

# Los Angeles City Employees' Retirement System

A Department of the Municipality of the City of Los Angeles, California



*Securing Your Tomorrows*

**Comprehensive Annual Financial Report**  
for the Fiscal Year Ended June 30, 2017

*Watts Tower*  
*Photo by Robin Kerr*

**Los Angeles City Employees' Retirement System**  
(A Department of the Municipality of the City of Los Angeles, California)

**Comprehensive Annual Financial Report**  
**For the Fiscal Year Ended June 30, 2017**

Issued by  
Thomas Moutes  
General Manager

202 W. First Street, Suite 500  
Los Angeles, CA 90012-4401  
[www.LACERS.org](http://www.LACERS.org)



# Table of Contents

## INTRODUCTORY SECTION

Letter of Transmittal .....	1
Board of Administration .....	5
Organization Chart .....	6
Professional Consultants .....	6
Certificate of Achievement .....	7

## FINANCIAL SECTION

Independent Auditor's Report .....	11
<b>Management's Discussion and Analysis</b>	
Financial Highlights .....	15
Overview of the Financial Statements .....	15
Financial Analysis .....	17
<b>Basic Financial Statements</b>	
Statement of Fiduciary Net Position .....	24
Statement of Changes in Fiduciary Net Position .....	25
Notes to the Basic Financial Statements .....	26
<b>Required Supplementary Information</b>	
Retirement Plan	
Schedule of Net Pension Liability .....	50
Schedule of Changes in Net Pension Liability and Related Ratios .....	51
Schedule of Contribution History .....	52
Schedule of Investment Returns .....	53
Postemployment Health Care Plan	
Schedule of Net OPEB Liability .....	54
Schedule of Changes in Net OPEB Liability and Related Ratios .....	55
Schedule of Contribution History .....	56
Schedule of Investment Returns .....	57
<b>Supplemental Schedules</b>	
Schedule of Administrative Expenses .....	60
Schedule of Investment Fees and Expenses .....	61

## INVESTMENT SECTION

Report on Investment Activity .....	65
Outline of Investment Policies .....	67
Investment Results .....	67
Investment Contract Activity .....	68
Asset Allocation .....	69

## Table of Contents (Continued)

### INVESTMENT SECTION (Continued)

#### List of Largest Assets Held by Fair Value

Largest U.S. Equity Holdings .....	70
Largest Non-U.S. Equity Holdings .....	70
Largest U.S. Fixed Income Holdings .....	71
Largest Non-U.S. Fixed Income Holdings .....	71

#### Schedules of Fees and Commissions

Schedule of Fees .....	72
Schedule of Top Ten Brokerage Commissions .....	72

Investment Summary .....	73
--------------------------	----

Advisory/Consulting/Custody Services .....	74
--	----

### ACTUARIAL SECTION

#### Actuarial Valuation Summary

Summary of Significant Valuation Results .....	79
--	----

#### Retirement Benefits Valuation

Actuarial Certification .....	81
Active Member Valuation Data .....	83
Retirees and Beneficiaries Added to and Removed from Retiree Payroll .....	83
Solvency Test .....	84
Schedule of Funding Progress .....	84
Actuarial Analysis of Financial Experience .....	85
Actuarial Balance Sheet .....	85
Schedule of Changes in Net Pension Liability and Related Ratios .....	86
Projection of Plan's Fiduciary Net Position for Use in Calculation of Discount Rate .....	87
Summary of Actuarial Assumptions and Actuarial Cost Method .....	89
Summary of Plan Provisions .....	91

#### Health Benefits Valuation

Actuarial Certification .....	95
Active Member Valuation Data .....	97
Retirees and Beneficiaries Added to and Removed from Health Benefits .....	97
Solvency Test .....	98
Schedule of Funding Progress .....	98
Actuarial Analysis of Financial Experience .....	99
Actuarial Balance Sheet .....	99
Schedule of Changes in Net OPEB Liability and Related Ratios .....	100
Projection of Plan's Fiduciary Net Position for Use in Calculation of Discount Rate .....	101
Summary of Actuarial Assumptions and Actuarial Cost Method .....	103

# Table of Contents (Continued)

## ACTUARIAL SECTION (Continued)

Summary of Plan Provisions .....	106
----------------------------------	-----

## STATISTICAL SECTION

Schedule of Additions by Source - Retirement Plan .....	111
Schedule of Deductions by Type - Retirement Plan .....	111
Schedule of Additions by Source - Postemployment Health Care Plan .....	112
Schedule of Deductions by Type - Postemployment Health Care Plan .....	112
Net Increase (Decrease) in Fiduciary Net Position - Retirement Plan .....	113
Net Increase (Decrease) in Fiduciary Net Position - Postemployment Health Care Plan ....	113
Schedule of Benefit Expenses by Type - Retirement Plan .....	114
City Contributions versus Benefits Paid - Retirement Plan .....	114
Schedule of Benefit Expenses by Type - Postemployment Health Care Plan .....	115
City Contributions versus Benefits Paid - Postemployment Health Care Plan .....	115
Schedule of Retired Members by Type of Benefits - Retirement Plan .....	116
Schedule of Retired Members by Type of Benefits - Postemployment Health Care Plan .....	117
Schedule of Average Benefit Payments - Retirement Plan .....	118
Schedule of Average Benefit Payments - Postemployment Health Care Plan .....	119

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# Introduction



## Letter of Transmittal

December 5, 2017

Board of Administration  
Los Angeles City Employees' Retirement System  
202 W. First Street, Suite 500  
Los Angeles, CA 90012-4401



Dear Members of the Board:

We are pleased to present the Los Angeles City Employees' Retirement System (LACERS) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2017, the System's 80<sup>th</sup> year of operation. This report is intended to provide a comprehensive review of our financial condition during the fiscal year including the System's audited financial statements, investment performance results, and actuarial valuations for retirement and health benefits.

### LACERS History, Participants, and Services

In 1937, the Los Angeles City Charter established LACERS as a retirement trust fund for the exclusive purpose of providing the civilian employees of the City of Los Angeles, a defined benefit retirement plan inclusive of service retirements, disability retirements, survivor benefits, and in 1999, LACERS began administering the retiree health insurance subsidies. All regular, full time, and certified part-time City employees are eligible for LACERS benefits except employees of the Department of Water and Power, and sworn personnel who are members of the Los Angeles Fire and Police Pensions. Today, approximately 25,000 Active Members and 18,000 Retired Members and beneficiaries count on LACERS to provide a lifetime of retirement benefits.

### Financial Reporting

LACERS management is responsible for the contents of this report. A system of internal control is designed, implemented, and maintained by management, as a means to protect System assets, and to assure the integrity of LACERS financial statements. Management recognizes the inherent limitations that internal controls do not provide absolute assurance against errors and material misstatement in the financial statements, and that one should only implement controls whose benefits outweigh its costs. However, management is confident that its system of internal control, with oversight from LACERS Audit Committee, in tandem with internal audit staff, as well as the annual engagement of an independent external auditing firm to render an opinion on LACERS financial statements, provide the requisite level of due diligence expected from a governmental pension system. In fact, external auditor Brown Armstrong Accountancy Corporation has audited and expressed an unmodified opinion that LACERS basic financial statements are free of material misstatement, presented fairly, and in conformity with accounting principles generally accepted in the United States of America.

Readers of this CAFR are encouraged to review the Management's Discussion and Analysis Section starting on page 15, which provides narrative analysis and highlights of our financial condition and fiscal operations during the reporting period.

## Major Initiatives

LACERS is committed to working in the best interests, and for the exclusive benefit of our Members. To help achieve this, LACERS established a Strategic Plan with the intent of implementing industry best practices in several areas. The LACERS Strategic Plan goals and initiatives for fiscal year 2016-17 were as follows:

### Customer Service (Outstanding Customer Service)

LACERS places great importance on always delivering a high level of customer service to its Members who seek information and assistance through counseling sessions, retirement planning seminars, and health plan enrollments. Member satisfaction among those attending LACERS retirement seminars, group counseling sessions, Open Enrollment meetings, Medicare workshops, and “walk-ins” was in the mid to high 90% range.

### Benefit Delivery (Accurate and Timely Delivery of Benefits)

LACERS’ fiduciary responsibility includes providing benefits to system participants and their beneficiaries and assuring prompt delivery of those benefits and related services. LACERS continued an initiative to audit and maintain operational compliance with regulatory requirements; and identified opportunities to reengineer benefit delivery processes for greater efficiency.

### Health & Welfare (Maximize Value and Minimize Costs of our Health)

LACERS strives to offer its Members a complete health benefits package that is cost-effective. Initiatives included testing the marketplace and seeking only the most competitive services and premium rates, reviewing health plan utilization data to identify trends and develop strategies to improve Member care and minimize premium increases, and promoting wellness through the LACERS Well campaign for retired Members. A major accomplishment was the completion of the Health Plan Dependent Eligibility Verification Audit.

### Investment (Achieve Satisfactory Long-term Risk-adjusted Investment Returns)

Achievement of this goal will help ensure funding to provide plan participants with post-retirement benefits and maintain or reduce the City contribution to the System. Main initiatives were to ensure investments were within target of the Asset Allocation Policy and to increase due diligence and regular review efforts of investment managers.

### Board Governance (Uphold Good Governance Practices which Affirm Transparency, Accountability, and Fiduciary Duty)

LACERS strives to being accountable, transparent, law-abiding, responsive, equitable and inclusive, effective and efficient, and being participatory by establishing and maintaining Board Administrative Policies, Board Governance, and Investment Policies.

### Organizational (Maximize Organizational Effectiveness and Efficiency)

LACERS entered the fourth year of a major initiative to replace the Pension Administration System. This project achieved over 75% completion as of the fiscal year ended and is progressing smoothly toward the scheduled Go-Live date of March 1, 2018.

### Workforce (Recruit, Mentor, Empower, and Promote a High-performing Workforce)

LACERS strives to hire the best employees and develop them to their full potential for career advancement. Completed initiatives include maintaining a regular schedule of training and education, and continuing the staff-led Guiding Principles campaign. There was a 71% increase from the previous year in staff participation in the LACERS Tuition Reimbursement Program.

## Funding Status and Progress

Annual actuarial valuations are performed by LACERS consulting actuary to determine the actuarial accrued liability arisen from the benefits promised by the City, among other things. Such liability is expected to be met by LACERS assets accumulated through City contributions, Member contributions, and investment returns. The funding status, commonly expressed by the term “funded ratio,” is calculated by dividing the assets, based either on actuarial (smoothed) value or fair value, by the actuarial accrued liabilities. The funded ratio is a snapshot of the relative status of LACERS assets and liabilities at the end of each reporting year. Determined annually in the actuarial valuation, it reflects changes that affect the assets and liabilities during the reporting year due to investment performance, change in demographics, assumptions, benefit terms, and other factors. Funded ratios are useful when they are looked at over several years to determine trends, and should be viewed in light of the economic situation at each time point. If the ratio is less than 100%, indicating an underfunding condition,

the underfunded portion is paid for by the City systematically over a period no longer than 20 years pursuant to LACERS funding policy (fiscal year beginning from 2013-14), which targets a funding status of 100% in the long run.

Based on the June 30, 2017 actuarial valuation, the combined funded ratio, based on the actuarial value of assets, for the Retirement Plan and the Postemployment Health Care Plan has increased by 0.2% from a year ago to 72.8%. Individually, the funded ratio, on the same actuarial basis, for the Retirement Plan increased slightly, but for reporting purpose stayed the same at last year's level of 71.4% after rounding; and for the Postemployment Health Care Plan, the ratio has increased from 80.5% to 81.1%. The moderate progress in the funded ratios was achieved despite an increase of the actuarial accrued liabilities by \$461.9 million as a result of the change of economic assumptions, including the reduction of assumed investment return from 7.50% to 7.25%. The impact of assumption changes was mitigated primarily by: 1) lower than expected COLA granted to retirees and beneficiaries, 2) lower than expected salary increase for active Members, 3) adopted medical trend with ultimate rate reduced from 5.0% to 4.5%, and 4) lower than expected 2018 renewal premiums payable to the health care providers. It is noteworthy that the funded ratio for the Postemployment Health Care Plan achieved a relatively high funding status of being 81.1% funded, while a large majority of local governments do not pre-fund their retiree health benefits.

The fair value of LACERS assets as of June 30, 2017 has caught up with the actuarial value of assets which is determined by the seven-year Asset Smoothing policy, erasing the entire deferred loss of \$747.0 million as of June 30, 2016. Therefore, the funded ratios based on fair value of assets are the same as those above-mentioned funded ratios based on the actuarial value of assets.

## **Investment Summary**

The System established its investment policies in accordance with Section 1106 of the Charter of the City of Los Angeles for the systematic administration of LACERS. The investment policies are designed to achieve the best risk-adjusted investment returns. The System's assets are managed on a total return basis in compliance with the investment policies to produce a total portfolio, long-term, real (above inflation) return of 5.0%. Consequently, prudent risk-taking is warranted within the context of the overall portfolio diversification. The Board implements its risk

management policy by monitoring the portfolio's compliance through the adoption of investment policies, guidelines, and procedures for determining the strategic management of investment risk, while allowing sufficient flexibility in capturing investment opportunities, as they may occur, and establishing reasonable risk parameters to ensure prudence and care in the management of the System's assets.

The portfolio consists of investments in U.S. and non-U.S. equities and fixed income, private equity, private real estate, public real assets, and short-term investments. The System's total portfolio was valued at \$15.7 billion as of June 30, 2017, an increase of \$1.7 billion (12.1%) compared to the prior fiscal year. The portfolio posted a gross of fees return of 13.3% (or a net of fees return of 13.1%) over a one-year period. The total fund underperformed its policy benchmark by 0.65% gross of fees return (or 0.84% net of fees return), and outperformed its actuarial assumed rate of investment return.

The annualized investment returns in detail are presented in the Investment Results on page 67 of the Investment Section. The detail of investment income and loss can be found on pages 20 - 21 of the Financial Section. Other investment related information is summarized in the Investment Section of this report.

