specified in and provided to members based on the California Constitution, the County Employees Retirement Law of 1937 (CERL), the California Public Employees' Pension Reform Act (PEPRA) and the regulations, procedures, and policies adopted by the LACERA Board of Retirement and the LACERA Board of Investments. The Los Angeles County (County) Board of Supervisors may also adopt resolutions, as permitted by CERL, which may affect the benefits of LACERA members. Benefits are provided to members of the plan based on the provisions of PEPRA.

(2) Basis of Presentation and Significant Accounting Principles

The Schedule of Employer Allocations and Schedule of Pension Amounts by Employer presents amounts that are elements of the financial statements of the plan or of its participating employers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of the plan or its participating employers. The accompanying schedules were prepared in accordance with the full accrual basis of accounting under accounting principles generally accepted in the United States of America. Revenue is recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Member and employer contributions are recognized in the period in which the contributions are due, pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of each benefit plan.

The preparation of these schedules requires management of LACERA to make a number of estimates and assumptions relating to the reported amounts. Due to the inherent nature of these estimates, actual results could differ from those estimates.

The plan net position, which is part of the calculation of the net pension liability (per Note (4)), includes investments valued at \$12,628,199,000 (24 percent of net position) at June 30, 2017, whose fair values have been estimated by management in the absence of readily determinable market values. Given that publicly listed prices are not available, management uses alternative sources of information, including audited financial statements, unaudited interim reports, independent appraisals, and other similar sources of information, to determine the fair value of investments.

(3) Allocation Methodology

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, requires participating employers in the plan to recognize their proportionate share of the collective net pension liability, collective deferred outflows of resources, collective deferred inflows of resources, and collective pension expense. The employer allocation percentages presented in the Schedule of Employer Allocations and applied to amounts presented in the Schedule of Pension Amounts by Employer are based on the ratio of each employer's contribution to the plan's total employer contributions during the measurement period July 1, 2016 through June 30, 2017.

LOS ANGELES COUNTY EMPLOYEE RETIREMENT ASSOCIATION

Notes to Schedule of Employer Allocations and

Schedule of Pension Amounts by Employer

As of and for the year ended June 30, 2017

(3) Allocation Methodology (Continued)

A reconciliation of total contributions presented in the Schedule of Employer Allocations and additions from employer contributions for the plan pursuant to the plan's Statement of Changes in Fiduciary Net Position for the year ended June 30, 2017 is as follows:

Total contributions per Schedule of Employer Allocations	\$ 1,353,249,817
Reconciling items:	
Less: County Contribution Credit Reserve	<u>21,890,817</u>
Total contributions per LACERA audited financial statements	\$ <u>1,331,359,000</u>

During fiscal year 2017, the Superior Court fully utilized its proportionate share of the County Contribution Credit Reserve totaling approximately \$21.9 million to pay for the 10 months of its employer contributions due to LACERA.

(4) Collective Net Pension Liability

The components of the collective net pension liability of the participating employers at June 30, 2017 are as follows:

Total pension liability	\$ 64,031,677,000
Plan fiduciary net position	<u>(52,743,651,000)</u>
Net pension liability	<u>\$11,288,026,000</u>

Actuarial Assumptions

The collective net pension liability for the June 30, 2017 measurement date was determined by an actuarial valuation as of June 30, 2016, with updated procedures used to roll forward the total pension liability to June 30, 2017. This actuarial valuation used the following actuarial assumptions:

Inflation	2.75 percent
General wage growth	3.25 percent
Projected salary increases	3.51 percent to 11.51 percent
Projected COLAs	Postretirement benefit increases of either 2.75 percent or 2.0 percent per year (a prorated portion for Plan E) are assumed. The LACERA funding policy calls for the inclusion of the STAR (Supplemental Targeted Adjustment for Retirees) Reserve in the calculation of valuation assets for funding purposes, with no corresponding liability. For the total pension liability, STAR COLA benefits are assumed to be substantively automatic at the 80 percent purchasing power level until the STAR Reserve is projected to be insufficient to pay further STAR benefits. This roll-forward calculation includes a future liability for STAR COLA benefits.
Investment rate of return	7.38 percent, net of pension plan investment expense, including inflation

LOS ANGELES COUNTY EMPLOYEE RETIREMENT ASSOCIATION

Notes to Schedule of Employer Allocations and

Schedule of Pension Amounts by Employer

As of and for the year ended June 30, 2017

(4) Collective Net Pension Liability (Continued)

Actuarial Assumptions (Continued)

Mortality rates were based on the RP-2014 Healthy and Disabled Annuitant mortality tables and included projection for expected future mortality improvement using the MP-2014 Ultimate Projection Scale.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2013 to June 30, 2016.

Long-term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table. The asset class return assumptions are presented on a real basis, after the effects of inflation, and all assumptions incorporate a base inflation rate assumption of 2.75 percent.

Asset Class	Target Allocations	2017 Weighted-average Long-term Expected Real Rate of Return
Global Equity	41.4%	5.7%
Fixed Income	27.8%	2.6%
Real Estate	11.0%	4.6%
Private Equity	10.0%	6.9%
Commodities	2.8%	1.6%
Hedge Funds	5.0%	3.1%
Other Opportunities	0.0%	4.5%
Cash	2.0%	-0.2%

Single Discount Rate

The discount rate used to measure the total pension liability was 7.38 percent. This rate reflects the long-term assumed rate of return on assets for funding purposes of 7.25 percent, net of all expenses, increased by .13 percent, gross of administrative expenses.

LOS ANGELES COUNTY EMPLOYEE RETIREMENT ASSOCIATION

Notes to Schedule of Employer Allocations and

Schedule of Pension Amounts by Employer

As of and for the year ended June 30, 2017

(4) Collective Net Pension Liability (Continued)

The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the plan's fiduciary net position was projected to be sufficient to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Collective Net Pension Liability to Changes in the Discount Rate

The following presents the collective net pension liability calculated using a discount rate of 7.38 percent, as well as what the collective net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.38 percent) or 1 percentage point higher (8.38 percent) than the current rate:

	1% Decrease (6.38%)	Current Discount Rate (7.38%)	1% Increase (8.38%)
Collective net pension liability	\$19,963,395,000	\$ 11,288,026,000	\$ 4,116,171,000

(5) Collective Deferred Outflows of Resources and Deferred Inflows of Resources

The following presents a summary of changes in the collective deferred outflows of resources and deferred inflows of resources (excluding employer specific amounts) for the year ended June 30, 2017:

	Year of Deferral	Amortization Period (years)	Beginning of Year Balance	Additions	Deductions	End of Year Balance
Deferred Outflow of Resources:						
Difference between projected and actual earnings on pension plan investments	2016	5	\$ 2,881,560,000	\$ -	\$ 720,390,000	\$ 2,161,170,000
	2015	5	970,117,000	-	323,372,000	646,745,000
Subtotal			<u>3,851,677,000</u>	-	<u>1,043,762,000</u>	<u>2,807,915,000</u>
Changes of assumptions	2017	8	-	3,079,892,000	384,987,000	2,694,905,000
Subtotal			-	<u>3,079,892,000</u>	<u>384,987,000</u>	<u>2,694,905,000</u>
Total Deferred Outflows of Resources			<u>\$ 3,851,677,000</u>	<u>\$ 3,079,892,000</u>	<u>\$ 1,428,749,000</u>	<u>\$ 5,502,820,000</u>
Deferred Inflows of Resources						
Difference between expected and actual experience	2017	8	\$ -	\$ 47,506,000	\$ 5,938,000	\$ 41,568,000
	2016	8	382,409,000	-	54,630,000	327,779,000
	2015	8	552,008,000	-	92,001,000	460,007,000
Subtotal			<u>934,417,000</u>	<u>47,506,000</u>	<u>152,569,000</u>	<u>829,354,000</u>
Difference between projected and actual earnings on pension plan investments	2017	5	-	2,524,979,000	504,996,000	2,019,983,000
	2014	5	1,503,652,000	-	751,827,000	751,825,000
Subtotal			<u>1,503,652,000</u>	<u>2,524,979,000</u>	<u>1,256,823,000</u>	<u>2,771,808,000</u>
Total Deferred Inflows of Resources			<u>\$ 2,438,069,000</u>	<u>\$ 2,572,485,000</u>	<u>\$ 1,409,392,000</u>	<u>\$ 3,601,162,000</u>

LOS ANGELES COUNTY EMPLOYEE RETIREMENT ASSOCIATION

Notes to Schedule of Employer Allocations and
 Schedule of Pension Amounts by Employer
 As of and for the year ended June 30, 2017

(5) Collective Deferred Outflows of Resources and Deferred Inflows of Resources (Continued)

Amounts reported as deferred outflows of resources and deferred inflows of resources (excluding employer specific amounts) related to pensions will be recognized (amortized) in pension expense as follows:

<u>Years Ending June 30</u>	
2018	\$ 19,359,000
2019	771,185,000
2020	447,812,000
2021	(272,577,000)
2022	232,416,000
Thereafter	<u>703,463,000</u>
Total	\$ <u>1,901,658,000</u>

Changes in Proportion

The previous amounts do not include employer specific deferred outflows of resources and deferred inflows of resources related to changes in proportion. These amounts should be recognized (amortized) by each employer over the average of the expected remaining service lives of all plan members, which is eight years for the 2017, 2016, 2015, and 2014 amounts.