## **Awards and Acknowledgements**

### **GFOA Certificate of Achievement**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to LACERS for its CAFR for the fiscal year ended June 30, 2016. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that this report for the fiscal year ended June 30, 2017, will again meet the requirements of the Certificate of Achievement Program and we are submitting it to the GFOA for consideration of an annual award.

### **PPCC Standards Award**

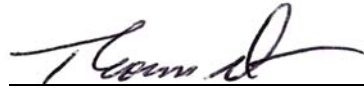
The Public Pension Coordinating Council presented its Public Pension Standards Award For Funding and Administration to LACERS in recognition of compliance with professional standards for plan

funding and administration as for the fiscal year ending 2017. To receive this honor, LACERS was assessed to have met the standards in six key areas: Comprehensive Benefit Program, Actuarial Valuation, Independent Audit, External Investments Performance Evaluation, Member Communications, and Funding Adequacy.

### **Acknowledgements**

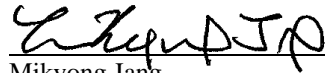
Lastly, I would like to acknowledge those who assisted with the preparation of this report: Linda Aparicio, Aleli Capati, Andy Chiu, Edeliza Fang, Bryan Fujita, Andrea Galstian, Rodney June, Alan Lee, Ricky Mulawin, Jo Ann Peralta, Alex Rabrenovich, May Tran, and Jimmy Wang. I would also like to thank our external auditor, Brown Armstrong, and our consulting actuary, Segal Consulting, for their professional assistance in the preparation of this report.

Respectfully Submitted,



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Thomas Moutes  
General Manager



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Mikyong Jang  
Chief Accountant

# Board of Administration

## For the Fiscal Year Ended June 30, 2017

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**Jaime L. Lee**  
President  
Appointed by the Mayor



**Michael R. Wilkinson**  
Vice President  
Elected by Retired Members



**Elizabeth L. Greenwood**  
Member  
Elected by Active Members



**Annie Chao**  
Member  
Elected by Active Members



**Cynthia M. Ruiz**  
Member  
Appointed by the Mayor



**Nilza R. Serrano**  
Member  
Appointed by the Mayor

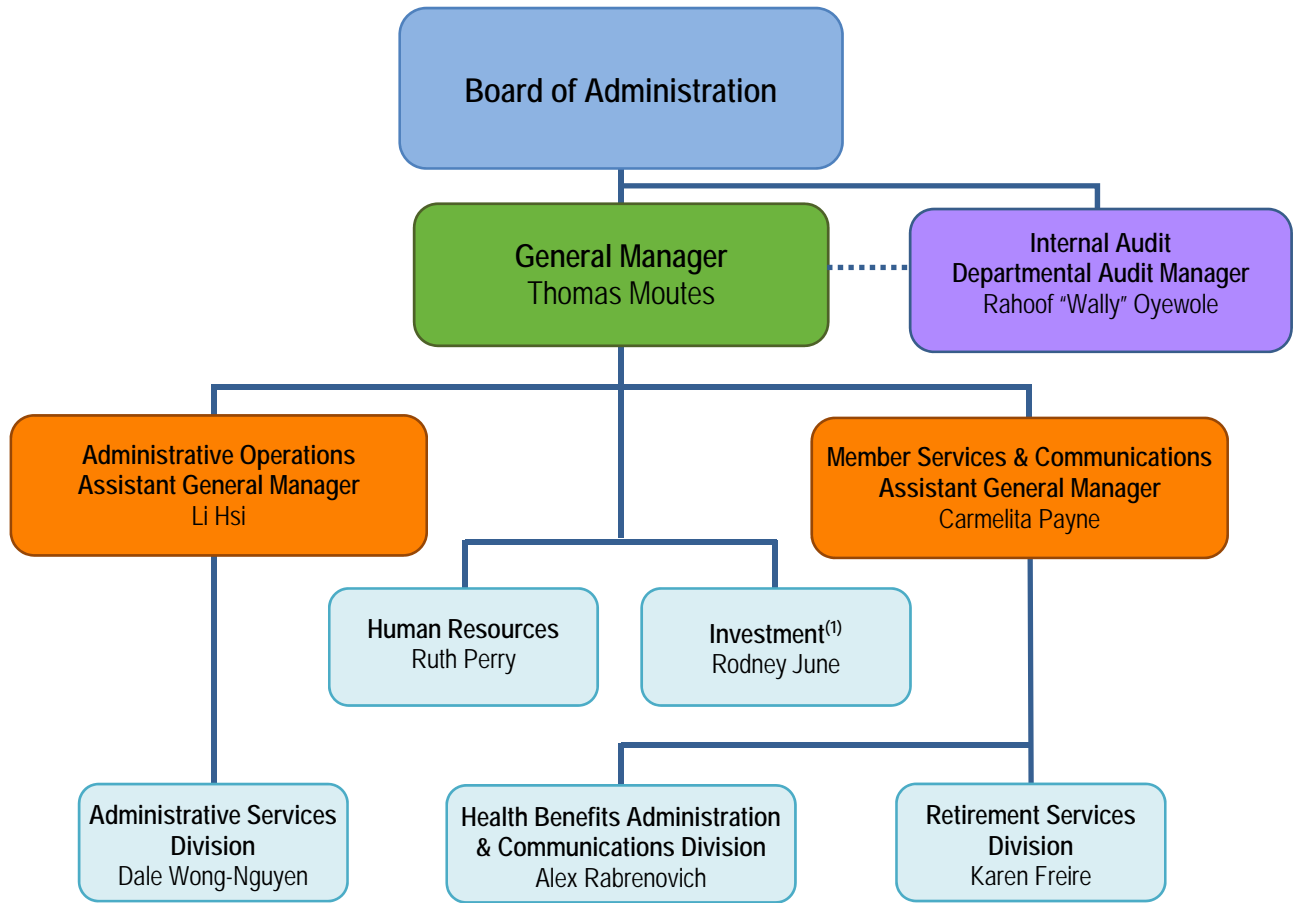


**Sung Won Sohn**  
Member  
Appointed by the Mayor

# Organization Chart

## As of June 30, 2017

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(1) Schedules of Fees and Commissions can be found in the Investment Section on page 72, and a list of firms managing the investment portfolio can be found in the Investment Section on pages 74 and 75.

## Professional Consultants

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### Actuary

Segal Consulting

### Independent Auditor

Brown Armstrong

### Investment Consultants

Portfolio Advisors, LLC  
The Townsend Group  
Wilshire Associates, Inc.

### Health & Welfare Consultant

Keenan & Associates

### Legal/Fiduciary Counsel

Ice Miller, LLP  
Morgan, Lewis & Bockius, LLP  
Nossaman, LLP  
Olson, Hagel & Fishburn, LLP  
Step toe & Johnson, LLP

### Pension Administration System Consultants

Levi, Ray and Shoup, Inc.  
Linea Solutions





Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**Los Angeles City  
Employees' Retirement System  
California**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2016**

Executive Director/CEO

AWARDED 18 CONSECUTIVE YEARS SINCE 1999



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2017***

Presented to

***Los Angeles City Employees' Retirement System***

In recognition of meeting professional standards for  
plan funding and administration as  
set forth in the Public Pension Standards.

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

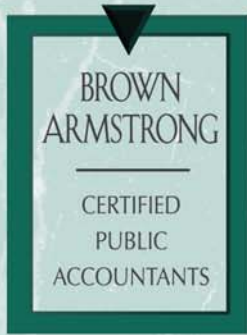
A handwritten signature in black ink that reads "Alan H. Winkle". The signature is written in a cursive, flowing style.

Alan H. Winkle  
Program Administrator

ALSO AWARDED IN 2013, 2014, 2015 & 2016

**Financial**





# BROWN ARMSTRONG

*Certified Public Accountants*

## LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM INDEPENDENT AUDITOR'S REPORT

Board of Administration  
Los Angeles City Employees' Retirement System  
Los Angeles, California

### Report on the Financial Statements

We have audited the accompanying Retirement Plan and Postemployment Health Care Plan Statement of Fiduciary Net Position of the Los Angeles City Employees' Retirement System (LACERS), a department of the Municipality of the City of Los Angeles, California, as of June 30, 2017, and the related Retirement Plan and Postemployment Health Care Plan Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise LACERS basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements 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 financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to LACERS preparation and fair presentation of the financial statements 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 LACERS 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 financial statements.

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

#### BAKERSFIELD OFFICE (MAIN OFFICE)

4200 TRUXTUN AVENUE  
SUITE 300  
BAKERSFIELD, CA 93309  
TEL 661.324.4971  
FAX 661.324.4997  
EMAIL [info@bacpas.com](mailto:info@bacpas.com)

#### FRESNO OFFICE

10 RIVER PARK PLACE  
EAST SUITE 208  
FRESNO, CA 93720  
TEL 559.476.3592

#### LAGUNA HILLS OFFICE

23272 MILL CREEK DRIVE  
SUITE 255  
LAGUNA HILLS, CA 92653  
TEL 949.652.5422

#### STOCKTON OFFICE

5250 CLAREMONT  
AVENUE  
SUITE 150  
STOCKTON, CA 95207  
TEL 209.451.4833

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Retirement Plan and Postemployment Health Care Plan of LACERS as of June 30, 2017, and the changes in fiduciary net position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

## **Emphasis of Matter**

As discussed in Note 1 to the financial statements, in the fiscal year of 2017, LACERS adopted Governmental Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, which modified the current financial reporting of those elements. Our opinion is not modified with respect to this matter.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the GASB who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements of LACERS that collectively comprise LACERS basic financial statements. The supplemental schedules, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplemental schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used in the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

### *Report on Summarized Comparative Information*

We have previously audited LACERS June 30, 2016 financial statements, and our report dated November 21, 2016, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent in all material respects, with the audited financial statements from which it has been derived.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated November 21, 2017, on our consideration of LACERS internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering LACERS internal control over financial reporting and compliance.

BROWN ARMSTRONG  
ACCOUNTANCY CORPORATION

*Brown Armstrong  
Accountancy Corporation*

Bakersfield, California  
November 21, 2017

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## Management's Discussion and Analysis

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As management of the Los Angeles City Employees' Retirement System (LACERS), we are pleased to provide this overview and analysis of the financial activities of LACERS for the fiscal year ended June 30, 2017. We encourage readers to consider the information presented here in conjunction with additional information included in our letter of transmittal in the Introductory Section of LACERS Comprehensive Annual Financial Report.

### Financial Highlights

- The Los Angeles City Employees' Retirement System ("LACERS", or "the System") fiduciary net position as of June 30, 2017 was \$15,689,570,000, an increase of \$1,684,511,000 or 12.0% over the prior fiscal year.
- The total additions to the fiduciary net position of LACERS, from employer contributions made by the City of Los Angeles (the City), Member contributions, and net investment income, were \$2,633,394,000, a 235.5% increase from the prior fiscal year.
- The employer contributions to the Retirement Plan represented 100% of the Actuarially Determined Contribution of employer as defined by the Governmental Accounting Standards Board (GASB) Statements No. 67, *Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25*, and No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*.
- The employer contributions to the Postemployment Health Care Plan represented 100% of the Actuarially Determined Contribution of employer as defined by GASB Statements No. 74, *Financial Reporting for Postemployment Benefit Plans Other than Pension Plans*, and No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*.
- Net investment income for this fiscal year was \$1,854,901,000, representing a 6,791.2% increase compared with an investment income of \$26,917,000 for the previous reporting period.
- The total deduction from the fiduciary net position was \$948,883,000, a 4.9% increase from the prior fiscal year, for the payment of retirement and postemployment health care benefits, refunds of Member contributions, and administrative expenses.
- The System's Net Pension Liability (NPL) for the retirement benefits was \$5,277,672,000 as of June 30, 2017. NPL, an important measure required by GASB Statement No. 67 to disclose in the financial notes of a pension plan, is the difference between the Total Pension Liability (TPL) and the Plan fiduciary net position. As the Plan fiduciary net position is equal to the fair value of the System's assets, NPL is determined on a fair value basis, and it fully reflects the Plan's investment performance (13.3% rate of return, gross of fees) of this fiscal year. Compared with the previous fiscal year, the NPL decreased by \$337,995,000.
- The System's Net Other Postemployment Benefits (OPEB) Plan Liability for the postemployment health care benefits was \$566,944,000 as of June 30, 2017. Net OPEB Liability (NOL) is an important measure required by GASB Statement No. 74. NOL is determined on a fair value basis, and is the difference between the Total OPEB Liability (TOL) and the Plan fiduciary net position (fair value of the System's assets). NOL reflects the Plan's investment performance (13.3% rate of return, gross of fees) for this fiscal year. As compared with the previous fiscal year, NOL decreased by \$91,868,000.
- The Plan fiduciary net position as a percentage of TPL for the Retirement Plan, another required disclosure by GASB Statement No. 67, is 71.4%, which is the same as the funded ratio on a fair value basis reported in the actuarial valuation for the retirement benefits.
- The Plan fiduciary net position as a percentage of TOL for the Postemployment Health Care Plan, another required disclosure by GASB Statement No. 74, is 81.1%, which is the same as the funded ratio on a fair value basis reported in the actuarial valuation for the postemployment health care benefits.

### Overview of the Financial Statements

The following discussion and analysis are intended to serve as an introduction to LACERS financial statements and the accompanying notes thereto. The required supplementary information and supplemental schedules provide additional financial data on LACERS operations.

## **Management's Discussion and Analysis**

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### **Overview of the Financial Statements (Continued)**

#### **Financial Statements**

There are two financial statements presented by LACERS. The Statement of Fiduciary Net Position on page 24 gives a snapshot of the account balances at year-end and shows the amount of the fiduciary net position (the difference between the assets plus deferred outflows of resources, and liabilities plus deferred inflows of resources) available to pay future benefits. Over time, increases or decreases in fiduciary net position may serve as a useful indicator of whether the fiduciary net position of LACERS is improving or deteriorating. The Statement of Changes in Fiduciary Net Position on page 25 provides a view of current year additions to, and deductions from, the fiduciary net position.

#### **Notes to the Basic Financial Statements**

The notes to the basic financial statements ("Note") provide additional information that is essential for a full understanding of the data provided in the financial statements. The notes to the basic financial statements can be found on pages 26 - 47 of this report.

#### **Required Supplementary Information**

In addition to the Management's Discussion and Analysis, other required supplementary information consists of Schedule of Net Pension Liability, Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Contribution History, and Schedule of Investment Returns for the Retirement Plan, and Schedule of Net OPEB Liability, Schedule of Changes in Net OPEB Liability and Related Ratios, Schedule of Contribution History, and Schedule of Investment Returns for the Postemployment Health Care Plan. These schedules and notes primarily present multi-year information as required by the applicable financial reporting standards of GASB Statements No. 67 and No. 74. This required supplementary information can be found on pages 50 – 57 of this report.

#### **Supplemental Schedules**

The supplemental schedules, including a Schedule of Administrative Expenses and a Schedule of Investment Fees and Expenses, are presented to provide additional financial information on LACERS operations for the current year. They can be found on pages 60 and 61 of this report.

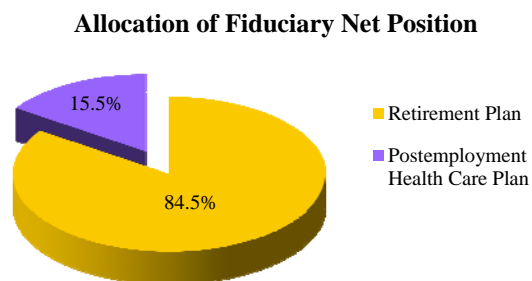
## Management's Discussion and Analysis

### Financial Analysis

#### Allocation of Fiduciary Net Position

Fiduciary net position may serve as a useful indicator of a plan's financial position. The total fiduciary net position is allocated between the Retirement Plan and Postemployment Health Care Plan, as required by the existing reporting standards. The following information provides a brief description of the asset allocation between the Retirement Plan and the Postemployment Health Care Plan as of June 30, 2017 (dollars in thousands):

	Fiduciary Net Position	Percent
Retirement Plan	\$ 13,250,708	84.5%
Postemployment Health Care Plan	2,438,862	15.5
Fiduciary Net Position	<u>\$ 15,689,570</u>	<u>100.0%</u>



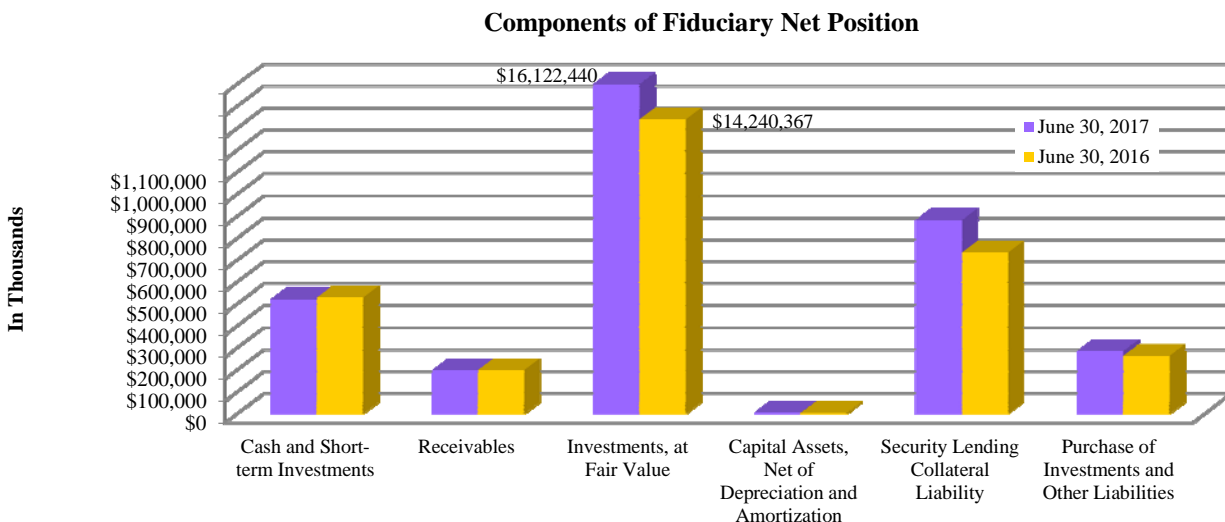
#### Fiduciary Net Position

The following table and graph detail the components of the fiduciary net position of LACERS as of June 30, 2017 and 2016 (dollars in thousands):

	June 30, 2017	June 30, 2016	Change	
Cash and Short-Term Investments	\$ 491,514	\$ 499,731	\$ (8,217)	(1.6) %
Receivables	178,907	180,505	(1,598)	(0.9)
Investments, at Fair Value	16,122,440	14,240,367	1,882,073	13.2
Capital Assets, Net of Depreciation and Amortization	<u>6,490</u>	<u>4,952</u>	<u>1,538</u>	31.1
Total Assets	<u>16,799,351</u>	<u>14,925,555</u>	<u>1,873,796</u>	12.6
Securities Lending Collateral Liability	863,691	695,789	167,902	24.1
Purchase of Investments and Other Liabilities	<u>246,090</u>	<u>224,707</u>	<u>21,383</u>	9.5
Total Liabilities	<u>1,109,781</u>	<u>920,496</u>	<u>189,285</u>	20.6
Fiduciary Net Position Restricted for Pension Benefits and Postemployment Health Care Benefits	<u>\$ 15,689,570</u>	<u>\$ 14,005,059</u>	<u>\$ 1,684,511</u>	12.0 %

## Management's Discussion and Analysis

### Financial Analysis (Continued)



### Fiduciary Net Position (Continued)

The vast majority of LACERS fiduciary net position is contained in its investment portfolio, which consists of cash and short-term investments, receivables, fixed income, equities, and other asset classes. Fiduciary net position increased by \$1,684,511,000, or 12.0%, during this fiscal year.

### Net Increase (Decrease) in Fiduciary Net Position

The increase in fiduciary net position during the reporting period was the net effect of factors that either added to or deducted from the fiduciary net position. The following table summarizes the changes in fiduciary net position during the report year, as compared with the prior year (dollars in thousands):

	June 30, 2017	June 30, 2016	Change	
Additions	\$ 2,633,394	\$ 784,949	\$ 1,848,445	235.5 %
Deductions	948,883	904,650	44,233	4.9
Net Increase/(Decrease) in Fiduciary Net Position	1,684,511	(119,701)	1,804,212	1,507.3
Fiduciary Net Position, Beginning of Year	14,005,059	14,124,760	(119,701)	(0.8)
Fiduciary Net Position, End of Year	<u>\$ 15,689,570</u>	<u>\$ 14,005,059</u>	<u>\$ 1,684,511</u>	12.0 %

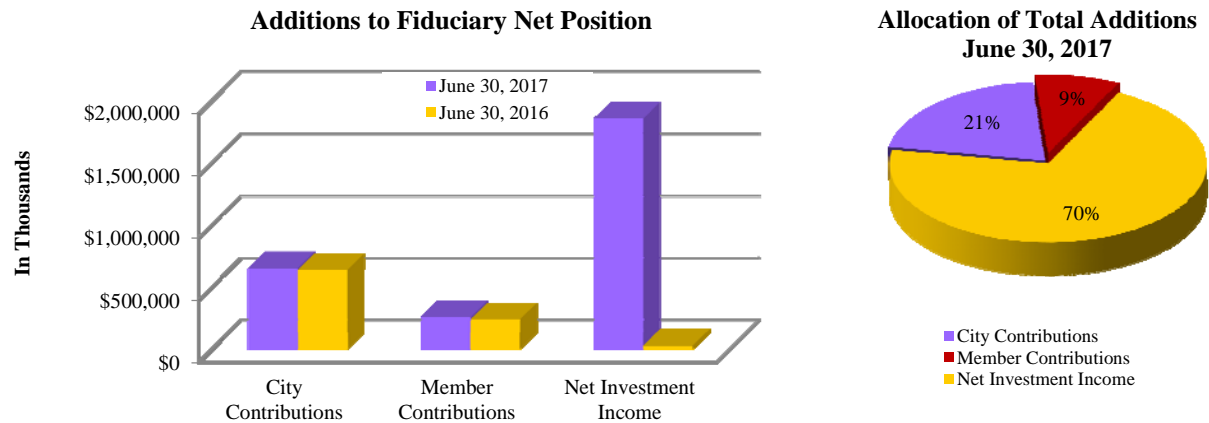
## Management’s Discussion and Analysis

### Financial Analysis (Continued)

#### Net Increase (Decrease) in Fiduciary Net Position – Additions to Fiduciary Net Position

The following table and graph represent the components that make up the additions to fiduciary net position for LACERS for the years ended June 30, 2017 and 2016 (dollars in thousands):

	June 30, 2017	June 30, 2016	Change
City Contributions	\$ 550,961	\$ 546,687	0.8 %
Member Contributions	227,532	211,345	7.7
Net Investment Income	1,854,901	26,917	6,791.2
<b>Additions to Fiduciary Net Position</b>	<b>\$ 2,633,394</b>	<b>\$ 784,949</b>	<b>235.5 %</b>



The additions to LACERS fiduciary net position include three main items that constitute the funding sources of LACERS benefits: City Contributions, Member Contributions, and Net Investment Income.

City contributions to the Retirement Plan, the Postemployment Health Care Plan, and the Family Death Benefit Plan were \$550,961,000 during the year. The total increase of \$4,274,000 (or 0.8%) over the prior fiscal year was due to a higher payroll base (approximately 5.1% increase in payroll). The total City contribution includes a true-up credit adjustment, a reduction from the advance payment of \$22,341,000 to reconcile the difference of the City’s contribution based on projected payroll against actual payroll. This true-up amount, which included accrued interest at 7.5%, was recognized as liability as of the end of the reporting period. After reflecting the true-up adjustment, the aggregate employer contribution rate for this fiscal year was 27.92% (22.98% for the Retirement Plan and 4.94% for the Postemployment Health Care Plan) which is 1.20% lower than the prior fiscal year at 29.12%. The actual contribution to the Retirement Plan in the amount of \$453,356,000 was equal to 100% of the Actuarially Determined Contribution (ADC) of employer, as defined by GASB Statement No. 67. The actual contribution to the Postemployment Health Care Plan in the amount of \$97,457,000 was equal to 100% of the Actuarially Determined Contribution of employer, as defined by GASB Statement No. 74.

## Management's Discussion and Analysis

### Financial Analysis (Continued)

#### Net Increase (Decrease) in Fiduciary Net Position – Additions to Fiduciary Net Position (Continued)

In fiscal year 2016-17, Member contributions were \$227,532,000, which was \$16,187,000 or 7.7% greater than the prior year. The primary cause of the increased contributions was the increase in number of Members and their salaries during the fiscal year. During this fiscal year, LACERS received a \$999,000 lump sum payment of Member contributions from Los Angeles World Airport (LAWA) to settle collective bargaining issues with these Members' retroactive contributions for prior years. Although it was paid by the employer, this amount was included as Member contributions in order to comply with the requirements of GASB Statement No. 82, *Pension Issues*.

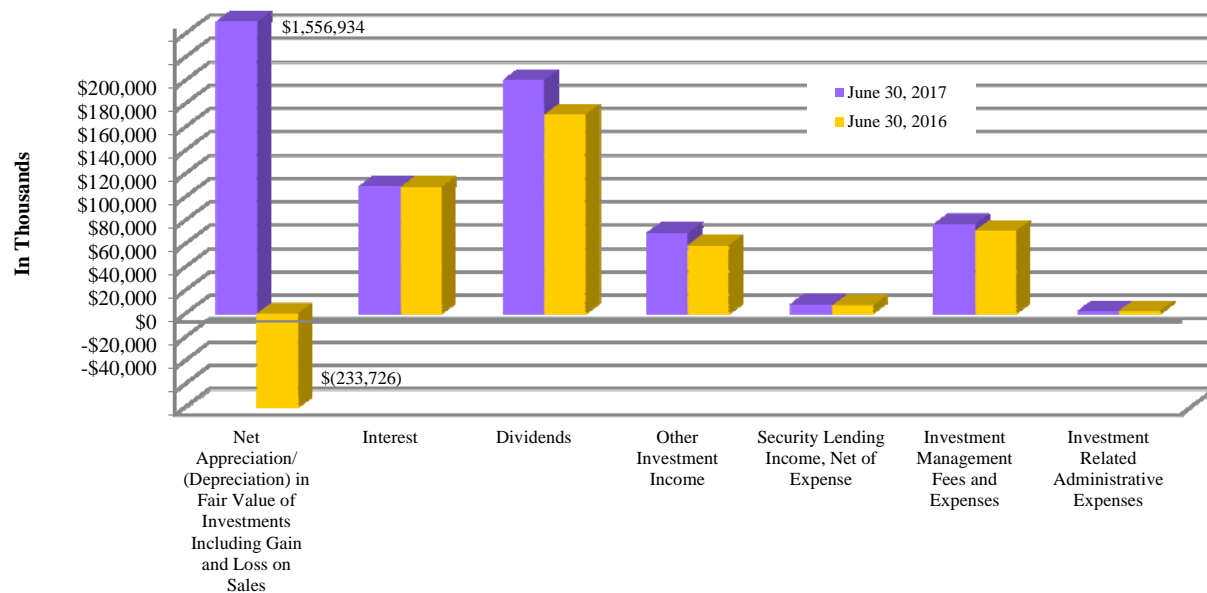
The net investment income was \$1,854,901,000, which included \$1,556,934,000 of net appreciation in the fair value of investments. This is discussed in more detail in the next section.