(6) Pension Expense

The components of allocable pension expense for the year ended June 30, 2017 (excluding employer specific pension expense for changes in proportion) are as follows:

Service cost	\$ 1,106,755,000
Interest on the total pension liability	4,393,712,000
Member contributions	(526,579,000)
Projected earnings of plan investments	(3,604,321,000)
Net miscellaneous income	(6,182,000)
Administrative expense	66,830,000
(Amortization) recognition of deferred outflows and inflows of resources:	
Difference between expected and actual experience	(152,569,000)
Difference between projected and actual earnings on pension plan investments	(213,061,000)
Changes of assumptions	<u>384,987,000</u>
Total	<u><u>\$ 1,449,572,000</u></u>

Los Angeles County Employees Retirement Association

GASB 75 Disclosure Report:
Schedule of Employer Allocations as of June 30, 2017 and 2016
And the
Schedule of OPEB Amounts by Employer
As of and for the Year Ended June 30, 2017
With Independent Auditor's Report

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Independent Auditor's Report

To the Boards of Retirement and Investments
Los Angeles County Employees Retirement Association

We have audited the accompanying schedule of other postemployment benefits (OPEB) employer allocations of Los Angeles County Employees Retirement Association (LACERA) for the years ended June 30, 2017 and 2016 and the related notes. We have also audited the total for all entities in the columns titled net OPEB liability as of June 30, 2017 and 2016; the total deferred outflows of resources (excluding contributions made subsequent to June 30, 2017), total deferred inflows of resources, and total OPEB expense (specified column totals) as of and for the year ended June 30, 2017 included in the accompanying schedule of OPEB amounts by employer of LACERA; and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column totals included in the schedule of OPEB amounts by employer based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

To the Boards of Retirement and Investments
Los Angeles County Employees Retirement Association

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net OPEB liability as of June 30, 2017 and 2016 and the total deferred outflows of resources (excluding contributions made subsequent to June 30, 2017), total deferred inflows of resources, and total OPEB expense as of and for the year ended June 30, 2017 for the total of all participating entities for LACERA defined benefit OPEB plan in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of LACERA as of and for the year ended June 30, 2017, and our report thereon, dated October 12, 2017, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of LACERA management, Boards of Retirement and Investments, LACERA employers, and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Plante & Moran, PLLC

August 14, 2018

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Defined Benefit OPEB Plan

Schedule of Employer Allocations

As of June 30, 2017

Amounts rounded to nearest thousand

Employer	Total OPEB Liability (TOL)	Fiduciary Net Position (FNP)	TOL - FNP	Employer Proportion
Los Angeles County	\$ 25,947,268,000	\$ 703,860,000	\$ 25,243,408,000	95.36901%
South Coast Air Quality Management District (County paid)	3,216,000	-	3,216,000	0.01215%
Los Angeles County Office of Education (County paid)	470,000	-	470,000	0.00178%
Local Agency Formation Commission (County paid)	1,380,000	-	1,380,000	0.00521%
Little Lake Cemetery District (County paid)	632,000	-	632,000	0.00239%
Subtotal	25,952,966,000	703,860,000	25,249,106,000	95.39054%
Los Angeles County Superior Court	1,172,941,000	36,347,000	1,136,594,000	4.29403%
Los Angeles County Employees Retirement Association	79,965,000	2,676,000	77,289,000	0.29200%
South Coast Air Quality Management District	3,533,000	-	3,533,000	0.01335%
Los Angeles County Office of Education	1,729,000	-	1,729,000	0.00653%
Local Agency Formation Commission	939,000	-	939,000	0.00355%
Little Lake Cemetery District	-	-	-	0.00000%
Total	\$ 27,212,073,000	\$ 742,883,000	\$ 26,469,190,000	100.00000%

See accompanying notes to the Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer.

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Defined Benefit OPEB Plan

Schedule of Employer Allocations

As of June 30, 2016

Amounts rounded to nearest thousand

Employer	Total OPEB Liability (TOL)	Fiduciary Net Position (FNP)	TOL - FNP	Employer Proportion
Los Angeles County	\$ 25,947,751,000	\$ 550,731,000	\$ 25,397,020,000	95.27898%
South Coast Air Quality Management District (County paid)	3,689,000	-	3,689,000	0.01384%
Los Angeles County Office of Education (County paid)	497,000	-	497,000	0.00186%
Local Agency Formation Commission (County paid)	1,405,000	-	1,405,000	0.00527%
Little Lake Cemetery District (County paid)	656,000	-	656,000	0.00246%
Subtotal	25,953,998,000	550,731,000	25,403,267,000	95.30241%
Los Angeles County Superior Court	1,176,406,000	7,900,000	1,168,506,000	4.38375%
Los Angeles County Employees Retirement Association	79,267,000	2,119,000	77,148,000	0.28943%
South Coast Air Quality Management District	3,722,000	-	3,722,000	0.01396%
Los Angeles County Office of Education	1,829,000	-	1,829,000	0.00686%
Local Agency Formation Commission	956,000	-	956,000	0.00359%
Little Lake Cemetery District	-	-	-	0.00000%
Total	\$ 27,216,178,000	\$ 560,750,000	\$ 26,655,428,000	100.00000%

See accompanying notes to the Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer.

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION
Schedule of OPEB Amounts by Employer

Amounts rounded to nearest thousand

Employer Name	As of June 30, 2016	As of June 30, 2017							For the Year Ended June 30, 2017		
	Net OPEB Liability	Deferred Outflows of Resources		Total Deferred Outflows of Resources	Deferred Inflows of Resources			OPEB Expense			
		Net OPEB Liability	Changes in Proportion		Differences between Projected and Actual Plan Investment Earnings	Changes of Assumptions	Changes in Proportion	Total Deferred Inflows of Resources	Proportionate Share of Allocable OPEB Expense	Net Amortization of Deferred Amounts from Changes in Proportion	Total OPEB Expense
Los Angeles County	\$ 25,397,019,000	\$ 25,243,404,000	\$ 21,332,000	\$ 21,332,000	\$ 41,143,000	\$ 1,491,380,000	\$ -	\$ 1,532,523,000	\$ 1,970,404,000	\$ 2,666,000	\$ 1,973,070,000
South Coast Air Quality Management District (County paid)	3,689,000	3,216,000	-	-	5,000	190,000	400,000	595,000	251,000	(50,000)	201,000
Los Angeles County Office of Education (County paid)	496,000	471,000	-	-	1,000	28,000	19,000	48,000	37,000	(2,000)	35,000
Local Agency Formation Commission (County paid)	1,405,000	1,379,000	-	-	2,000	81,000	14,000	97,000	108,000	(2,000)	106,000
Little Lake Cemetery District (County paid)	656,000	633,000	-	-	1,000	37,000	17,000	55,000	49,000	(2,000)	47,000
Subtotal	\$ 25,403,265,000	\$ 25,249,103,000	\$ 21,332,000	\$ 21,332,000	\$ 41,152,000	\$ 1,491,716,000	\$ 450,000	\$ 1,533,318,000	\$ 1,970,849,000	\$ 2,610,000	\$ 1,973,459,000
Los Angeles County Superior Court	1,168,507,000	1,136,595,000	-	-	1,853,000	67,150,000	21,258,000	90,261,000	88,718,000	(2,657,000)	86,061,000
Los Angeles County Employees Retirement Association	77,149,000	77,290,000	609,000	609,000	126,000	4,566,000	-	4,692,000	6,033,000	76,000	6,109,000
South Coast Air Quality Management District	3,721,000	3,534,000	-	-	6,000	209,000	145,000	360,000	276,000	(18,000)	258,000
Los Angeles County Office of Education	1,829,000	1,728,000	-	-	3,000	102,000	78,000	183,000	135,000	(10,000)	125,000
Local Agency Formation Commission	957,000	940,000	-	-	2,000	56,000	10,000	68,000	73,000	(1,000)	72,000
Little Lake Cemetery District	-	-	-	-	-	-	-	-	-	-	-
Total for All Employers	\$ 26,655,428,000	\$ 26,469,190,000	\$ 21,941,000	\$ 21,941,000	\$ 43,142,000	\$ 1,563,799,000	\$ 21,941,000	\$ 1,628,882,000	\$ 2,066,084,000	\$ -	\$ 2,066,084,000

See accompanying notes to the Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer.

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Notes to Schedule of Employer Allocations and

Schedule of OPEB Amounts by Employer

As of and for the year ended June 30, 2017

Amounts rounded to nearest thousand

(1) Plan Description

LACERA administers the Los Angeles County Other Post-Employment Benefits (OPEB) Program or Retiree Healthcare Program, a cost-sharing multiple-employer defined benefit plan, which is used to provide medical, dental, vision, and death benefits for those LACERA members eligible for retirement benefits. The participating employers include the County, its affiliated Superior Court, Los Angeles County Employees Retirement Association, and four Outside Districts. The Outside Districts include the following: Little Lake Cemetery District, Local Agency Formation Commission, Los Angeles County Office of Education, and the South Coast Air Quality Management District.

In April 1982, the County adopted an ordinance pursuant to the County Employees Retirement Law of 1937 (CERL) that provided for a retiree health insurance program and death/burial benefits for retired employees and their eligible dependents. In 1982, the County and LACERA entered into an Agreement whereby LACERA would administer the program subject to the terms and conditions of the Agreement. In 1994, the County amended the Agreement to continue to support LACERA's retiree insurance benefits program, regardless of the status of the active member insurance.

In June 2014, the LACERA Board of Retirement approved the County's request to modify the agreement to create a new retiree healthcare benefit program in order to lower its costs. Structurally, the County segregated all current retirees and current employees into LACERA-Administered Retiree Healthcare Benefits Program (Tier 1) and placed all employees hired after June 30, 2014 into Los Angeles County Tier 2 Retiree Healthcare Benefits Program (Tier 2).