#### Investment Income

The following table and graph present the detail of investment income, net of investment management fees and expenses for the years ended June 30, 2017 and 2016 (dollars in thousands):

	June 30, 2017	June 30, 2016	Change
Net Appreciation/(Depreciation) in Fair Value of Investments Including Gain and Loss on Sales	\$ 1,556,934	\$ (233,726)	766.1 %
Interest	102,138	103,618	(1.4)
Dividends	195,794	165,432	18.4
Other Investment Income	64,037	51,479	24.4
Security Lending Income, Net of Expense	7,842	6,654	17.9
Sub-Total	1,926,745	93,457	1,961.6
Less: Investment Management Fees and Expenses	(69,969)	(64,439)	8.6
Investment Related Administrative Expenses	(1,875)	(2,101)	(10.8)
Net Investment Income	\$ 1,854,901	\$ 26,917	6,791.2 %

**Investment Income and Expenses**



## Management's Discussion and Analysis

### Financial Analysis (Continued)

#### Investment Income (Continued)

The net investment income for the current fiscal year was \$1,854,901,000, as compared with the income of \$26,917,000 for the previous fiscal year (6,791.2% increase). The primary cause of large increase of investment income was a \$1,556,934,000 of net appreciation, including gain and loss on sales, in fair value of LACERS investment assets as compared with the previous year's net realized and unrealized loss of \$233,726,000, and reflected the economic and financial strength in equity markets over the reporting period. Major U.S. and non-U.S. equity indices achieved double returns during the fiscal year. The MSCI World Ex-U.S. Index, which tracks non-U.S. equities in developed markets, returned 19.5%; the MSCI Emerging Markets Index returned 23.8%. In contrast, the Russell 3000 Index, which tracks U.S. broad market equities, returned 18.5%, while Standard & Poor's 500 Index, a gauge of U.S. large capitalization equities, returned 17.9%. With the passage of Assembly Bill No. 2833 in this fiscal year, private equity and real estate funds have started to provide detailed disclosure on fees, expenses, and carried interest. The net appreciation as reported reflects a deduction for carried interest in the amount of \$33,399,000 which represents a profit share that the general partners of these funds received as a compensation after the performance of the funds achieved agreed-upon return level.

Interest income derived from bonds and other fixed income securities decreased by \$1,480,000 (1.4%),

which was attributed primarily to a decline in the average coupon rate of LACERS fixed income portfolio.

Dividend income derived from equities increased by \$30,362,000 (18.4%) due to an increase in public equity holdings relative to the previous fiscal year.

Other investment income, primarily derived from private equity and private real estate partnership investments, increased by \$12,558,000 (24.4%) to \$64,037,000 in the current fiscal year. This increase was attributed to higher partnership distributions in light of a robust market environment.

LACERS earns additional investment income by lending the securities to borrowers through its custodian bank. The borrowers provide cash or non-cash collateral to LACERS custodian bank. To earn income for LACERS, the custodian bank invests the cash collateral pledged by borrowers on behalf of LACERS in short-term fixed-income securities. LACERS also generates income from fees paid by borrowers that pledge non-cash collateral. In the reporting year, LACERS security lending income (net of expense) increased by \$1,188,000 (17.9%) from a year ago due to higher borrower demand for securities held in the LACERS portfolio.

Investment management fees, expenses, and investment related administrative expenses increased by \$5,304,000 (8.0%) from the prior year. This increase corresponded with the increase in the fair value of LACERS investments over the fiscal year.

#### Net Increase (Decrease) in Fiduciary Net Position – Deductions from Fiduciary Net Position

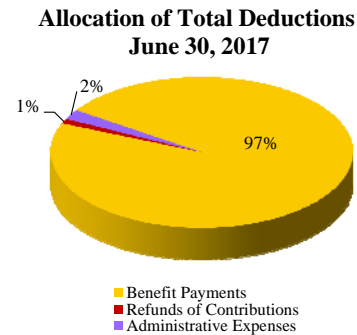
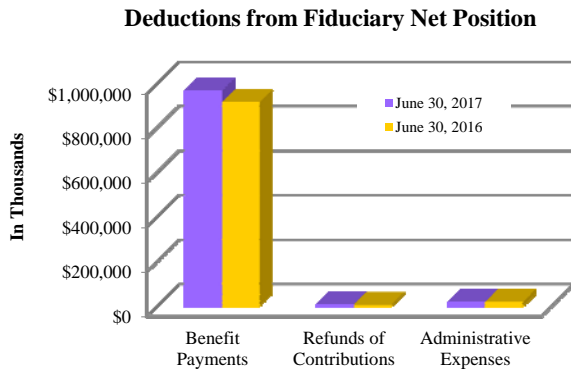
The following table and graphs provide information related to the deductions from fiduciary net position for the years ended June 30, 2017 and 2016 (dollars in thousands):

	June 30, 2017	June 30, 2016	Change
Benefit Payments	\$ 918,837	\$ 877,204	4.7 %
Refunds of Contributions	9,803	7,719	27.0
Administrative Expenses	20,243	19,727	2.6
Deductions from Fiduciary Net Position	\$ 948,883	\$ 904,650	4.9 %

# Management's Discussion and Analysis

## Financial Analysis (Continued)

### Net Increase (Decrease) in Fiduciary Net Position – Deductions from Fiduciary Net Position (Continued)



LACERS deductions from fiduciary net position in the reporting period can be summarized as Benefit Payments, Refunds of Contributions, and Administrative Expenses. These deductions represent the types of benefit delivery operations undertaken by LACERS and the costs associated with them. Total deductions increased by \$44,233,000 or 4.9%.

Compared to the prior year, benefit payments increased by \$41,633,000 or 4.7%. The benefit payments for the Retirement Plan increased by \$31,957,000 (4.2%) mainly due to the annual cost of living adjustments (COLA) (approximately 0.9% increase on average with a maximum of 3.0%); increased number of retirees and beneficiaries; and the average retirement allowance of newly retired Members being higher than those of the deceased Members who were removed from the retirement payroll. Payments for Postemployment Health Care Plan benefits also increased by \$9,676,000 (8.8%). This increase mainly driven by the higher maximum health subsidy amount at \$1,737 per month (the maximum subsidy amount was \$1,580 for the two previous years) based on the higher renewed medical premium rates as well as the higher Medicare Part B Reimbursement rate for calendar year 2017, and the increased in number of retired Members and their dependents eligible for medical subsidy. In addition, there was a retroactive adjustment made in the health care benefit expense in fiscal year 2016 related to a one-time defrayal of \$3,718,000 by the return of excess premium stabilization reserve in the a postemployment healthcare provider which lowered the prior year expense, resulting to a higher increase in expense for this reporting year.

The refunds of Member contributions increased by \$2,084,000 (27.0%) from the prior year's \$7,719,000 mainly due to the increased in claims for the refunds of contributions upon Members leaving City service or their death.

LACERS administrative expenses increased by \$516,000 or 2.6% from the prior year. This increase was primarily due to salary factors such as granted COLA increases, additional staff overtime costs for the implementation of the Pension Administration System software replacement project, and LACERS share of employer contributions to employee retirement and OPEB benefits.

### Requests for Information

This financial report is designed to provide a general overview of LACERS finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

LACERS  
Fiscal Management Section  
202 W. First Street, Suite 500  
Los Angeles, CA 90012-4401



## **BASIC FINANCIAL STATEMENTS**

**Statement of Fiduciary Net Position**  
**Retirement Plan and Postemployment Health Care Plan**  
**As of June 30, 2017 with Comparative Totals**  
**(In Thousands)**

	<u>Retirement Plan</u>	<u>Postemployment Health Care Plan</u>	<u>2017 Total</u>	<u>2016 Total</u>
<b>Assets</b>				
Cash and Short-Term Investments	\$ 415,111	\$ 76,403	\$ 491,514	\$ 499,731
Receivables				
Accrued Investment Income	44,573	8,204	52,777	50,163
Proceeds from Sales of Investments	95,098	17,503	112,601	102,334
Other	11,426	2,103	13,529	28,008
Total Receivables	<u>151,097</u>	<u>27,810</u>	<u>178,907</u>	<u>180,505</u>
Investments, at Fair Value				
U.S. Government Obligations	799,739	147,196	946,935	937,518
Municipal Bonds	3,615	665	4,280	1,431
Domestic Corporate Bonds	777,905	143,177	921,082	903,753
International Bonds	473,954	87,234	561,188	542,403
Other Fixed Income	733,729	135,046	868,775	856,747
Bank Loans	5,372	989	6,361	2,111
Opportunistic Debts	76,351	14,053	90,404	84,286
Domestic Stocks	3,561,155	655,449	4,216,604	3,603,882
International Stocks	4,056,464	746,613	4,803,077	3,938,201
Mortgages	329,795	60,701	390,496	406,958
Government Agencies	28,453	5,237	33,690	25,507
Derivative Instruments	1,993	367	2,360	-
Real Estate	705,075	129,773	834,848	823,132
Private Equity	1,333,256	245,393	1,578,649	1,418,649
Securities Lending Collateral	729,435	134,256	863,691	695,789
Total Investments	<u>13,616,291</u>	<u>2,506,149</u>	<u>16,122,440</u>	<u>14,240,367</u>
Capital Assets				
Furniture, Computer Hardware and Software (Net of Depreciation and Amortization)	5,481	1,009	6,490	4,952
<b>Total Assets</b>	<u>14,187,980</u>	<u>2,611,371</u>	<u>16,799,351</u>	<u>14,925,555</u>
<b>Liabilities</b>				
Accounts Payable and Accrued Expenses	31,745	5,843	37,588	38,484
Accrued Investment Expenses	9,104	1,675	10,779	11,324
Derivative Instruments	-	-	-	871
Purchases of Investments	166,988	30,735	197,723	174,028
Securities Lending Collateral	729,435	134,256	863,691	695,789
<b>Total Liabilities</b>	<u>937,272</u>	<u>172,509</u>	<u>1,109,781</u>	<u>920,496</u>
<b>Fiduciary Net Position Restricted for Pension Benefits and Postemployment Health Care Benefits</b>	<u><u>\$ 13,250,708</u></u>	<u><u>\$ 2,438,862</u></u>	<u><u>\$ 15,689,570</u></u>	<u><u>\$ 14,005,059</u></u>

The accompanying notes are an integral part of these financial statements.

**Statement of Changes in Fiduciary Net Position**  
**Retirement Plan and Postemployment Health Care Plan**  
**For the Fiscal Year Ended June 30, 2017 with Comparative Totals**  
**(In Thousands)**

	<b>Retirement Plan</b>	<b>Postemployment Health Care Plan</b>	<b>2017 Total</b>	<b>2016 Total</b>
<b>Additions</b>				
Contributions				
City Contributions	\$ 453,504	\$ 97,457	\$ 550,961	\$ 546,687
Member Contributions	227,532	-	227,532	211,345
Total Contributions	681,036	97,457	778,493	758,032
Investment Income				
Net Appreciation (Depreciation) in Fair Value of Investments, Including Gain and Loss on Sales	1,274,660	282,274	1,556,934	(233,726)
Interest	85,251	16,887	102,138	103,618
Dividends	163,423	32,371	195,794	165,432
Other Investment Income	53,450	10,587	64,037	51,479
Securities Lending Income	7,700	1,525	9,225	7,828
Less: Securities Lending Expense	(1,132)	(251)	(1,383)	(1,174)
Sub-Total	1,583,352	343,393	1,926,745	93,457
Less: Investment Management Fees and Expenses	(57,284)	(12,685)	(69,969)	(64,439)
Investment Related Administrative Expenses	(1,535)	(340)	(1,875)	(2,101)
Net Investment Income	1,524,533	330,368	1,854,901	26,917
<b>Total Additions</b>	<b>2,205,569</b>	<b>427,825</b>	<b>2,633,394</b>	<b>784,949</b>
<b>Deductions</b>				
Benefit Payments	799,221	119,616	918,837	877,204
Refunds of Contributions	9,803	-	9,803	7,719
Administrative Expenses	16,019	4,224	20,243	19,727
<b>Total Deductions</b>	<b>825,043</b>	<b>123,840</b>	<b>948,883</b>	<b>904,650</b>
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<b>1,380,526</b>	<b>303,985</b>	<b>1,684,511</b>	<b>(119,701)</b>
<b>Fiduciary Net Position Restricted for Pension Benefits and Postemployment Health Care Benefits</b>				
<b>Beginning of Year</b>	<b>11,870,182</b>	<b>2,134,877</b>	<b>14,005,059</b>	<b>14,124,760</b>
<b>End of Year</b>	<b>\$ 13,250,708</b>	<b>\$ 2,438,862</b>	<b>\$ 15,689,570</b>	<b>\$ 14,005,059</b>

The accompanying notes are an integral part of these financial statements.

# Notes to the Basic Financial Statements

## 1. Description of LACERS and Significant Accounting Policies

### General Description

The Los Angeles City Employees' Retirement System ("LACERS", or "the System") is under the exclusive management and control of its Board of Administration (the Board), whose authority is granted by statute in Article XVI, Section 17 of the California State Constitution, and Article XI of the Los Angeles City Charter. The Board has seven members. Four members, one of whom shall be a retired Member of the System, shall be appointed by the Mayor subject to the approval of the City Council. Two members shall be active employee Members of the System elected by active employee Members. One shall be a retired Member of the System elected by retired Members of the System. Elected Board members serve five-year terms in office, with no term limits. The System is a Department of the Municipality of the City of Los Angeles (the City). The System's financial statements are included in the City of Los Angeles' Annual Financial Report as a pension trust fund.

The System operates a single-employer defined benefit plan (the Retirement Plan) and a Postemployment Health Care Plan. Benefits and benefit changes are established by ordinance and approved by the City Council and the Mayor. A description of each plan is located in Note 2 and Note 3 on pages 29 - 37 of this report. All Notes to the Basic Financial Statements apply to both plans unless indicated otherwise.

Members who entered the System prior to February 21, 2016 are Tier 1 Members of LACERS. On or after February 21, 2016, new Members become Members of LACERS Tier 3 (refer to Note 2 – Retirement Plan Description on pages 29 - 30, and Note 3 – Postemployment Health Care Plan Description on page 34 for each tier's eligibility requirement and benefits provided).