A significant difference included in this modification concerns LACERA's administrative responsibility for the Retiree Healthcare Program. Under Tier 1, LACERA will continue its agreed-upon role as Program Administrator for retiree healthcare benefits, as governed by the 1982 Agreement. Under Tier 2, LACERA is responsible for administering this program for as long as the County desires. The County may, at any time, choose another organization to administer Tier 2.

On June 17, 2014, the Los Angeles County Board of Supervisors adopted changes to Los Angeles County Code Title 5 – Personnel, which established the Benefit Provisions for Tier 2.

(2) Basis of Presentation and Significant Accounting Policies

The Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer present amounts that are elements of the financial statements of the Plan or of its participating employers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of the Plan or its participating employers. The accompanying Schedules were prepared in accordance with the full accrual basis of accounting under accounting principles generally accepted in the United States of America. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Member and employer contributions are recognized in the period in which the contributions are due, pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of each benefit plan.

(2) Basis of Presentation and Significant Accounting Policies (Continued)

The preparation of these schedules requires management of the LACERA to make a number of estimates and assumptions relating to the reported amounts. Due to the inherent nature of these estimates, actual results could differ from those estimates.

In March 2010, President Obama signed into law the Affordable Care Act (the "ACA"). The ACA impacts the County's future healthcare liabilities. Estimated ACA fees are included in the OPEB liabilities. As potential impacts become clearer, they will be reflected in the OPEB assumptions. However, as a "retiree only" group plan, LACERA is exempt from many of the provisions implemented thus far, including these significant provisions:

- Dependent Coverage for Adult Children up to Age 26
- Elimination of Lifetime Limits
- No Cost-Sharing for Approved Preventive Services

Other provisions of the ACA may or may not impact the Retiree Healthcare Benefits Program as these provisions and any governing regulations are clarified and implemented.

The ACA originally contained provisions to assess an excise tax in 2018 on employer-provided health insurance benefits that the ACA determined to be an excess benefit. The Consolidated Appropriations Act of 2016 was signed into law in December 2015, delaying the assessment of the excise tax until 2020. While the tax was originally non-tax deductible, the December 2015 changes made it tax deductible for employers who pay it.

Milliman estimated the impact of the excise tax on the projection of benefits in the measurement of the total OPEB liability under GASB 74 and GASB 75.

(3) Allocation Methodology

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, requires participating employers in the Plan to recognize their proportionate share of the collective net OPEB liability, collective deferred outflows of resources, collective deferred inflows of resources, and collective OPEB expense.

The employer allocation percentages presented in the Schedule of Employer Allocations and applied to amounts presented in the Schedule of OPEB Amounts by Employer are driven by the actuary's calculation of the total OPEB liability by employer offset by the actual net position each participating employer has in the OPEB Trust. The County is currently paying a portion of the OPEB expenses for the outside districts. The proportionate share related to the amounts being paid by the County for these outside districts are shown with the notation "County paid" in parenthesis on the Schedules. Each employer should determine whether a special funding situation exists related to these payments.

(4) Collective Net OPEB Liability

The components of the collective net OPEB liability of the participating employers at June 30, 2017 and 2016 are as follows:

	<u>June 30, 2017</u>	<u>June 30, 2016</u>
Total OPEB liability	\$27,212,073,000	\$27,216,178,000
Plan fiduciary net position	<u>(742,883,000)</u>	<u>(560,750,000)</u>
Net OPEB liability	<u>\$ 26,469,190,000</u>	<u>\$ 26,655,428,000</u>

(4) Collective Net OPEB Liability (Continued)

Actuarial Assumptions

The collective total OPEB liability for the June 30, 2017 measurement date was determined by an actuarial valuation as of June 30, 2016, with update procedures used to roll forward the total OPEB liability to June 30, 2017. This actuarial valuation used the following actuarial assumptions:

June 30, 2017:

Inflation	2.75%
General wage growth	3.25%
Investment rate of return	6.66%, net of OPEB plan investment expense, including inflation

June 30, 2016:

Inflation	2.75%
General wage growth	3.25%
Investment rate of return	6.72%, net of OPEB plan investment expense, including inflation

Mortality rates were based on the RP-2014 Healthy and Disabled Annuitant mortality tables, and including projection for expected future mortality improvement using the MP-2014 Ultimate Projection Scale.

Healthcare Cost Trend Rates:

	FY 2017 to <u>FY 2018</u>	FY 2018 to <u>FY 2019</u>	<u>Ultimate</u>
LACERA Medical Under 65	4.40%	6.70%	4.50%
LACERA Medical Over 65	4.60%	6.60%	4.50%
Part B Premiums	6.80%	7.70%	4.35%
Dental/Vision	2.00%	3.30%	3.70%
Weighted-average Trend	4.57%	6.50%	4.47%

The OPEB liability figures include the Excise Tax. This is based on the requirements of the Affordable Care Act (ACA) and the Consolidated Appropriations Act of 2016.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period from July 1, 2013 to June 30, 2016.

Long-term Expected Rate of Return

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table. The asset class return assumptions are presented on a real basis, after the effects of inflation, and all assumptions incorporate a base inflation rate assumption of 2.75 percent. The Expected Geometric Nominal Return (30 years) as of June 30, 2016 was 6.72%.

(4) **Collective Net OPEB Liability (Continued)**

June 30, 2017

Asset Class	Target Allocations	Expected Geometric Nominal Return (30 years)	Expected Geometric Real Return (30 years)
Cash	11.20%	3.05%	0.31%
Short-term U.S. Bonds	7.28%	3.90%	1.14%
U.S. Equity	44.02%	6.44%	3.61%
Foreign Developed Equity	18.75%	6.87%	4.02%
Emerging Markets Equity	18.75%	7.68%	4.82%
Total	100.00%	6.66%	3.81%

Discount Rate

GASB Statement No. 74 requires determination of whether the OPEB Trust's Fiduciary Net Position is projected to be sufficient to make projected benefit payments. The discount rate was developed using a depletion date projection, which included the following assumptions:

- The employers contribute the amount necessary to pay the current year benefits and the planned contribution amounts to the OPEB Trust, as described in governing body approved funding documents.
- Employees are not required to make contributions.
- Benefit payments are projected based on the actuarial assumptions and the current plan provisions.
- Members are assumed to terminate, retire, become disabled, or die according to the actuarial assumptions used for the July 1, 2016 OPEB valuation.
- All cash flows are assumed to occur on average halfway through the year.
- The employers' funding policies used to determine actuarially determined contributions do not change.
- The calculations include the Affordable Care Act Excise Tax in the liabilities and funding policies.
- The plan provisions do not change except if any material future changes have been agreed upon as of the measurement date.

Based on these assumptions, the OPEB Trust's Fiduciary Net Position was projected to not be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate incorporates a municipal bond rate based on the 20-year Bond Buyer Go index (municipal bond rate) as of June 2017, which was 3.58 percent as of June 30, 2017 and 2.85 percent as of June 30, 2016. For 2017, the long-term expected rate of return was applied to projected benefit payments from 2017 to 2052 for 2017, and through 2056 for the calculations as of June 30, 2016; the municipal bond rate was applied to the remaining periods. The resultant blended discount rate used to measure the total OPEB liability as of June 30, 2017 was 4.69 percent and 4.34 percent as of June 30, 2016.

(4) Collective Net OPEB Liability (Continued)

Sensitivity of the Collective Net OPEB Liability to Changes in the Discount Rate

The following presents the collective net OPEB liability calculated using a discount rate of 4.69%, as well as what the collective net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate:

	1% Decrease (3.69%)	Current Discount Rate (4.69%)	1% Increase (5.69%)
Collective net OPEB liability	\$ 31,931,159	\$ 26,469,190	\$ 22,190,501

Sensitivity Analysis – Changes in Healthcare Cost Trend Rates

In accordance with GASB Statement No. 74, sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rates must be reported. The following presents the Net OPEB Liability, calculated using the healthcare cost trend rates as reported on the July 1, 2016 OPEB Actuarial Valuation Health Cost Trend Assumptions with Excise Tax table, as well as what the Net OPEB Liability would be if it were calculated using the healthcare cost trend rates that are 1 percentage point lower or 1 percentage point higher than the current rates:

	1% Decrease	Current Healthcare Cost Trend Rates	1% Increase
Collective net OPEB liability	\$ 21,421,059,000	\$ 26,469,190,000	\$33,229,290,000

(5) Collective Deferred Outflows of Resources and Deferred Inflows of Resources

The following presents a summary of changes in the collective deferred outflows of resources and deferred inflows of resources (excluding employer specific amounts, including contributions subsequent to the measurement date) for the year ended June 30, 2017:

	Year of Deferral	Amortization Period (years)	Beginning of Year Balance	Additions	Deductions	End of Year balance
Deferred Inflows of Resources						
Difference between projected and actual earnings on OPEB plan investments	2017	5	\$ -	\$ 53,927,000	\$ 10,785,000	\$ 43,142,000
Changes of assumptions	2017	9	-	1,759,274,000	195,475,000	1,563,799,000
Total Deferred Inflows of Resources			<u>\$ -</u>	<u>\$ 1,813,201,000</u>	<u>\$ 206,260,000</u>	<u>\$ 1,606,941,000</u>

(5) Collective Deferred Outflows of Resources and Deferred Inflows of Resources (Continued)

Amounts reported as deferred outflows of resources and deferred inflows of resources (excluding employer specific amounts) related to OPEB will be recognized (amortized) in OPEB expense as follows:

	<u>Year ending June 30:</u>
2018	(206,260,000)
2019	(206,260,000)
2020	(206,260,000)
2021	(206,260,000)
2022	(195,475,000)
Thereafter	<u>(586,426,000)</u>
Total	\$ <u>(1,606,941,000)</u>

Changes in Proportion

The previous amounts do not include employer-specific deferred outflows of resources and deferred inflows of resources related to changes in proportion. These amounts should be recognized (amortized) by each employer over the average of the expected remaining service lives of all plan members, which is nine years for the 2017 amounts.

(6) OPEB Expense

The components of allocable OPEB expense for the year ended June 30, 2017 (excluding employer specific OPEB expense for changes in proportion) are as follows:

Service cost	\$ 1,087,211,000
Interest on the total OPEB liability	1,216,588,000
Projected earnings of plan investments	(40,579,000)
Administrative expense	9,124,000
Recognition (amortization) of deferred outflows and inflows of resources:	
Difference between projected and actual earnings on OPEB plan investments	(10,785,000)
Changes of assumptions	<u>(195,475,000)</u>
Total	<u>\$ 2,066,084,000</u>

2018

Audit Plan Status Report

FYE 2019 Plan Status as of November 6, 2018

Submitted to the Audit Committee
December 12, 2018

In This Report

WORK COMPLETED & IN PROGRESS.....	3
ONGOING TESTING, MONITORING & CONSULTING	9





Los Angeles County Employees Retirement Association

AUDIT COMMITTEE

of the Board of Retirement & Board of Investments

Michael S. Schneider - Chair

Vivian Gray – Vice Chair

Herman Santos - Secretary

David Green

Shawn R. Kehoe

Joseph Kelly

INTERNAL AUDIT DIVISION

Richard Bendall, CPA, CISA Chief Audit Executive

Leisha Collins, CPA Principal Internal Auditor

Christina Logan, CPA, CFE Senior Internal Auditor

George Lunde, CIA, CISA Senior Internal Auditor

Kathryn Ton, CPA, CFE Senior Internal Auditor

Gabriel Tafoya, CISA, ACDA Senior Internal Auditor

Nathan Amick Internal Auditor

Perla Gonzalez Senior Secretary

AUDIT COMMITTEE CONSULTANT

Rick Wentzel, CPA

EXECUTIVE SUMMARY

On behalf of the Internal Audit team, I am pleased to submit the **Internal Audit Work-In-Progress Report (Report)** of the Los Angeles County Employees Retirement Association (*LACERA*) for the period of July 1, 2018 to November 6, 2018. This Report provides information on the FYE 2019 Audit Plan, the assurance, consulting, and advisory projects completed as well as other Internal Audit activities.

The work performed by LACERA Internal Audit contributes toward accountability, integrity, and good management practices throughout LACERA's business units.

As of July 1, 2018, the FYE 2018 Audit Plan consisted of thirty-three (33) projects. Of the thirty-three (33) total projects on the current Audit Plan, eighteen (18) projects have been initiated during the year with six (6) completed and twelve (12) in various stages of progress toward completion.

The attached report contains the status on all projects undertaken this fiscal year including the objective of the project, the rationale for the work, and a brief synopsis on the "progress" or "conclusion" of each project. We also include the justification for initiating each of the unplanned projects. Any reports issued during the period since your last Audit Committee meeting are provided to your Committee under separate cover.

I would like to thank the Committee for your continued support of Internal Audit.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Richard Bendall', written in a cursive style.

Richard Bendall, CPA, CISA
Chief Audit Executive

INTERNAL AUDIT PLAN FYE 2018

The following table provides a list of the planned Internal Audit projects for the **Fiscal Year Ending 2019**.

PROJECT	STATUS	TYPE	FREQUENCY
MANAGEMENT, GOVERNANCE & COMPLIANCE			Est. Hours: 3500
1. Fiduciary Review		Ext. Audit	Planned
2. Privacy Audit Recommendation Coordination	In Progress	Consulting	Planned
3. Compliance Committee	In Progress	Consulting	Ongoing
4. Business Continuity/Disaster Recovery	In Progress	Consulting	Planned
5. Continuous Auditing Program (CAP) <ul style="list-style-type: none"> • New Payee Validation • High Risk Payees 	In Progress	Audit	Ongoing
6. 960 Hours Testing	Completed	Audit	Periodic
7. Pensionable Pay code Testing	In Progress	Audit	Periodic
8. Timecard Review		Audit	Planned
9. Corporate Credit Card Audit*	In Progress	Audit	Planned
10. Board and Staff Travel*	In Progress	Audit	Planned
11. Inventory Controls	In Progress	Audit	Planned
12. Risk Assessment – FYE 2020		Admin	Annual
13. Update Internal Audit Guide Book		Admin	Planned
14. Internal Audit Fraud Hotline		Admin	Planned
BENEFITS ADMINISTRATION			Est. Hours: 1200
15. Benefits' Exception Report Review Process		Audit	Planned
16. Active Death Process – Follow Up*		Audit	Planned
17. Death Legal Process		Audit	Planned
18. Foreign Payee Audit		Audit	Planned
19. Member Account Settlement Process	In Progress	Audit	Planned
INFORMATION SYSTEMS			Est. Hours: 2100
20. IT Risk Assessment Follow-Up	Completed	Consulting	Planned
21. Member Applications Change Control	Completed	Audit	Planned
22. External Penetration Testing		Ext. Audit	Planned
23. Database Review		Audit	Planned
24. Management Project Review		Audit	Planned
FINANCIAL & INVESTMENT OPERATIONS			Est. Hours: 2400
25. External Financial Audit - Oversight	Completed	Ext. Audit	Ongoing
26. THC Real Estate Audits - Oversight	In Progress	Ext. Audit	Ongoing
27. Actuarial Services - Oversight	In Progress	Consulting	Ongoing
28. Foreign Tax Reclamation - Oversight	Completed	Audit	Planned
29. Wire Transfers Audit	Completed	Audit	Planned
30. THC Tax Liability Review		Consulting	Planned
31. Real Estate Investment Operations*		Ext. Audit	Planned
32. Real Estate Advisor Audits ¹	In Progress	Ext. Audit	Planned
33. Custodial Bank Risk Assessment*		Audit	Planned
			Total Hours: 9200

*An audit that was rolled-over from FYE 2018 Audit Plan that will commence in FYE 2019.

¹ Includes audits of Advisors managing debt program.

The following provides a more detailed narrative of Internal Audit projects completed or in progress for the period of July 1, 2018 to November 6, 2018. The projects are ordered by Division. Project detail includes the objective, rationale, and a brief synopsis of the project’s status or conclusion.

ADMINISTRATIVE SERVICES

Business Continuity Planning

DIVISION(S)	ADMINISTRATIVE SERVICES	REPORT DATE	TBD
OBJECTIVE	Provide consulting to Administrative Services management in their revision and upgrade of LACERA’s business continuity plan including: <ol style="list-style-type: none"> 1. Business impact analysis <ol style="list-style-type: none"> a. processes that are critical and order of importance b. recovery time, and recovery point objectives 2. Develop crisis management plan roles and responsibilities 		
RATIONALE	The Business Continuity Plan is critical to the continuation of LACERA in the event of a disaster. Rather than perform an audit of the current plan, we determined together with the Executive Office and Administrative Services Management that it would be more appropriate for Administrative Services to engage a consultant to evaluate and possibly upgrade the current Business Continuity platform. This will include improving board and staff awareness of the plan as well as training LACERA staff on the plan and its deployment in the event of a disaster.		
STATUS	<p><u>IN PROGRESS:</u></p> Internal Audit is participating in a cross-functional oversight committee. A Business Continuity Planning vendor has been selected, scope of work contract was signed and initiation of work is pending executive office decision.		

BENEFITS

Member Account Settlement Collections Process

DIVISION(S)	BENEFITS	REPORT DATE	TBD
OBJECTIVE	The purpose of the Member Account Settlement Collections Process audit is to assess internal controls and design of the process of recovering payments that members owe to the LACERA fund resulting from members underpaying their contributions to LACERA or LACERA overpaying benefits to members.		
RATIONALE	As part of our fiscal year 2017-18 Audit Plan and based on a request from Management to follow-up on a previous review, Internal Audit is performing a review of LACERA’s Member Account Settlements Process (to ensure that collections are initiated from members within the statute of limitations.		
STATUS	<p><u>IN PROGRESS:</u></p> While fieldwork was on-going, the Benefits significantly changed the Member Account Settlement Process. After discussions within Internal Audit, the audit was reclassified to a consulting engagement. A written memo will be issued during January 2019.		