### Basis of Accounting and Presentation

The financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America (US GAAP) as outlined by the Governmental Accounting Standards Board (GASB). The financial statements are maintained on the accrual basis of accounting. Contributions from the employer and Members were recognized when due pursuant to formal commitments and contractual requirements. Benefits, refunds, and other expenses are recognized when due and payable. The accompanying financial statements

include information from the prior year summarized for comparative purpose only. Such information does not include sufficient detail to constitute a presentation in accordance with US GAAP.

### Investments

#### Investment Policies

Funds of the System are invested pursuant to the System's investment policy, established by the Board, in compliance with Article XI Section 1106(d) of the City Charter. The System has a long-term investment horizon, and utilizes an asset allocation that encompasses a strategic, long run perspective of capital markets. The System's investment portfolio is composed of domestic and international equities, domestic and international bonds, bank loans, derivative instruments, real assets, private equity, and short-term investments. During the reporting period, there were no significant investment policy changes.

As of June 30, 2017, the Board's adopted asset allocation policy was as follows:

Asset Class	Target Allocation
Domestic and International Equities	53.0%
Domestic and International Bonds	19.0
Private Equity	12.0
Real Assets	10.0
Short-Term Investments	1.0
Credit Opportunities	5.0
Total	100.0%

#### Fair Value of Investments

Securities traded on national or international exchanges are valued at the last reported sales price at the current exchange rates. Short-term investments, bonds, bank loans, stocks, and private equities are reported at fair value. The fair values of real estate investment funds are provided by the individual real estate fund managers based on periodic appraisals, in the form of either annual in-house appraisals or longer-term appraisals by outside professionals, in accordance with industry practice. The fair value determined as such is also reviewed and evaluated by the Board's real estate consultant. The private equity funds ("partnership investment"), which are managed by third party investment managers, are valued on a quarterly and/or annual basis at their net asset value as reported by the investment managers under US GAAP. US GAAP requires that assets be reported at fair value in accordance with Accounting Standards Codification Topic 820 – *Fair Value Measurement and Disclosures*. The fair values of derivative instruments are determined using available market

## Notes to the Basic Financial Statements

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### 1. Description of LACERS and Significant Accounting Policies (Continued)

#### Investments (Continued)

information. Debt rewrites are valued based on yields currently available on comparable securities of issuers with similar credit ratings. LACERS investment strategy, as it relates to the debt portfolio, is mainly to achieve market appreciation and not to hold bonds to their maturities.

The provisions of the GASB Statement No. 72, *Fair Value Measurement and Application*, require investments to be measured at fair value as well as to classify the inputs used to determine fair value based on a three-level fair value hierarchy. This information is presented in the Note 6 on pages 43 - 45.

Investment transactions are accounted for on the date the securities are purchased or sold (trade date). Unsettled investment trades as of fiscal year-end are reported in the financial statements on an accrual basis. The corresponding proceeds due from sales are reported on the Statement of Fiduciary Net Position under Receivables and labeled as Proceeds from Sales of Investments, and amounts payable for purchases are reported under (Current) Liabilities and labeled as Purchases of Investments. Dividend income is recorded on the ex-dividend date. Interest income is reported at the stated interest rate as earned, and any premiums or discounts on debt securities are not amortized. The calculation of realized gains and losses is independent of the calculation of the net change in the fair value of LACERS pension plan investment. Realized gains and losses on investments that had been held in more than one reporting period and sold in the current period were included as a change in the fair value reported in the prior period(s) and the current period.

For the future contracts, an initial margin is required to open a position and maintain the collateral requirement until the position is closed. LACERS reports the collateral for the future contracts in the short-term investments.

#### Concentrations

The investment portfolio as of June 30, 2017, contained no concentration of investments in any one entity that represented 5% or more of the total investment portfolio.

#### Rate of Return on Investments

For the year ended June 30, 2017, the aggregate annual money-weighted rate of return on LACERS

investments, net of investment expenses, was 13.03%.

The money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested. Separate schedules for the money-weighted rate of return for Retirement Plan and Postemployment Health Care Plan are presented in the Required Supplementary Information (RSI) on pages 53 and 57, respectively.

#### Receivables

As of June 30, 2017, LACERS held no long-term contracts for contributions receivable from the City.

#### Capital Assets

Prior to July 1, 2001, purchases of capital assets, consisting primarily of office furniture and computer equipment, were recorded and expensed in the year acquired. Effective July 1, 2001, these purchases are capitalized upon acquisition if the cost of purchase is \$5,000 or more, and depreciated over five years using the straight-line method.

In order to comply with the requirements of GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*, certain costs for developing LACERS new Pension Administration System (PAS), a customized software solution critical to LACERS core operations, have been capitalized. This project is still in process, and the capitalized costs to date as of June 30, 2017 was \$6,194,000.

#### Administrative Expenses

All administrative expenses are funded from LACERS fiduciary net position, which represents accumulated investment earnings and contributions from the City and the Members net of payments.

#### Reserves

As provided in the Los Angeles City Charter, LACERS is maintained on a reserve basis, determined in accordance with recognized actuarial methods. The Los Angeles City Charter establishes reserves for the following:

##### Reserves for the Retirement Plan

Member Contributions (Mandatory) – To provide for individual accounts of Members consisting of Active Member mandatory contributions to the Retirement Plan and interest credited to Members' accounts, less refunds of Members contributions and transfers to the Annuity reserve.

## Notes to the Basic Financial Statements

### 1. Description of LACERS and Significant Accounting Policies (Continued)

#### Reserves (Continued)

##### Reserves for the Retirement Plan (Continued)

Member Contributions (Voluntary) – To provide for individual accounts of Members participating in the larger annuity program of Active Member voluntary contributions and interest/investment return credited to Members’ accounts, less refunds of Member contributions (voluntary) and transfers to the Larger Annuity reserve.

Basic Pensions – To provide for the City’s guaranteed portion of retirement benefits consisting of City contributions; investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to retired Members.

Annuity – To provide for the Members’ share of retirement benefits consisting of Members’ mandatory contribution balances transferred at retirement; investment earnings (losses) excluding net appreciation (depreciation) in fair value of investments; less payments to retired Members.

Larger Annuity – To provide for the Larger Annuity benefit consisting of Members’ voluntary contribution balances transferred at retirement including Internal Revenue Service (IRS) Section 457 deferred compensation and other rollovers; investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to participating retired Members.

Family Death Benefit Plan (FDBP) – To pay benefits under the Family Death Benefit Plan administered by LACERS consisting of Active Member voluntary contributions; matching City contributions; and investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to beneficiaries.

##### Reserve for the Postemployment Health Care Plan

To provide health care benefits for retirees consisting of City contributions; investment earnings (losses) including net appreciation (depreciation) in fair value of investments; less payments to insurance providers and reimbursements to retired Members.

Reserve balances as of June 30, 2017, were as follows (in thousands):

##### Reserves for the Retirement Plan

###### Member Contributions:

- Mandatory	\$	2,289,986	
- Voluntary		5,788	
Basic Pensions		10,404,730	
Annuity		485,800	
Larger Annuity		48,543	
FDBP		15,861	\$13,250,708

##### Reserve for the Postemployment

Health Care Plan		2,438,862
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Total Reserves		<u>\$15,689,570</u>
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#### Estimates

The preparation of the financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting years. Actual results could differ from those estimates.

#### Implementation of New GASB Pronouncements

On June 2, 2015, the GASB released two new standards: GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The new Other Postemployment Benefits (OPEB), primarily retiree health insurance, standards parallel the pension standards issued in June 2012: GASB Statement No. 67, *Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25*, and GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*.

In the current fiscal year, the System implemented the provisions of the GASB Statement No. 74 which requires the net OPEB liability to be measured as the total OPEB liability, less the amount of the OPEB plan’s fiduciary net position. The total OPEB liability generally is required to be determined through an actuarial valuation. The implementation of this Statement also requires various other information provided through revised and new Note disclosures and RSI which, in general, parallel those under the GASB Statement No. 67.

## Notes to the Basic Financial Statements

### 1. Description of LACERS and Significant Accounting Policies (Continued)

#### Implementation of New GASB Pronouncements (Continued)

Together, the pension and OPEB standards provide consistent and comprehensive guidance for accounting and financial reporting of benefits administered by LACERS. Significant changes include: 1) a disclosure of the annual money-weighted rate of return; 2) a disclosure of the asset allocation policy; 3) a sensitivity analysis of net OPEB liability using a discount rate that is one percentage point higher and lower than the current rate; and 4) an actuarial calculation of net OPEB liability using a healthcare cost trend rate that is one percentage point higher and lower than assumed healthcare cost trend rate, as required by the Statement No. 74. This information is presented in the Note 3 - Postemployment Health Care Plan Description on pages 34 - 37 and in RSI schedules. Statement No. 74 replaces a few reporting requirements under the previously issued GASB Statements, therefore, the schedule of funding progress under GASB Statement No. 25 is no longer included in RSI. The previously reported schedule of employer contributions for the Postemployment Health Care Plan is replaced by a schedule of contribution history in RSI.

In March 2016, GASB issued Statement No. 82, *Pension Issues*, to address certain issues that have been raised with respect to the Statements No. 67, No. 68, and No. 73 such as presentation of payroll related measures in RSI and classification of employer-paid member contributions. Key changes implemented by the System include: 1) replacing the former description of "covered-employee payroll" with "covered payroll" in the RSI schedules; and 2) classifying the payments that are made by an employer to satisfy contribution requirements that are identified by the pension plan terms as Plan Member contributions.

### 2. Retirement Plan Description

#### Plan Administration and Membership

LACERS administers a defined benefit pension plan that provides for service and disability retirement benefits, as well as death benefits.

The Retirement Plan covers all full-time personnel and department-certified part-time employees of the City, except for sworn employees of the Fire and

Police departments, Department of Water and Power employees, elected officials who elected to participate in an alternative Defined Contribution Plan, certain Port Police officers of the Harbor, and certain Airport Peace Officers of the Airports who elected to opt out of LACERS. Upon transferring all active Tier 2 Members to Tier 1 as of February 21, 2016, Membership to Tier 1 is now closed to new entrants unless a Member meets one of the exceptions allowed in the Ordinance (No. 184134). Eligible employees hired on or after February 21, 2016 become Members of Tier 3.

As of June 30, 2017, the components of LACERS membership in both tiers (Tier 1 and Tier 3) were as follows:

Active:	
Vested	19,188
Non-vested	6,269
	<u>25,457</u>
Inactive:	
Non-vested	5,078
Terminated Entitled to Benefits, Not Yet Receiving Benefits	2,350
Retired	18,805
	<u>18,805</u>
Total	<u>51,690</u>

Members of LACERS have a vested right to their own contributions and accumulated interest posted to their accounts. Generally, after five years of employment, Members are eligible for future retirement benefits, which increase with length of service. If a Member who has five or more years of continuous City service terminates employment, the Member has the option of receiving retirement benefits when eligible or having his or her contributions and accumulated interest refunded. Benefits are based upon age, length of service, and compensation.

#### Eligibility Requirement and Benefits Provided

##### Tier 1

Plan Members are eligible to retire with unreduced benefits if they have 10 or more years of continuous City service at age 60, or at least 30 years of City service at age 55, or with any years of City service at age 70 or older. Plan Members also are eligible to retire with age-based reduced benefits after reaching age 55 with 10 or more years of continuous City service, or at any age with 30 or more years of City service. Full (unreduced) retirement benefits are determined as 2.16% of the Member's average monthly pensionable salary during the Member's last

## Notes to the Basic Financial Statements

### 2. Retirement Plan Description (Continued)

#### Eligibility Requirement and Benefits Provided (Continued)

12 months of service, or during any other 12 consecutive months of service designated by the Member, multiplied by the Member's years of service credit. Plan Members with five years of continuous service are eligible for disability retirement, and the benefits are determined as 1/70 of the Member's final average monthly salary for each year of service or 1/3 of the Member's final average monthly salary, if greater. Upon an active Member's death, a refund of the Member's contributions and, depending on the Member's years of service, a limited pension benefit equal to 50% of monthly salary may be paid up to 12 months. Or, if such Member was eligible to retire, survivor benefits may be paid to an eligible spouse or qualified domestic partner. Upon a retired Member's death, a \$2,500 funeral allowance is paid, and a modified or unmodified allowance is continued to an eligible spouse or qualified domestic partner.

#### Tier 3

Plan Members are eligible to retire with unreduced benefits if they have at least 10 or more years of City service at age 60 or at least 30 years of City service at age 55, provide that five years of service must be continuous. Full unreduced retirement benefits at age 60 with 10 years of City service are determined with a 1.5% retirement factor. Plan Members also are eligible to retire with an age-based reduced benefit before reaching age 60 with 30 or more years of City service with a retirement factor of 2.0%. If the Member is age 55 or older with 30 years of service at the time of retirement, his or her retirement allowance will not be subject to reduction on account of age. However, if the Member is younger than age 55 with 30 years of Service at the time of retirement, his or her retirement allowance will be reduced by the applicable early retirement reduction factor. In addition, the System also provides Tier 3 Members an enhanced retirement benefits with a 2.0% retirement factor if the Member retires at age 63 with at least 10 years of service, or a retirement factor of 2.1% if the Member retires at age 63 with 30 years of service. Tier 3 retirement benefits are determined by multiplying the Member's retirement factor (1.5% - 2.1%), with the Member's Final Average Compensation (FAC) based on the Member's pensionable salary for the last 36 months or any other 36 consecutive months designated by the Member, and by the Member's years of service credit (SC) as follows:

Age at Retirement	Required Years of Service	Retirement Benefit <sup>(1)</sup>
Under 55	30 Years	2.0% x FAC x Yrs. of SC <sup>(2)</sup>
55 and Over	30 Years	2.0% x FAC x Yrs. of SC
60 and Over	10 Years	1.5% x FAC x Yrs. of SC
63 and Over	10 Years	2.0% x FAC x Yrs. of SC
63 and Over	30 Years	2.1% x FAC x Yrs. of SC

(1) Retirement allowance may not exceed 80% of final compensation except when benefit is based solely on the annuity component funded by the Member's contributions.

(2) A reduction factor will be applied based on age at retirement.

Plan Members with five years of continuous service are eligible for disability retirement, and the benefits are determined as 1/70 of the Member's final average monthly salary for each year of service or 1/3 of the Member's final average monthly salary, if greater. Upon an active Member's death, a refund of the Member's contributions and, depending on the Member's years of service, a limited pension benefit equal to 50% of monthly salary may be paid up to 12 months. Or, if such Member was eligible to retire, survivor benefits may be paid to an eligible spouse or qualified domestic partner. Upon a retired Member's death, a \$2,500 funeral allowance is paid, and a modified or unmodified allowance is continued to an eligible spouse or qualified domestic partner.

There were no Tier 3 Members who retired during this reporting period.

#### Cost of Living Adjustment

Retirement allowances are indexed annually for inflation. The Board has authority to determine, no later than May 1<sup>st</sup> of each year, the average annual percentage change in the Consumer Price Index (CPI) for the purpose of providing a Cost of Living Adjustment (COLA) to the benefits of eligible Members and beneficiaries in July. The adjustment is based on the prior year's change of Los Angeles area CPI subject to a maximum of 3.0% for Tier 1 Members or 2.0% for Tier 3 Members. For Tier 1 Members, the COLA percentage greater than 3.0% is banked for future use.

#### Employer Contributions

The Los Angeles City Charter Sections 1158 and 1160 provide for periodic actuarially-determined employer contribution rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate the required assets to pay benefits



## Notes to the Basic Financial Statements

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### 2. Retirement Plan Description (Continued)

#### Employer Contributions (Continued)

when due. For the year ended June 30, 2017, the actuarially-determined contribution of the employer to the Retirement Plan by the City was 22.88% of covered payroll, based on the June 30, 2015 actuarial valuation. Upon closing the fiscal year 2016-17, LACERS re-calculated employer contributions using actual payroll incurred during the fiscal year which was smaller than projected covered payroll used by the City to make the advance payment at the beginning of the fiscal year. As a result, employer contributions received for the Retirement Plan were \$18,921,000 more, and it was credited to the employer toward employer contribution for fiscal year 2017-18. Based on actual payroll, the effective rate of employer contribution for Retirement Plan was 22.98%.

#### Member Contributions

##### Tier 1

The current contribution rate for Tier 1 Members is 11% of their pensionable salary including: 1) a 1% increase in the Member contribution rate pursuant to 2009 Early Retirement Incentive Program (ERIP) ordinance for all employees for a period of 15 years (or until the ERIP Cost obligation is fully recovered, whichever comes first); and 2) 4% additional contributions in exchange for a vested right to future increases in the maximum retiree medical subsidy pursuant to a 2011 City Council ordinance. As of June 30, 2017, all active Tier 1 Members are now paying additional contributions, and are not subject to the retiree medical subsidy cap.

##### Tier 3

The contribution rate for Tier 3 Members is 11% of their pensionable salary including 4% additional contributions in exchange for a vested right to future increases in the maximum retiree medical subsidy. Unlike Tier 1, Tier 3 Members do not pay ERIP contribution, therefore, Tier 3 Members' contribution rate will not drop down when Tier 1 Members cease to pay the 1% ERIP contribution.

## Notes to the Basic Financial Statements

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### 2. Retirement Plan Description (Continued)

#### Net Pension Liability

In calculating the Plan's net pension liability, the total pension liability and the Plan fiduciary net position exclude amounts associated with Family Death and Larger Annuity Benefits. As of June 30, 2017, the components of the net pension liability were as follows (in thousands):

Total Pension Liability	\$ 18,458,188
Plan Fiduciary Net Position <sup>(1)</sup>	<u>(13,180,516)</u>
Plan's Net Pension Liability	<u>\$ 5,277,672</u>

Plan Fiduciary Net Position as a percentage of the Total Pension Liability	71.4%
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(1) Plan fiduciary net position was \$13,250,708,000 as of June 30, 2017 without excluding amounts associated with Family Death, and Larger Annuity Benefits.

#### Significant Assumptions

Projections of benefits for financial reporting purposes are based on the types of benefits provided to active, inactive, and retired Members at the time of each valuation, including expected future COLAs. The attribution method and significant assumptions used in the valuation year of June 30, 2017, are summarized below:

Valuation Date	June 30, 2017
Actuarial Cost Method	Entry Age Method – assuming a closed group (individual basis).
Amortization Method	Level Percent of Payroll
Actuarial Assumptions:	
Date of Experience Study	June 30, 2014 (July 1, 2011 through June 30, 2014)
Long-Term Expected Rate of Return	7.25%, net of pension plan investment expenses, including inflation assumption at 3.00%.
Inflation	3.00%
Real Across-the-Board Salary Increase	0.50%
Projected Salary Increases	Ranges from 3.90% to 10.00% based on years of service, including inflation assumption at 3.00% and the real across-the-board salary increase assumption of 0.50%.
Annual COLAs	3.0% maximum for Tier 1 and 2.0% maximum for Tier 3
Mortality Table for Retirees and Beneficiaries	RP-2000 Combined Healthy Mortality Table, projected with Scale BB to 2020, set back one year for males and no set back for females.
Mortality Table for Disabled Retirees	RP-2000 Combined Healthy Mortality Table, projected with Scale BB to 2020, set forward seven years for males and set forward eight years for females.
Percent Married / Domestic Partner	76% of male participants; 50% of female participants are assumed to be married or have a qualified domestic partner.
Spouse Age Difference	Male retirees are assumed to be four years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.

## Notes to the Basic Financial Statements

### 2. Retirement Plan Description (Continued)

#### Net Pension Liability (Continued)

##### Discount Rate

The discount rates used to measure the total pension liability were 7.25% and 7.50% as of June 30, 2017 and June 30, 2016, respectively. Both rates are long-term expected rate of return on the System's investments.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rate of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized as follows:

Asset Class	Target Allocation	Arithmetic Long-Term Expected Real Rate of Return
U.S. Large Cap Equity	19.0%	5.6%
U.S. Small Cap Equity	5.0	6.5
Developed Int'l Equity	19.0	7.1
Developed Int'l Small Cap Equity	3.0	7.3
Emerging Market Equity	7.0	9.4
Core Bonds	19.0	1.1
Private Real Estate	5.0	4.4
Public Real Assets	5.0	3.4
Private Equity	12.0	9.0
Credit Opportunities	5.0	3.8
Cash	1.0	(0.1)
Total	<u>100.0%</u>	

The projection of cash flows used to determine the discount rate assumed plan Member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the actuarially-determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan Members

and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan Members and beneficiaries, as well as projected contributions from future plan Members, are not included.

Based on those assumptions, LACERS fiduciary net position was projected to be available to make "all" projected future benefit payments for current plan Members. Therefore, in accordance with the GASB Statement No. 67, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of both June 30, 2017 and June 30, 2016.

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

The following presents the net pension liability of LACERS as of June 30, 2017, calculated using the discount rate of 7.25%, as well as what LACERS net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.25%) or one percentage point higher (8.25%) than the current rate (dollar in thousands):

1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
<u>\$7,722,365</u>	<u>\$5,277,672</u>	<u>\$3,243,284</u>

## Notes to the Basic Financial Statements

### 3. Postemployment Health Care Plan Description

#### Plan Administration and Membership

LACERS administers, and provides postemployment healthcare benefits to eligible retirees and their eligible spouses/domestic partners who participate in the Retirement Plan regardless of their membership tiers. These benefits consist of subsidies which may also apply to the coverage of other eligible dependent(s).

As of June 30, 2017, the components of Membership, excluding non-participating retirees and surviving spouses of LACERS postemployment healthcare benefits were as follows:

Retired Members/Surviving Spouses <sup>(1)</sup>	14,652
Vested terminated Members entitled to, but not yet receiving benefits <sup>(2)</sup>	1,280
Active Members	<u>25,457</u>
Total	<u><u>41,389</u></u>

- (1) Total participants including married dependents and dependent children currently receiving benefits are 19,539.
- (2) Includes terminated Members due a refund of employee contributions.

#### Eligibility Requirement and Benefits Provided

To be eligible for LACERS postemployment healthcare benefits, Member must: 1) be at least age 55; 2) have at least 10 whole years of service with LACERS; and 3) be enrolled in a System-sponsored medical or dental plan or are a participant in the Medical Premium Reimbursement Program (MPRP). Retirees and surviving spouses/domestic partners can choose from the health plans that are available, which include medical, dental, and vision benefits, or participate in the MPRP if he/she resides in an area not covered by the available medical plans. Retirees and surviving spouses/domestic partners receive medical subsidies based on service years and service credit. The dental subsidies are provided to the retirees only, based on service years and service credit.

The maximum subsidies are set annually by the Board. Effective February 21, 2016, healthcare benefit eligibility requirements have changed Members who have periods of part-time service. Such Members are now eligible to participate in the

LACERS retiree medical programs with a 10 whole years of service, even if some or all of that service was part-time, provided that the Member meets the eligibility requirements. Both Tier 1 and Tier 3 Members will be eligible for 40% of maximum medical plan premium subsidy for 1 – 10 whole years of service credit, and eligible Members earn 4% per year of service credit for their annual medical subsidy accrual after 10 years of service. Eligible spouses/domestic partners of Plan Members are entitled to the System's postemployment health care benefits after the retired Member's death. During the 2011 fiscal year, the City adopted an ordinance ("Subsidy Cap Ordinance") to limit the maximum medical subsidy at \$1,190 for those Members who retire on or after July 1, 2011; however, Members who at any time prior to retirement made additional contributions are exempted from the subsidy cap and obtain a vested right to future increases in the maximum medical subsidy at an amount not less than the dollar increase in the Kaiser two-party non-Medicare Part A and Part B premium. As of June 30, 2017, all active Tier 1 and Tier 3 Members were making the additional contributions, and therefore will not be subject to the medical subsidy cap (refer to Member Contributions of Note 2 – Retirement Plan Description on page 31).

#### Employer Contributions

The Los Angeles City Charter Sections 1158 and 1160 require periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate the required assets to pay benefits when due. The required contribution rate for the Postemployment Health Care Plan for the fiscal year ended June 30, 2017, was 4.74% of covered payroll, determined by the June 30, 2015 actuarial valuation.

Upon closing the fiscal year 2016-17, LACERS recalculated employer contributions using actual payroll incurred during the fiscal year which was smaller than projected covered payroll used by the City to make the advance payment at the beginning of the fiscal year. As a result, employer contributions for Postemployment Plan were overpaid by \$3,420,000, and the overpayment was returned to the employer as a credit toward employer contribution for fiscal year 2017-18. Based on the actual payroll, the effective rate of employer contribution for Postemployment Health Care Plan was 4.94%.

## Notes to the Basic Financial Statements

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### 3. Postemployment Health Care Plan Description (Continued)

#### Net OPEB Liability

As of June 30, 2017, the components of the net OPEB liability were as follows (in thousands):

Total OPEB Liability	\$ 3,005,806
Plan Fiduciary Net Position	<u>(2,438,862)</u>
Plan's Net OPEB Liability	<u>\$ 566,944</u>

Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	81.1%
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#### Significant Assumptions

The total OPEB liability as of June 30, 2017 was determined by actuarial valuation as of June 30, 2017. The attribution method and significant assumptions used to measure the total OPEB liability, including assumptions about inflation, and healthcare cost trend rates in the valuation year of June 30, 2017, are summarized below:

Valuation Date	June 30, 2017
Actuarial Cost Method	Entry Age Cost Method – level percent of salary.
Amortization Method:	Level Percent of Payroll – assuming a 3.50% increase in total covered payroll.
Actuarial Assumptions:	
Date of Experience Study	June 30, 2014 (July 1, 2011 through June 30, 2014)
Long-Term Expected Rate of Return	7.25%, net of OPEB plan investment expenses, including inflation assumption at 3.00%
Inflation	3.00%
Salary Increase	Range from 10.00% to 3.90% based on years of service, including inflation assumption at 3.00%
Spouse Age Difference	Male retirees are assumed to be four years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.
Mortality Table for Retirees and Beneficiaries	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and no set back for females.
Mortality Table for Disabled Retirees	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward eight years for females.
Marital Status	60% of male and 30% of female retirees who receive a subsidy are assumed to be married or have a qualified domestic partner and elect dependent coverage.
Spouse Age Difference	Male retirees are assumed to be four years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.
Surviving Spouse Coverage	With regard to Members who are currently alive, 100% of eligible spouses or domestic partners are assumed to elect continued health coverage after the Member's death.
Participation	50% of inactive Members are assumed to receive a subsidy for a City approved health carrier. 100% of retirees becoming eligible for Medicare are assumed to be covered by both Parts A and B.

## Notes to the Basic Financial Statements

### 3. Postemployment Health Care Plan Description (Continued)

#### Net OPEB Liability (Continued)

#### Significant Assumptions (Continued)

##### Health Care Cost Trend Rates

Medical Premium Trend Rates to be applied in the following fiscal years, to all health plans. Trend Rate is to be applied to the premium for shown fiscal year to calculate next fiscal year's projected premium.

Medical Premium Trend Rates to be applied to fiscal year 2017-18 and later years are:

First Fiscal Year (July 1, 2017 through June 30, 2018)		
Carrier	Under Age 65	Age 65 & Over
Kaiser HMO	5.16%	5.72%
Anthem Blue Cross HMO	7.18%	N/A
Anthem Blue Cross PPO	7.23%	6.85%
UHC Medicare HMO	N/A	5.74%

Fiscal Year 2018 - 19 and later	
Fiscal Year	Trend (Approx.)
2018 - 19	6.87%
2019 - 20	6.62%
2020 - 21	6.37%
2021 - 22	6.12%
2022 - 23	5.87%
2023 - 24	5.62%
2024 - 25	5.37%
2025 - 26	5.12%
2026 - 27	4.87%
2027 - 28	4.62%
2028 - 29 and later	4.50%

Dental Premium Trend to be applied is 4.50% for all years.