EXECUTIVE OFFICE

Los Angeles County Rehired Retirees Audit (PEPRA 960 Hours Testing FYE 2018)

DIVISION(S)	EXECUTIVE OFFICE	REPORT DATE	NOV. 6, 2018
OBJECTIVE	<p>To determine whether all retirees temporarily rehired, were done so in compliance with State and federal laws and LACERA policies.</p> <p>The State of California’s County Employees Retirement Law provides that Los Angeles County has the option to re-employ retirees for up to 120 days (960 hours) per fiscal year, on a strictly temporary basis, without affecting their retirement status or benefits. Additionally, the Public Employees’ Pension Reform Act of 2013 and LACERA policy requires a bona fide break in service prior to the retiree being rehired by the County.</p>		
RATIONALE	<p>Compliance with State law and LACERA policy helps ensure that LACERA retains its “qualified” tax deferred status. As this is a critical risk to LACERA, Internal Audit performs a 100 percent compliance test of all rehired retirees employed by the County each year.</p>		
STATUS	<p><u>COMPLETED:</u> Internal Audit concluded fieldwork and issued the audit report November 6, 2018.</p> <p>Internal Audit determined that for the Fiscal Year Ended June 30, 2018 there were minimal issues of non-compliance with legal requirements and LACERA policies. These issues were reported to the County's Chief Executive Office - Benefits, Compensation Policy, and Employee Relations Division and they are in the process of implementing workable solutions to mitigate these issues in the future.</p>		

Compliance Committee

DIVISION(S)	EXECUTIVE OFFICE	REPORT DATE	N/A
OBJECTIVE	<p>Provide consulting to the Executive Office and participate in the Compliance Committee in their development of a framework for a formal compliance program at LACERA.</p>		
RATIONALE	<p>Internal Audit has been requested by the Executive Office to assist with the development of a framework managements system of compliance. As part of the updates to the Audit Committee Charter, the Audit Committee will have responsibility for monitoring managements system of compliance.</p>		
STATUS	<p><u>IN PROGRESS:</u></p> <p>Internal Audit is continuing to meet and consult with Management and participate with the Compliance Committee on the development of the formal compliance program.</p>		

FINANCIAL AND ACCOUNTING SERVICES

Wire Transfers Audit

DIVISION(S)	FASD	REPORT DATE	OCT. 2, 2018
OBJECTIVE	The audit objectives were to assess the controls over LACERA’s investment operations to determine whether wires were authorized, documented, and processed accurately. In addition, we evaluated the security controls for wires processed through the Bank of America treasury management system (CashPro), which is used exclusively by LACERA for the real estate and debt program.		
RATIONALE	We reviewed LACERA’s electronic wire transfers process as part of the fiscal year 2017/18 audit plan. Wire transfers, which are made through State Street Bank and Bank of America, pose a financial risk to LACERA because inadequate controls can lead to transmission errors or opportunities for fraud.		
STATUS	<p><u>COMPLETED:</u> Internal Audit concluded fieldwork and issued the report on October 2, 2018.</p> <p>Internal Audit found LACERA’s internal controls over wire operations to be adequate. FASD processes wire transfers timely and accurately. In addition, the Investments Office ensures that wire transfers are documented and authorized by appropriate LACERA personnel. However, we did note two opportunities for the Investments Office to further strengthen their processes. We recommended that staff develop a standard template for advisors to use when submitting wire requests, and that staff update operating procedures for documenting, reviewing, and storing payment requests.</p>		

Corporate Credit Card Audit

DIVISION(S)	FASD	REPORT DATE	TBD
OBJECTIVE	The audit objectives were to assess whether purchase cards were used in accordance with the established LACERA Corporate Credit Card Policy. In addition, Internal Audit evaluated the controls in place to monitor and detect improper credit card use.		
RATIONALE	We reviewed LACERA’s corporate credit card policy as part of the fiscal year 2018/19 audit plan. The corporate credit card facilitates purchases authorized by the LACERA Boards or CEO for business-related expenses. Internal Audit routinely audits the corporate credit card program to ensure that it is effectively managed and compliant with laws and regulations.		
STATUS	<p><u>IN PROGRESS:</u></p> <p>Internal Audit concluded fieldwork and anticipates issuing the audit report December 31, 2018.</p>		

FINANCIAL AND ACCOUNTING SERVICES cont.

Board and Staff Travel

DIVISION(S)	FASD / Executive Office / Legal	MEMO DATE	TBD
OBJECTIVE	To determine if Board & staff compliant with LACERA’s Education and Travel Policy.		
RATIONALE	Internal Audit last audited Board and staff travel in 2016. This is an expense highly scrutinized by the media and public. For the fiscal year ended June 30, 2018, Boards’ education and travel expenses were approximately \$425,000 while the staffs’ expenses were approximately \$600,000.		
STATUS	<p><u>IN PROGRESS:</u></p> <p>Internal Audit anticipates completing fieldwork in Nov., and issuing the final report in Dec. 2018</p>		

LACERA Annual Financial Audit Facilitation – FYE 2018

DIVISION(S)	FASD	MEMO DATE	N/A
OBJECTIVE	Facilitate LACERA's annual external financial statement audit for FYE 2018.		
RATIONALE	External auditors require assistance with coordinating meetings with the Divisions, collecting data, assisting with documentation exchanges, and ensuring timely responsiveness from LACERA management and staff to complete their work within the determined timeframe.		
STATUS	<p><u>COMPLETED:</u> Plante Moran Report dated Dec. 12, 2018</p> <p>Plante Moran completed its final fieldwork and issued its timely 1) opinion of LACERA’s 2018 financial statements and 2) “Management Letters” to LACERA. Plante Moran will formally present the results of its work during the December 2018 Audit Committee meeting. The 2018 CAFR should be issued by LACERA in January 2019.</p>		

INVESTMENTS

Foreign Tax Reclamation RFP & Audit Oversight

DIVISION(S)	INVESTMENTS DIVISION	REPORT DATE	DEC. 12, 2018
OBJECTIVE	The purpose of the WTAX audit was to determine whether LACERA has reclaimed all foreign tax withholdings to which it is entitled.		
RATIONALE	The Board of Investments directed Staff to issue a Request for Proposals (RFP) to hire a firm to determine the extent of LACERA’s exposure to unclaimed foreign withholding taxes from investment income.		
STATUS	<p><u>COMPLETED:</u> The WTAX report and State Street Bank response were submitted to the Board for the December 12, 2018 BOI meeting.</p> <p>Staff recommends that the Board (1) accept and file the report and (2) direct the Investments Office to more closely oversee State Street Bank’s foreign tax reclamation process and reporting going forward. It appears that LACERA may have some foreign withholding tax exposure, but the amount varies based on the collectability and practicality of claims, which range from several thousand dollars up to \$179,114.</p>		

SYSTEMS

Member Applications Change Control

DIVISION(S)	SYSTEMS	REPORT DATE	OCT. 30, 2018
OBJECTIVES	To review the change management process over LACERA’s Membership Applications, to assess whether the process is controlled, monitored and is in compliance with control objectives.		
RATIONALE	As part of our fiscal year 2017-18 Audit Plan, Internal Audit is reviewing the Member Applications Change Control Process to verify that only authorized and tested changes to member applications are implemented.		
STATUS	<p><u>COMPLETED:</u> Internal Audit concluded fieldwork and issued the audit report on October 30, 2018.</p> <p>Based on our review, Internal Audit observed the following good practices:</p> <ul style="list-style-type: none"> • LACERA uses the lifecycle utility application to manage membership application changes. All development activities, design, and testing is formally documented and followed by staff in the lifecycle application • Changes are tested and approved by authorized staff prior to being moved to production • Access to development, testing, and production environments is restricted to appropriate staff <p>While we observed good control practices, we provided six recommendations that would serve to strengthen the segregation of duties over administrator access to some systems used during the change process, enhance segregation of duties controls related to review and approval for movement of code between development, testing, and production, and improving submission of documentation into the lifecycle management environment.</p>		

Information Technology Risk Assessment

DIVISION(S)	SYSTEMS	REPORT DATE	Nov. 2, 2018
OBJECTIVE	Internal Audit will issue a Request-For-Proposal (RFP) to conduct a Risk Assessment of the entire information technology operations area consisting of policy review, data security, and risk exposure. A baseline of opportunities for improvement will be established.		
RATIONALE	Best Practice to address IT risk.		
STATUS	<p><u>COMPLETED:</u> Internal Audit concluded fieldwork and issued the audit report November 2, 2018.</p> <p>Through a combination of interviews, documentation reviews, and guided observations, nine risks were identified. No high or critical risks were identified, the majority of risks scored in the low category. The audit consultant commented; “Overall, discussions with the LACERA team members showed that the importance of information security was well understood, information security concepts were found to be implemented at every level of the organization.”</p>		

ONGOING TESTING, MONITORING & CONSULTING

The following provides a brief narrative of ongoing Internal Audit projects for the period of July 1, 2018 to November 6, 2018. These recurring projects include testing, monitoring, and consulting assignments performed on an ongoing basis to prevent fraud and ensure compliance throughout LACERA’s business units. Project detail includes the objective, rationale, and a brief synopsis of the project’s status.