Medicare Part B Premium Trend for the 2017-18 fiscal year will be calculated based on the actual increase in premium from 2017 to 2018. 4.50% for years following the 2018 calendar year.

## Notes to the Basic Financial Statements

### 3. Postemployment Health Care Plan Description (Continued)

#### Net OPEB Liability (Continued)

##### Discount Rate

The discount rates used to measure the total OPEB liability were 7.25% and 7.50% as of June 30, 2017 and June 30, 2016, respectively. Both rates are long-term expected rate of return on the System's investments.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rate of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized as follows:

Asset Class	Target Allocation	Arithmetic Long-Term Expected Real Rate of Return
U.S. Large Cap Equity	19.0%	5.6%
U.S. Small Cap Equity	5.0	6.5
Developed Int'l Equity	19.0	7.1
Developed Int'l Small Cap Equity	3.0	7.3
Emerging Market Equity	7.0	9.4
Core Bonds	19.0	1.1
Private Real Estate	5.0	4.4
Public Real Assets	5.0	3.4
Private Equity	12.0	9.0
Credit Opportunities	5.0	3.8
Cash	1.0	(0.1)
Total	<u>100.0%</u>	

The projection of cash flows used to determine the discount rate assumed that employer contributions will be made at rates equal to the actuarially-determined contribution rates. For this purpose, employer contributions are intended only to fund the benefits of current plan Members and their beneficiaries.

Based on those assumptions, LACERS fiduciary net position was projected to be available to make "all" projected future benefit payments for current plan Members and their beneficiaries. Therefore, in accordance with the GASB Statement No. 74, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability as of both June 30, 2017 and June 30, 2016.

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

The following presents the net OPEB liability of LACERS as of June 30, 2017, calculated using the discount rate of 7.25%, as well as what LACERS net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.25%) or one percentage point higher (8.25%) than the current rate (dollar in thousands):

1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
<u>\$ 973,450</u>	<u>\$ 566,944</u>	<u>\$ 229,418</u>

##### Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the net OPEB liability of LACERS as of June 30, 2017, as well as what LACERS net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower or one percentage point higher than the current rates (dollar in thousands):

1% Decrease	Current Healthcare Cost Trend Rates <sup>(1)</sup>	1% Increase
<u>\$ 176,653</u>	<u>\$ 566,944</u>	<u>\$1,072,553</u>

(1) Current healthcare cost trend rates: 6.87% graded down to 4.50% over 10 years for Non-Medicare medical plan costs; 6.37% graded down to 4.50% over eight years for Medicare medical plan costs; and 4.50% for all years for Dental and Medicare part B subsidy cost.

## Notes to the Basic Financial Statements

### 4. Contributions Required and Contributions Made

LACERS switched to the Entry Age cost method beginning from the June 30, 2012 actuarial valuation to determine the required annual contribution amount for the Retirement Plan and the Postemployment Health Care Plan. The required annual contribution amount is composed of two components: normal cost which is the cost of the portion of the benefit that is allocated to a given year, and the payment to amortize the Underfunded Actuarial Accrued Liability (UAAL) which is the difference between LACERS actuarial liabilities and actuarial assets. The components of the UAAL are amortized as a level percent of pay. Based on LACERS funding policy, increases or decreases in the UAAL due to assumption changes are amortized over 20 years, except that health cost trend and premium assumption changes are amortized over 15 years. Plan changes and experience gains and losses are amortized over 15 years, subject to adjustments to comply with GASB requirements on maximum amortization period of 30 years for all layers combined. The amortization periods are “closed” as each layer of the UAAL is systematically amortized over a “fixed” period.

The total contributions to LACERS for the year ended June 30, 2017, in the amount of \$778,493,000 (\$681,036,000 for the Retirement Plan and \$97,457,000 for the Postemployment Health Care Plan), consisted of the following (in thousands):

	Retirement Plan	Postemployment Health Care Plan
City Contributions:		
Required Contributions	\$ 453,356	\$ 97,457
FDBP	148	-
Total City Contributions	453,504	97,457
Member Contributions	227,532	-
Total Contributions	<u>\$ 681,036</u>	<u>\$ 97,457</u>

The City contributions made for the Retirement Plan under the Required Contributions category in the amount of \$453,356,000 were equal to 100% of the actuarially determined contribution of the employer. The City contributions made for the Postemployment Health Care Plan, in the amount of \$97,457,000, represents 100% of the actuarially determined contribution of the employer as defined by GASB Statement No. 74. Member contributions in the amount of \$227,532,000 were made toward the Retirement Plan and the voluntary Family Death Benefit Plan.

### 5. Historical Trend Information

Historical trend information, designed to provide information about LACERS progress made in accumulating sufficient assets to pay benefits when due, is presented on pages 50 - 53 for the Retirement Plan and pages 54 - 57 for the Postemployment Health Care Plan.

### 6. Cash and Short-Term Investments and Investments

The Board has the responsibility for the investment of LACERS funds, and should discharge its duties with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims, as prescribed by Article XI Section 1106(c) of the City Charter.

LACERS considers investments with a maturity of 12 months or less to be short-term investments. The carrying value of cash and short-term investments at June 30, 2017, on the Retirement Plan and Postemployment Health Care Plan included approximately \$3,179,000 held in LACERS general operating accounts with the City Treasurer and short-term investments funds (STIF) of \$488,335,000 for a total of \$491,514,000. The amounts held by the City Treasurer are pooled with the monies of other City agencies and invested by the City Treasurer’s office. These assets are not individually identifiable. At June 30, 2017, short-term investments included collective STIF of \$81,898,000, international STIF of \$164,960,000, and future contracts initial margin and collaterals of \$241,477,000.



## Notes to the Basic Financial Statements

### 6. Cash and Short-Term Investments and Investments (Continued)

The fair value of derivative instruments, including equity index, commodity, currency, and interest rate future contracts, currency forward contracts and options, and rights and warrants, are recorded in the Statement of Fiduciary Net Position with a net positive value of \$2,360,000. The changes in fair value of the derivative instruments during the fiscal year are recorded in the Statement of Changes in Fiduciary Net Position as Investment Income. LACERS enters into derivative contracts for investment purposes and to manage risks associated with its investment portfolio. For financial reporting purposes, all of LACERS derivatives for the current and previous fiscal years are classified as investment derivatives.

The notional amount and the fair value of derivative instruments as of June 30, 2017, are as follows (in thousands):

Derivative Type	Notional Amount	Fair Value	Change in Fair Value
Future Contracts -			
Commodities	\$ 145,947	\$ 2,161	\$ 2,960
Equity Index	15,223	(132)	(290)
Foreign Exchange	(860)	1	(17)
Interest Rate	18,931	8	40
Currency Forward			
Contracts	199,880	(61)	364
Currency Options	N/A	269	269
Right / Warrants	N/A	114	(95)
Total Value		<u>\$ 2,360</u>	<u>\$ 3,231</u>

#### Credit Risk – Investments

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. LACERS seeks to maintain a diversified portfolio of fixed income instruments in order to obtain the highest total return for the fund at an acceptable level of risk within this asset class. The credit quality ratings of investments in fixed income securities by Standard and Poor's (S&P), a nationally-recognized statistical rating organization as of June 30, 2017, are as follows (dollars in thousands):

S & P Ratings	Fair Value	Percentage
AAA	\$ 84,940	3.02 %
AA	1,261,933	44.79
A	175,455	6.23
BBB	552,946	19.63
BB	255,499	9.07
B	329,887	11.71
CCC	34,999	1.24
CC	2,560	0.09
D	628	0.02
Not Rated	118,436	4.20
	2,817,283	<u>100.00%</u>
U.S. Government		
Guaranteed Securities <sup>(1)</sup>	<u>1,005,936</u>	
Total Fixed Income		
Securities	<u>\$ 3,823,219</u>	

(1) Consists of U.S. Government Bonds and GNMA Mortgage-Backed Securities which had the AA+ rating.

#### Credit Risk – Derivatives

Derivatives are subject to credit risk that the counterparty to a contract will default. LACERS is exposed to credit risk on reported assets of the investment derivatives that are traded over the counter. The credit risk of exchange traded derivatives for future contracts is considered minimal because the exchange clearing house is the counterparty and guarantees the performance.

LACERS permits investment managers, under the terms of individual guidelines, to use derivative instruments as set forth in each manager's investment guidelines to control portfolio risk. It is the responsibility of these investment managers to actively monitor counterparties on their financial safety and ensure compliance with the investment restrictions. LACERS has no general investment policy with respect to netting arrangements or collateral requirements. However, these individual investment managers have set up the arrangements with the counterparties to net off the positive and negative contracts with the same counterparty in case of the counterparty's default.

## Notes to the Basic Financial Statements

### 6. Cash and Short-Term Investments and Investments (Continued)

#### Credit Risk – Derivatives (Continued)

As of June 30, 2017, without respect to netting arrangements, LACERS maximum loss on derivative instruments subject to credit risk, namely currency forward contracts, is \$1,882,000. All counterparties of these investment derivatives had the credit rating of “A” assigned by the Standard & Poor’s.

#### Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a financial institution’s failure of depository financial institution, LACERS would not be able to recover its deposits or would not be able to recover collateral securities that are in the possession of an outside party. Deposits are exposed to custodial credit risk if they are not insured or not collateralized. As of June 30, 2017, LACERS has exposure to such risk in the amount of \$16,553,000 or 0.29% of the fair value of total international investments. The amount represents non-invested cash denominated in foreign currencies, managed by 12 different investment managers, and held outside of LACERS custodial bank. LACERS policy requires each individual publicly traded equities investment manager to hold no more than 10% of their portfolios in the form of cash. LACERS is in compliance with the policy.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, LACERS would not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are not insured, are not registered in LACERS name, and are held by the counterparty, or the counterparty’s trust department or agent but not in LACERS name. As of June 30, 2017, LACERS investments were not exposed to custodial credit risk because all securities were registered in the name of the System.

#### Concentration of Credit Risk

The investment portfolio as of June 30, 2017, contained no concentration of investments in any one entity that represented 5% or more of the total investment portfolio.

#### Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. One of the ways LACERS manages its exposure to interest rate risk is by requiring the fixed income investment managers to maintain their portfolio effective duration within a specified range of the BC U.S. High Yield 2% Capped Index, the BC Intermediate Government Credit Index, the BC Aggregate Bond Index, or the J.P. Morgan EMBI Global Diversified Index, depending on the Board’s mandates. The effective duration is a measure, in years, of interest-rate sensitivity in debt investments. The longer the effective duration, the greater the sensitivity to interest rate changes. Information about the sensitivity of the fair values of LACERS investments to market interest rate fluctuations as of June 30, 2017 is provided by the following table that shows the weighted average effective duration of LACERS fixed income securities by investment type (dollars in thousands):

Investment Type	Fair Value	Weighted Average Duration (in Years)
Asset-Backed Securities	\$ 80,037	1.33
Bank Loans	6,360	0.21
Commercial Mortgage-Backed Securities	33,405	4.95
Corporate Bonds	1,149,635	5.46
Government Agencies	83,032	3.92
Government Bonds	601,803	7.45
Government Mortgage-Backed Securities	357,091	3.90
Index Linked Government Bonds	542,308	7.70
Municipal/Provincial Bonds	9,387	5.25
Non-Government Backed Collateralized Mortgage Obligations (C.M.O.s)	974	2.70
Opportunistic Debts	90,404	0.30
Other Fixed Income (Funds)	868,775	6.02
Derivative Instruments	8	N/A
Total Fixed Income Securities	<u>\$ 3,823,219</u>	

## Notes to the Basic Financial Statements

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### 6. Cash and Short-Term Investments and Investments (Continued)

#### Highly-Sensitive Investments

Highly-sensitive investments are certain debt investments whose terms may cause their fair value to be highly-sensitive to market interest rate changes. Terms include embedded options, coupon multipliers, benchmark indexes, and reset dates. LACERS asset-backed investments have embedded prepayment options that will typically cause prepayments by the obligees of the underlying investments when interest rates fall. Prepayments eliminate the stream of future interest payments and, therefore, diminish the fair value of the asset-backed investment. The following table shows the fair value of LACERS asset-backed investments by investment type (in thousands):

<u>Investment Type</u>	<u>Fair Value</u>
Asset-Backed Securities	\$ 80,037
Commercial Mortgage-Backed Securities	33,405
Government Agencies	83,032
Government Mortgage-Backed Securities	357,091
Non-Government Backed C.M.O.s	<u>974</u>
Total Asset-Backed Investments	<u>\$ 554,539</u>

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. LACERS Asset Allocation policy sets a target of 29% of the total portfolio for non-U.S. investments in equities. In addition, fixed income, real estate, and private equity managers may hold non-U.S. investments depending on their individual mandates. Forward currency contracts are permitted primarily to reduce the foreign currency risk.