BENEFITS

Continuous Auditing Program (CAP) - Over 90 High Risk Payees

DIVISION(S)	BENEFITS	REPORT DATE	N/A
OBJECTIVES	To identify “high risk” member accounts that need to be further investigated by LACERA’s Benefit’s Protection Unit (BPU).		
RATIONALE	<p>LACERA has a fiduciary duty to help ensure the protection of member benefits as well as funds in the LACERA Trust. Based on LACERA’s experience, certain member account attributes are associated with a higher than normal likelihood of the following situations:</p> <ul style="list-style-type: none"> • The member is alive but due to their current condition (mental state, physical state, old age) someone is misappropriating the members benefit, • The member is deceased but the death is concealed from LACERA so the benefits continued to be paid. <p>While these cases are rare and very difficult to identify, Internal Audit can use data analytics against LACERA’s member data to identify a population of retirees with these attributes, which may increase our chances of identifying these situations and stopping them before they go on for too long, lowering the overall impact to our members and/or the Trust. Some of the member account attributes we look for include, changes to address and banking information, and not having been high risk verified, all within a recent 24 month period.</p>		
STATUS	<p><u>IN PROGRESS:</u></p> <p>We identified 43 payees that met our high risk criteria. We provided results to the BPU for follow-up. BPU has verified 42 of the 43 cases that we forwarded to them, with no issues. A third party investigator has been contracted to perform an in person verification for the 1 outstanding case.</p>		

BENEFITS

Continuous Auditing Program (CAP) - New Payee Validation

DIVISION(S)	BENEFITS
OBJECTIVE	<p>To assess validity of new payees added to the retirement payroll, Internal Audit performs an independent monthly continuous process test to new service and disability retirees and new survivor payees.</p> <p>Internal Audit staff confirm by reviewing supporting file documentation that new payments added to the retiree payroll are only to eligible former Los Angeles County employees or their beneficiaries.</p> <p>Internal Audit examines 100% of the new benefit payees using computer assisted audit techniques.</p>
RATIONALE	Internal Audit performs this monthly fraud test due to our independence from the operations.
STATUS	<p><u>IN PROGRESS:</u></p> <p>Internal Audit has tested 100 percent of all new benefit payees from July 2018 through October 2018. Internal Audit found no exceptions to the scheduled new benefit payees.</p>

EXECUTIVE OFFICE

Pensionable Paycode Testing

DIVISION(S)	INTERNAL AUDIT, QUALITY ASSURANCE, BENEFITS, SYSTEMS DIVISION	REPORT DATE	N/A
OBJECTIVES	<p>Verify that the pay codes used by the Plan Sponsor are codes that have been approved by the Board of Retirement. The Plan Sponsor should not be using a code that has not been determined by the Board of Retirement as either pensionable or non-pensionable.</p> <p>Verify that each pay code used is coded correctly by the Plan Sponsor (e.g., either “yes” as pensionable or “no” as non-pensionable)</p> <p>Verify, on a sample basis, that pay codes used by the County are applied to the correct group and/or sub-group of employees (e.g., pay codes intended for Sheriff’s deputies should only be used for Sheriff’s deputies)</p>		
RATIONALE	<p>In accordance with the Public Employees’ Pension Reform Act of 2013 (“PEPRA”), LACERA’s Board of Retirement (“BOR”) became responsible for determining whether the components of a member’s compensation are pensionable or non-pensionable while working as an active employee after 1/1/13</p> <p>LACERA has developed a testing process for verifying that the pay codes used by the County Auditor-Controller are valid pay codes and coded correctly based on the determination of LACERA’s Board of Retirement.</p>		
STATUS	<p><u>IN PROGRESS:</u></p> <p>Internal Audit (IA) is currently testing pay codes and will provide any errors to QA for analysis and follow-up. IA will continue to test pay codes on a quarterly and annual interval.</p>		

EXECUTIVE OFFICE *continued*

Privacy Audit Recommendation Monitoring

DIVISION(S)	EXECUTIVE OFFICE
OBJECTIVE	Internal Audit will participate in the cross-functional management oversight team and record the status of the implementation of recommendations in the external Privacy Audit final report.
RATIONALE	Internal Audit has an independent oversight role in validating the implementation of audit recommendations. Due to the attorney-client privilege manner in which the audit was performed and reported to the Audit Committee, Internal Audit performs this role and reports on the status of implementation to your Committee separately.
STATUS	<p><u>IN PROGRESS:</u></p> <p>Executive Management has established a cross-functional team to address the implementation of the Privacy Audit recommendations, many of which will simultaneously assist in the formalization of the compliance function at LACERA. The team will coordinate the implementation and the standardization of policies and procedures and the establishment of a compliance framework. The team has identified specific divisions as the primary owners of the Privacy Audit recommendations.</p> <p>Internal Audit as a part of the team is working on those recommendations for which we have primary ownership. Internal Audit also records the status update of all recommendations and we are comfortable that Management is taking the recommendations and the implementation seriously and has developed a good plan and a reasonable timeline in which to do so. We will be reporting the status of the Privacy Audit recommendation follow-up to your Committee at your December 2018 meeting, under separate cover.</p>

INTERNAL AUDIT

FYE 2018 Actuarial Audit – Oversight

DIVISION(S)	INTERNAL AUDIT
OBJECTIVE	Facilitate LACERA's ongoing, external, audit of actuarial services.
RATIONALE	External auditors require information data and documentation. Internal Audit advises, directs, assists; with inquiries and timely responsiveness from LACERA staff and management in order to complete their work satisfactorily in a suitable fashion.
STATUS	<p><u>IN PROGRESS:</u></p> <p>Internal Audit and the Financial Accounting Services Division will coordinate an entrance meeting in December related to the fiscal year ended June 30, 2018 OPEB Experience Study and Validation Audit, as well as the fiscal year ending June 30, 2019 Pension Triennial Valuation Audit.</p> <p>Internal Audit will continue to facilitate any data and/or documentation requests needed by the external auditors.</p>

INTERNAL AUDIT *continued*

Recommendation Follow-up

DIVISION(S)	INTERNAL AUDIT
OBJECTIVE	In compliance with the Institute of Internal Auditors' <i>International Professional Practices Framework</i> , the Chief Audit Executive must establish and maintain a system to monitor the disposition of audit results communicated to management.
RATIONALE	Internal Audit monitors the implementation status of prior audit recommendations made to LACERA Management to ensure that Management action plans have been effectively implemented or that Senior and Executive Management have accepted the risk of not taking action.
STATUS	<u>IN PROGRESS:</u> The status of all, audit recommendation related, management action plans are reported to the Audit Committee regularly. The most recent review cycle was completed from July 1, 2018 through October 31, 2018. This project will continue through the following Fiscal Year Ending June 30, 2019.

General Consulting (< 2 hours)

DIVISION(S)	INTERNAL AUDIT
OBJECTIVE	Assist LACERA Management with advice and/or resources.
RATIONALE	Internal Audit is often consulted for advice or additional information on organizational processes, projects, and issues. Any consulting project requiring two hours or less of an auditor's time is placed in this category. Consulting projects requiring an excess of two hours are typically documented and reported as individual projects.
STATUS	<u>IN PROGRESS:</u> Internal Audit maintains an open door policy for general consulting purposes. This is ongoing consulting that will conclude June 30, 2019.

INTERNAL AUDIT *continued*

Internal Audit Quality Assurance Improvement Program (QAIP)

DIVISION(S)	INTERNAL AUDIT
OBJECTIVE	Internal Audit will maintain a Quality Assurance and Improvement Program as required by the Institute of Internal Auditing (IIA) Standards.
RATIONALE	In our 2015 Quality Assurance Review (QAR), our consultant recommended that LACERA Internal Audit develop a formal QAIP program to be in compliance with IIA standards. Internal Audit, while always implemented some form of the QAIP program, did not have a formalized program that fully complied with standards. Internal Audit believes that a formal QAIP is important with the on-going administration of Internal Audit and will add value to the work performed by staff. Internal Audit developed and implemented a QAIP in 2016.
STATUS	<u>IN PROGRESS:</u> Internal Audit is on track for the completion of the QAIP assessment by June 30, 2019.

INVESTMENTS

THC Financial Audit Oversight

DIVISION(S)	INTERNAL AUDIT
OBJECTIVE	The objectives of this project are to hire firms to perform audit and tax services associated with LACERA's wholly owned THCs. Staff will also oversee the THC audits to ensure that audits and financial reports are provided within established guidelines.
RATIONALE	The purpose of the THC audit is to ensure that real estate advisors are providing accurate and appropriate financial reports to LACERA. IA serves as liaison between the audit firms and the key stakeholders: FASD, the Investment Office and the Legal Division to ensure that the audits comply with established procedures and financial reports are provided within established periods.
STATUS	<u>IN PROGRESS:</u> This is an ongoing project. This project for FYE 2017-2018 was completed September 15, 2018. The financial audits for FYE June 30, 2019 will commence in May 2019.



November 30, 2018

TO: Each Member
Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Chief Audit Executive

FOR: December 12, 2018 Audit Committee Meeting

SUBJECT: INTERNAL AUDIT GOALS REPORT

The following Internal Audit Goal Report includes a status update on the completion of Fiscal Year End (FYE) 2019 goals. We welcome the opportunity for any discussion, clarification, or feedback from your Committee.

RB;rb
Attachment

Internal Audit Goals – FYE 2019

Goal 1: Manage the completion of the FYE 2019 Audit Plan and develop a realistic risk-based Audit Plan for FYE 2020.

Performance Measures:

- Execute 80%* of the projects included in the FYE 19 Audit Plan by June 30, 2019. (*Note: 80% allows for flexibility due to changes in LACERA business practices and special requests.)
- Internal Audit will provide the FYE 2019 Audit Plan to the Audit Committee for approval at the July 2019 meeting.

Status:

In progress and on track for completion by June 30, 2019.

The Audit Committee approved the FYE 2019 Audit Plan at the September 12 meeting. Progress on the FYE 2019 Audit Plan status is being reported to the Audit Committee at the December 12 meeting under separate cover.

Goal 2: Develop and implement audit performance and report writing standards based on Internal Audit staff training provided in FYE 2018

Performance Measures:

Update the Internal Audit Operation Guide with the new audit performance and report writing standards by June 30, 2019.

Status:

In progress and on track for completion by June 30, 2019.

Goal 3: Revise the Recommendation Follow-up Process to enhance the efficiency and effectiveness of the reporting platform

Performance Measures:

Revise the Recommendation Follow-up tracking and reporting platform to ensure that recommendations, action plans, and agreed upon implementation dates, are clearly communicated to management and reported to the Audit Committee. We anticipate completed the revised platform by June 30, 2019.

Status:

In progress. We have begun developing the revised format and plan to present it to the Audit Committee at the March 2019 meeting.

Each Member, Audit Committee
Re: Internal Audit Goals Report
July 2, 2018

Goal 4: Monitor and measure Internal Audit efficiency using the internal evaluation of the Quality Assurance and Improvement Program (QAIP) and report results of the QAIP to the Audit Committee

Performance Measures:

Internal Audit will update the QAIP self-assessment and present a status update to the Audit Committee by June 30, 2019.

Status:

In progress and on track for completion by June 30, 2019.




November 30, 2018

TO: Each Member
2018 Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Chief Audit Executive

Gabriel Tafoya 
Senior Internal Auditor

FOR: December 12, 2018 Audit Committee Meeting

SUBJECT: **Recommendation Follow-Up Report**

AUDIT RECOMMENDATION IMPLEMENTATION SUMMARY

From July 1, 2018 through October 31, 2018, the following audit recommendation activity occurred:

- Six (6) new recommendations were made during this reporting period. These recommendations were from the Contract Monitoring Update Program, Member Applications Change Control, and Wire Transfers audits.
- Six (6) recommendations were implemented.
 - Three (3) were implemented by Admin Services.
 - One (1) was implemented by the Benefits Division.
 - Two (2) were implemented by the Systems Division.

A summary report containing the relevant audit recommendations for each division can be found in **Attachment A**.

AUDIT RECOMMENDATIONS STATUS
July 1, 2018 – October 31, 2018

Division	New Recommendations	Implemented/ Closed	Management Accepts Risk	Pending
Administrative Services:	1	3		3
Benefits Division:		1		7
Communications:				
Disability Litigation:				
Disability Retirement:				
Executive-Org. level:				
FASD:				
Human Resources:				
Internal Audit:				
Investments:	2			3
Legal:				
Member Services:				
Quality Assurance:				
Retiree Health Care:				
Systems:	3	2		1
Actuary:				
Total:	6	6	0	14

AUDIT RECOMMENDATIONS AGING REPORT

Internal Audit included an aging report to provide additional transparency into the amount of time it takes LACERA to fully implement audit recommendations. Audit recommendations made to address higher risk issues are most often implemented immediately or certainly within the first year whenever possible. As requested by the Audit Committee, Internal Audit has also included a status from Management for those recommendations that have been outstanding for longer than two years (see page 5).

To better understand any particular number, please refer to **Attachment A** and review the **Implemented** and **Pending** recommendations. More details can be made available on each recommendation. Should you require such additional information, please contact me (gtafoya@lacera.com) or Mr. Bendall (rbendall@lacera.com) and we will be pleased to assist you.

BACKGROUND

The Institute of Internal Auditors' (IIA) Performance Standard #2500 pertains to monitoring the implementation progress of Internal Audit's recommendations made to Management. To be in compliance with the IIA Performance Standards, the Chief Audit Executive is required to establish and maintain a system to monitor the disposition of Management's corrective results and communicate those results to Executive Management.

During the audit process, Internal Audit, as well as external auditors (financial, fiduciary, actuarial, and IT), regularly identify areas where LACERA Management may implement changes to improve risk controls in its processes and Management provides action plans indicating how and when planned improvements will be made. These recommendations and action plans are included in each formal audit report. Additionally, Internal Audit makes recommendations and management identifies improvement plans during Internal Audit consulting assignments. All recommendations and management action plans are documented in Internal Audit's *Recommendation Follow-Up* database for tracking, monitoring, and follow-up reporting.

It is Internal Audit's responsibility to ensure that Management's action plans have been effectively implemented, or in the case of action plans that have yet to be implemented, to ensure that Management remains aware of the risks it has accepted by not taking action. In certain situations, if reported observations and recommendations are significant enough to require immediate action by Management, Internal Audit persistently monitors actions taken by Management until the observed risk is corrected and the recommendation implemented.

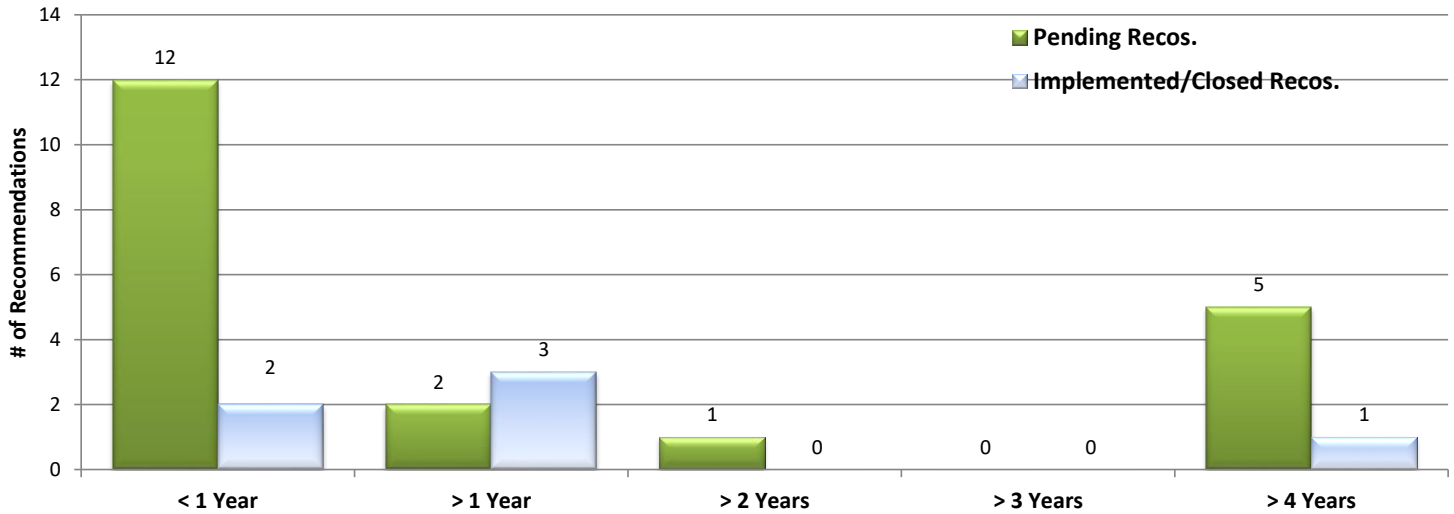
It is not the responsibility of the Chief Audit Executive to resolve the risks identified during audit work. However, in accordance with IIA Performance Standard #2600, it is Internal Audit's responsibility to communicate the acceptance of risks when the Chief Audit Executive concludes that Management has accepted a level of risk that may be unacceptable to the organization. As a result of this responsibility, Internal Audit communicates all pending *Management Action Plans* to LACERA's Executive Management for resolution. In this manner, Internal Audit escalates unsatisfactory responses or lack of Management actions - including the assumption of risk - to the appropriate levels of Executive Management.

RB/GT

Attachments

Audit Recommendation Aged Report

July 1, 2018 through October 31, 2018



Pending Recos.	< 1 Year	> 1 Year	> 2 Years	> 3 Years	> 4 Years
Administrative Services	1				3
Benefits Division	4	1			2
Communications					
Disability Retirement					
FASD					
Human Resources					
Internal Audit					
Investments	4		1		
Legal					
Systems Division	3	1			
Retiree Healthcare					5
Pending Total:	12	2	1	0	5

Implemented/Closed Recos.	< 1 Year	> 1 Year	> 2 Years	> 3 Years	> 4 Years
Administrative Services		3			
Benefits Division					1
Communications					
Benefits Division					
Disability Retirement					
FASD					
Human Resources					
Internal Audit					
Investments					
Legal					
Systems Division	2				
Retiree Healthcare					
Implemented/Closed Total:	2	3	0	0	1

Audit Recommendation Follow Up

Administrative Services

Status: **Implemented**

Audit Project: **Office Renovation Projects (April 24, 2016)**

Issue:	Recommendation	Actual	Estimated	Revised
Vendor Justification Not Included in Master Project File or Addressed in Written Procedures	Update written procedures and process to include documenting vendor selection	11/8/2018	12/31/2016	9/30/2018
Change Orders are not adequately documented or addressed in written procedures	Develop and codify process for managing Change Orders	11/8/2018	12/31/2016	9/30/2018
Inconsistent levels of participation from key stakeholders	Improve Planning and communication of Office Renovation projects	11/8/2018	12/31/2016	9/30/2018

Status: **New**

Audit Project: **Contract Monitoring Program (June 19, 2018)**

Issue:	Recommendation	Actual	Estimated	Revised
Monitoring Contract Expenditures	Monitor Contract Expenses		10/31/2018	12/31/2018

Status: **Pending**

Audit Project: **Purchasing/Procurement (May 8, 2011)**

Issue:	Recommendation	Actual	Estimated	Revised
Greater clarity & expansion needed in Purchasing Policy & the related Admin Manual	Admin Services Division should modify & expand both the Purchasing Policy and the related Admin Manual		12/30/2011	3/31/2019
Daily operating procedures ("desk procedures") need enhancement control procedures	Procurement Unit should update & expand its written, daily operating procedures		12/31/2011	3/31/2019
"Sole-source" or bidding documentation not found	(1) Promulgate requirements to other Divisions (2) Update desk procedures & (3) Contact FASD & agree upon document retention		12/31/2011	3/31/2019

Audit Recommendation Follow Up

Benefits

Status: **Closed**

Audit Project: **Claims Payroll Supervisor Policies/Procedures (July 02, 2013)**

Issue:	Recommendation	Actual	Estimated	Revised
Potential for input errors	Develop field for logging first payment and monthly payment data	11/12/2013	6/30/2014	10/31/2018

Status: **Pending**

Audit Project: **Certificate Processing (June 28, 2017)**

Issue:	Recommendation	Actual	Estimated	Revised
Birth Certificate Missing for Options Retirees	Update Certificate Requirements		6/29/2018	6/30/2019
Controls over Certificates Processing	Develop organization-wide Certificates Policy		6/29/2018	6/30/2019

Audit Project: **Claims - Process Objectives, Risks, Contols, Process Flows,and Procedural Gaps (April 12, 2012)**

Issue:	Recommendation	Actual	Estimated	Revised
1st Payment - Separation of Duties	Implement secondary review		12/31/2012	12/31/2019

Audit Project: **Duplicate Special Payments (January 19, 2017)**

Issue:	Recommendation	Actual	Estimated	Revised
Automation of Special Payment Approvals	Expand the Automation of Special Payment Approvals		12/31/2017	6/30/2020

Audit Project: **Member Death Record Process (October 31, 2017)**

Issue:	Recommendation	Actual	Estimated	Revised
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Audit Recommendation Follow Up

Benefits

Status: **Pending**

Audit Project: **Member Death Record Process (October 31, 2017)**

Issue:	Recommendation	Actual	Estimated	Revised
External Partners Monitoring System Deficiency	Develop a Data Confidentiality and Privacy - External Partners Monitoring - Control System for managing and monitoring vendors that have custody of LACERA member data		12/31/2018	

Audit Project: **Member Minor Survivor Compliance (June 29, 2016)**

Issue:	Recommendation	Actual	Estimated	Revised
Incomplete Documentation	Develop Procedures manual and Improve Review process		6/30/2017	12/31/2018

Audit Project: **Previous service to contracts (QC/QA/CP) July 2, 2013)**

Issue:	Recommendation	Actual	Estimated	Revised
Recreating Timelines	Certify Member Timelines		6/30/2014	6/30/2019

Audit Recommendation Follow Up

Investments

Status: **New**

Audit Project: **Wire Transfers Audit (October 02, 2018)**

Issue:	Recommendation	Actual	Estimated	Revised
Outdated Operating Procedures	Update Operating Procedures		12/31/2018	
No Formal Process to Request Wire Transfers	Develop Standard Template		12/31/2018	

Status: **Pending**

Audit Project: **Investment Private Equity Operations (June 25, 2015)**

Issue:	Recommendation	Actual	Estimated	Revised
No formal Information Management System or CRM System to manage information	Consider implementing CRM System		6/30/2016	3/31/2019

Audit Project: **Securities Lending (May 30, 2018)**

Issue:	Recommendation	Actual	Estimated	Revised
Transparency Over Third-Party Fees	Assess Fee Implications of Using Third-Party Agents		6/30/2019	
Update SLAA to Include Non-Cash Collateral	Review SLAA Provisions on Non-Cash Collateral		9/30/2018	3/31/2019

Audit Recommendation Follow Up

Systems

Status: **Implemented**

Audit Project: **Data Backup/Retention Testing (February 14, 2018)**

Issue:	Recommendation	Actual	Estimated	Revised
Macintosh System Backup Process	Macintosh Offsite Storage	8/23/2018	6/30/2018	7/31/2018

Audit Project: **Systems Penetration Testing 2017 (January 25, 2018)**

Issue:	Recommendation	Actual	Estimated	Revised
Document Metadata Internal Information Disclosure	Removing Metadata	10/5/2018	1/31/2018	7/31/2018

Status: **New**

Audit Project: **Member Applications Change Control (October 30, 2018)**

Issue:	Recommendation	Actual	Estimated	Revised
Segregation of Duties	Create Deployment Monitoring Report		12/31/2019	
Administrator Group Membership - Policy	Develop a Formal Administrator Access Policy		6/30/2019	
Administrator Group Membership	Review Administrator Group Accounts for Appropriateness		12/31/2018	

Status: **Pending**

Audit Project: **Data Backup/Retention Testing (February 14, 2018)**

Issue:	Recommendation	Actual	Estimated	Revised
Disaster Recovery Test Exercise Needed	Schedule System Recovery Exercise		12/31/2018	

Status of Recommendations Outstanding For More Than Two Years

Division	Issue	Recommendation	Aging (years)	Revised Est. Implementation	Current status of implementation (Management's response)
Admin Services	Greater clarity & expansion needed in Purchasing Policy & the related Admin Manual	Admin Services Division should modify & expand both the Purchasing Policy and the related Admin Manual	6	3/31/2019	A draft policy has been presented to Executive Management for approval. Upon approval of updated Purchasing Policy, the Purchasing Manual will include all applicable procedures and controls.
	Daily operating procedures ("desk procedures") need enhancement re control procedures	Procurement Unit should update & expand its written, daily operating procedures	6	3/31/2019	The daily operating procedures will be revised once the Board has adopted the new Procurement Policy. We estimate the development of the daily operating procedures will take an additional 90 -120 days from the date the policy is approved. This includes development of the desk procedures, appropriate training for procurement staff, and training for management staff. The procedures will be in compliance with all policy directives and will include all necessary controls.
	"Sole-source" or bidding documentation not found	(1) Promulgate requirements to other Divisions (2) Update desk procedures & (3) Contact FASD & agree upon document retention	6	3/31/2019	A draft policy has been presented to Executive Management for approval. Upon approval of updated Purchasing Policy, the Purchasing Manual will include all applicable procedures and controls. Estimated Completion date 03/31/2019. Procurement Unit procedures have been updated to include exception to the buying process such as "piggy-back" purchases that utilize pricing published by organizations such as NASPO and the State of California. Completed 10/17/2014. Procurement met with FASD and has established a process for scanning and retaining copies of purchase orders and supporting documentation on the LACERA network for retention purposes. The Procurement Unit procedures have been updated and this policy is in place. Completed 10/17/2014.
Benefits	1st Payment - Separation of Duties	Implement secondary review	5	12/31/2019	The action plan for this recommendation is still in progress. In the meantime, independent audits of Agenda cases by QA and close monitoring of cases by Supervisors throughout the first payment process help mitigate this risk. The final remedy is for Systems to create an automated process which notifies QA when an account is adjusted anytime after a member is placed on Agenda and then into retirement. This will ensure all changes which pose a risk to LACERA are validated prior to payment adjustment.
	Recreating Timelines	Certify Member Timelines	4	6/30/2019	The ACE training program is currently being developed by a team made up of QA, Benefits, and the former QA Division Manager.
Investments	No Formal Information Management System or CRM system to manage information	Consider implementing CRM system	2	12/31/2018	Due to limited Systems staffing resources the action plan for this recommendation was postponed until after the Systems Division implemented the org-wide operating systems conversion in July 2017. Since then, Investments and Systems staff have been collaborating to select a vendor. The team is currently assessing the capabilities of four vendors. The goal is to select vendors by November and rollout a new system by Q4 2019. In the meantime, staff continues to manage investment related information using LACERA's existing network folders and directories.




FOR INFORMATION ONLY

November 30, 2018

TO: Each Member
2018 Audit Committee

Audit Committee Consultant
Rick Wentzel

FROM: Richard Bendall 
Chief Audit Executive

Christina Logan 
Senior Internal Auditor

FOR: December 2018 Audit Committee Meeting

SUBJECT: **Additional External Audit Work Requested of Plante Moran**

In October 2017, Los Angeles County (County) requested that LACERA's Other Post-Employment Benefits (OPEB) plan change its structure from a cost sharing multiple-employer plan to an agent multiple employer plan for fiscal year 2018-2019. This change allows participating employers to continue to pool their assets for investment purposes in the LACERA OPEB Trust, but LACERA will now maintain separate accounting records for each employers' pay-as-you-go costs. This allows LACERA to identify financial activities attributable to the employers' distinct retired population. The County requested this new reporting structure to separate itself from the other employers and better manage its own retiree healthcare costs.

As a result of this change, Plante Moran (PM) will prepare and issue two additional reports, A) a report on census data used by the actuaries for projecting the OPEB liabilities, and B) the calculation of the Changes in Fiduciary Net Position by Employer. The AICPA has identified two options to ensure the employer and the employer's auditor obtain sufficient appropriate audit evidence that effective controls exist related to these two reports. These two options are for Plante Moran to perform either 1) a Systems and Organization Controls (SOC)1 Type 2 audit, or 2) an attestation audit.

Internal Audit met with the Executive Office, Financial Accounting Services Division (FASD), and Systems Division to review the two options. After carefully reviewing the timeline required for the SOC option, it was agreed the SOC audit was not a viable option for fiscal year 2018-2019, as there was not sufficient time to adequately plan and prepare for a SOC audit. Staff concluded the attestation engagement for the current year was the more feasible option.

Additional External Audit Work
December 2018

PM's current contract allows for LACERA to engage PM to perform special projects that are "directly related to or result from the annual financial statement audit." This additional attestation engagement relates directly to the annual financial statement audit. The not-to exceed fee in PM's Attestation proposal is \$63,645, which is within Staff's threshold to approve. With concurrence from Legal, Internal Audit has accepted PM's Attestation proposal for fiscal year 2018-2019, as a special project.

Internal Audit is currently working with FASD to determine the scope of work for the subsequent two years of PM's contract, as LACERA and its employers work through these new requirements. At the March 2019 Audit Committee meeting, Internal Audit will request the Audit Committee approve amending PM's original contract for the remaining two fiscal years, 2019-2020 and 2020-2021, to include the additional work and related fees.



Documents not attached are exempt from disclosure under the California Public Records Act and other legal authority.

**For further information, contact:
LACERA
Attention: Public Records Act Requests
300 N. Lake Ave., Suite 620
Pasadena, CA 91101**



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