## Notes to the Basic Financial Statements

### 6. Cash and Short-Term Investments and Investments (Continued)

#### Foreign Currency Risk (Continued)

LACERS non-U.S. currency investment holdings as of June 30, 2017, which represent 28.7% of the fair value of total investments, are as follows (in thousands):

Foreign Currency Type	Cash and Adjustments to Cash	Equity	Fixed Income	Derivative Instruments	Other Investments	Total Fair Value in USD
Argentine peso	\$ 2,727	\$ -	\$ -	\$ 10	\$ -	\$ 2,737
Australian dollar	210	159,408	-	(30)	-	159,588
Brazilian real	3,264	78,576	248	-	-	82,088
British pound sterling	1,051	662,047	-	(15)	1,251	664,334
Canadian dollar	482	180,372	-	(9)	-	180,845
Chilean peso	(3,135)	8,142	-	19	-	5,026
Chinese yuan renminbi	-	-	-	(92)	-	(92)
Colombian peso	(871)	3,427	-	76	-	2,632
Czech koruna	2,144	1,888	-	(92)	-	3,940
Danish krone	93	57,679	-	-	-	57,772
Egyptian pound	-	2,370	-	-	-	2,370
Euro	(5,814)	1,097,130	3,711	(458)	91,658	1,186,227
Hong Kong dollar	1,159	304,171	-	(10)	-	305,320
Hungarian forint	3,296	5,746	-	(37)	-	9,005
Indian rupee	7,749	117,630	-	3	-	125,382
Indonesian rupiah	3,293	31,473	833	-	-	35,599
Israeli new shekel	(477)	12,805	-	(55)	-	12,273
Japanese yen	(1,603)	740,585	-	15	-	738,997
Malaysian ringgit	110	36,844	-	1	-	36,955
Mexican peso	4,729	36,690	586	(8)	-	41,997
New Taiwan dollar	(6,230)	131,275	-	81	-	125,126
New Zealand dollar	150	10,853	-	-	-	11,003
Norwegian krone	133	32,831	-	-	-	32,964
Peruvian nuevo sol	1,201	-	-	-	-	1,201
Philippine peso	16	16,755	-	37	-	16,808
Polish zloty	2,015	17,638	-	(7)	-	19,646
Qatari rial	-	1,275	-	-	-	1,275
Russian ruble	1,900	9,958	-	41	-	11,899
Singapore dollar	(3,841)	62,241	-	(13)	-	58,387
South African rand	(2,644)	66,900	-	(119)	-	64,137
South Korean won	(1,898)	189,533	-	42	-	187,677
Swedish krona	17	102,467	-	-	-	102,484
Swiss franc	127	281,316	-	-	-	281,443
Thai baht	(801)	32,536	-	(9)	-	31,726
Turkish lira	3,384	25,468	-	-	-	28,852
United Arab Emirates dirham	-	4,949	-	-	-	4,949
<b>Total Investments Held in Foreign Currency</b>	<b>\$ 11,936</b>	<b>\$ 4,522,978</b>	<b>\$ 5,378</b>	<b>\$ (629)</b>	<b>\$ 92,909</b>	<b>\$ 4,632,572</b>

## Notes to the Basic Financial Statements

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### 6. Cash and Short-Term Investments and Investments (Continued)

#### Fair Value Measurements

LACERS follows GASB Statement No. 72 (GASB 72), *Fair Value Measurements and Application*. GASB 72 addresses accounting and financial reporting issues related to fair value measurements and disclosures. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in either a government's principal or the most advantageous market at the measurement date.

The System's investments are measured and reported within the fair value hierarchy established by accounting principles generally accepted in the United States of America. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value and gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly. Inputs to the valuation include: 1) quoted prices for similar assets or liabilities in active markets; 2) quoted prices for identical or similar assets or liabilities in markets that are not active; 3) inputs other than quoted prices that are observable for the asset or liability; and 4) market-corroborated inputs.

Level 3 inputs are unobservable inputs for an asset or liability where there are little market activities. The inputs into the determination of fair value are based upon the best information in the circumstances and may require management judgment or estimation.

#### Schedule of Investments by Fair Value Hierarchy

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt and equity securities classified in Level 2 or 3 of the fair value hierarchy are valued using a matrix pricing technique based on the availability of the market price, the pricing source and type, and the country of incorporation of the securities. The hierarchy levels are determined based on the level of corroborative information obtained from other market sources to assert that the prices provided represent observable data.

Private equity funds classified in Level 3 of the fair value hierarchy are valued based on the availability of market price of the underlying assets, and using either a discounted cash flow or Comparable Company Analysis with internal assumptions. Real estate funds classified in Level 2 or 3 of the fair value hierarchy are valued based on periodic appraisals in accordance with industry practice.

The exchange traded Future Contracts classified in Level 1 of the fair value hierarchy are valued using a daily settlement when available or as a daily mark to market. The Foreign Exchange Contracts classified in Level 2 of the fair value hierarchy are valued using independent pricing services including London Close mid-evaluation, WM/Reuters Company, Bloomberg, and Thomson Reuters.

Certain investments which do not have a readily determinable fair value have been valued at Net Asset Value (NAV) per share (or its equivalent) provided that the NAV is calculated and used as a practical expedient to estimate fair value in accordance with GAAP requirements. These investments are not categorized within the fair value hierarchy but disclosed in the schedule of Investments Measured at the NAV.

## Notes to the Basic Financial Statements

### 6. Cash and Short-Term Investments and Investments (Continued)

#### Fair Value Measurements (Continued)

##### Schedule of Investments by Fair Value Hierarchy (Continued)

The System has the following recurring fair value measurements as of June 30, 2017 (in thousands):

	Total	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
<b>Investments by Fair Value Level:</b>				
Debt securities:				
Government Bonds	\$ 1,144,110	\$ -	\$ 1,144,110	\$ -
Government Agencies	83,032	-	83,032	-
Municipal/Provincial Bonds	9,387	-	9,387	-
Corporate Bonds	1,230,646	-	1,229,736	910
Bank Loans	6,360	-	6,360	-
Government Mortgage Bonds	357,091	-	357,091	-
Commercial Mortgage Bonds	33,405	-	33,405	-
Opportunistic Debts	13,137	-	-	13,137
Total Debt Securities	<u>2,877,168</u>	<u>-</u>	<u>2,863,121</u>	<u>14,047</u>
Equity Securities:				
Common Stock:				
Basic Industries	1,136,592	1,136,525	24	43
Capital Goods Industries	521,794	521,378	-	416
Consumer & Services	2,101,328	2,099,630	-	1,698
Energy	695,279	695,235	-	44
Financial Services	1,635,198	1,634,971	-	227
Health Care	993,986	993,876	-	110
Information Technology	1,458,829	1,458,747	-	82
Real Estate	408,299	408,243	-	56
Miscellaneous	6,869	6,049	-	820
Total Common Stock	<u>8,958,174</u>	<u>8,954,654</u>	<u>24</u>	<u>3,496</u>
Preferred Stock	48,331	48,269	-	62
Stapled Securities	13,177	13,177	-	-
Total Equity Securities	<u>9,019,682</u>	<u>9,016,100</u>	<u>24</u>	<u>3,558</u>
Private Equity Funds	176,700	-	-	176,700
Real Estate Funds	117,025	-	115,288	1,737
Securities Lending Collateral	863,691	-	863,691	-
Total Investments by Fair Value Level	<u>13,054,266</u>	<u>\$ 9,016,100</u>	<u>\$ 3,842,124</u>	<u>\$ 196,042</u>
<b>Investments measured at the Net Asset Value (NAV):</b>				
Common Fund Assets	868,775			
Private Equity Funds	1,401,949			
Real Estate Funds	717,823			
Opportunistic Debts	77,267			
Total Investments measured at the NAV	<u>3,065,814</u>			
Total Investments measured at Fair Value <sup>(1)</sup>	<u>\$ 16,120,080</u>			
<b>Investment Derivative Instruments:</b>				
Future Contracts (liabilities)	\$ 2,038	\$ 2,038	\$ -	\$ -
Foreign Exchange Contracts (liabilities)	(61)	-	(61)	-
Rights/Warrants	383	92	270	21
Total Investment Derivative Instruments	<u>\$ 2,360</u>	<u>\$ 2,130</u>	<u>\$ 209</u>	<u>\$ 21</u>

(1) Excluded investment derivative instruments of \$2,360,000 which is shown separately.

## Notes to the Basic Financial Statements

### 6. Cash and Short-Term Investments and Investments (Continued)

#### Fair Value Measurements (Continued)

##### Investments measured at the NAV: (in thousands)

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Common Fund Assets <sup>(1)</sup>	\$ 868,775	\$ -	Daily	2 days
Private Equity Funds <sup>(2)</sup>	1,401,949	794,500	N/A	N/A
Real Estate Funds <sup>(3)</sup>	717,823	51,419	Daily, Quarterly	1-90 days
Opportunistic Debts <sup>(4)</sup>	77,267	-	Monthly	30 days
Total Investments measured at the NAV	<u>\$ 3,065,814</u>	<u>\$ 845,919</u>		

- (1) Common fund assets - This investment type includes one fund that primarily invest in U.S. bonds. The fair value of the investment has been determined using a practical expedient based on the investments' NAV per share (or its equivalent). This investment can be redeemed daily, with a two-day advance redemption notice period.
- (2) Private equity funds - This investment type includes 181 closed-end commingled private equity funds that invest primarily in securities of privately held U.S. and non-U.S. companies. The fair value of these investments has been determined using a practical expedient based on the investments' NAV per share (or its equivalent). These investments are not redeemable. It is expected that these investments will be held for the entire lives of the funds and will not be sold in the secondary market. Distributions from each fund will be received as the underlying assets are liquidated by the fund managers. It is expected that the underlying assets of these funds will be liquidated over the next one to 13 years, depending on the vintage year of each fund.
- (3) Real estate funds - This investment type includes 30 commingled real estate funds that invest primarily in U.S. commercial real estate. The fair value of these investments have been determined using a practical expedient based on the investments' NAV per share (or its equivalent). Seven investments, representing approximately 63.9% of the value of this investment type, are in open-end funds, which may be redeemed according to terms specific to each fund. Redemptions generally are subject to the funds' available cash and redemption queues. There is no intention to redeem any of these seven investments in the near future. Twenty-three investments, representing approximately 36.1% of the value this investment type, are in closed-end funds and are not redeemable. It is expected that these investments will be held for the entire lives of the funds and will not be sold in the secondary market. Distributions from each fund will be received as underlying assets are liquidated by the fund managers. It is expected that the underlying assets of these funds will be liquidated over the next one to 12 years, depending on the vintage year of each fund.
- (4) Opportunistic debts - This investment type includes two commingled funds: one that invests primarily in senior loans of non-investment grade companies (senior loan fund) and another one invests primarily in the securities and obligations of companies experiencing operational or financial distress (distressed investment fund). The fair values of these investments have been determined using a practical expedient based on the investments' NAV per share (or its equivalent). The senior loan fund, representing approximately 99% of the value of this investment type, can be redeemed monthly. The distressed investment fund, representing approximately 1% of the value of this investment type, is being dissolved and is no longer making new underlying investments. Distributions from this fund will be received as underlying investments are liquidated by the fund manager. It is expected that this fund will be liquidated fully over the next three years.

## Notes to the Basic Financial Statements

### 7. Securities Lending Agreement

Under authority granted by the City Charter, LACERS has entered into various short-term arrangements with its custodian to lend securities to various brokers. There are no restrictions on the amount of securities that may be lent, and the custodian determines which lenders' accounts to lend securities from by using an impartial sequential system that matches loan requests with various lenders' accounts. All lenders are deemed to have relatively equal opportunity to profit from the lending of securities. Therefore, should a collateral deficiency occur beyond the custodian's responsibilities, the deficiency is allocated pro rata among all lenders.

Minimum collateralization is 102% of the fair value of the borrowed U.S. securities and 105% for international securities. Collateral consists of cash, government and corporate securities, and commercial bank obligations. Cash collateral is invested in a separate account comprised of money market or high quality short-term investments. It is the responsibility of the custodian to monitor the collateralization on a daily basis. If the collateral is below the minimum collateralization level, additional collateral will be requested from the borrower to meet the requirement. Collateral requested each morning is required to be received on the same day. If the borrower fails to deliver additional collateral, the custodian would notify the borrower that they are in default under the securities lending agreement. If the borrower does not provide the necessary collateral after receiving notification, the legal agreement allows the custodian to close the contract with the borrower and buy-in the securities on behalf of LACERS.

The borrower has all incidents of ownership with respect to borrowed securities and collateral, including the right to vote and transfer or loan borrowed securities to others. LACERS is entitled to receive all distributions, which are made by the issuer of the borrowed securities, directly from the borrower. Under the agreement, the custodian will indemnify LACERS as a result of the custodian's failure to: 1) make a reasoned determination of the creditworthiness of a potential borrower before lending and, during the term of the loan or loans, the borrower files a petition of bankruptcy or similar action; 2) demand adequate collateral; or 3) otherwise maintain the securities lending program in compliance with the Federal Financial Institutions Examination Council Supervisory Policy on Securities Lending.

These agreements provide for the return of the securities and revenue determined by the type of collateral received. The cash collateral values of securities on loan to brokers are shown at their fair values on the Statement of Fiduciary Net Position.

As of June 30, 2017, LACERS had no losses on securities lending transactions resulting from default of a borrower or lending agent. Due to the nature of the securities lending program and the custodian bank's collateralization of loans at amounts greater than the fair value of the loaned securities, it is deemed that there were no material credit risks to LACERS as defined in GASB Statement No. 28 and GASB Statement No. 40 by its participation in the securities lending program. However, similar to any other investment portfolio, there is risk associated with investing cash collateral in securities. The value of the invested collateral may fall below the value of the cash collateral pledged by the borrowers, and may impair LACERS ability to return cash collateral to the borrowers upon the redemption of loans. In this event, LACERS would be required to make up the deficiency in collateral and would incur a loss.

All securities loans can be terminated on demand by either LACERS or the borrower. Because of this nature, their duration did not generally match the duration of the investment made with the cash collateral. LACERS cannot pledge or sell non-cash collateral unless the borrower defaults.

The following table represents the fair value of securities on loan and cash/non-cash collateral received as of June 30, 2017 (in thousands):

<u>Securities on Loan</u>	<u>Fair Value of Securities on Loan</u>	<u>Cash/Non-Cash Collateral Received</u>
U.S. Government and Agency Securities	\$ 533,337	\$ 546,167
Domestic Corporate Fixed Income Securities	203,295	207,557
International Fixed Income Securities	54,818	57,508
Domestic Stocks	488,897	500,547
International Stocks	394,786	419,925
Total	<u>\$ 1,675,133</u>	<u>\$ 1,731,704</u>



## Notes to the Basic Financial Statements

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### 7. Securities Lending Agreement (Continued)

As of June 30, 2017, the fair value of the securities on loan was \$1,675,133,000. The fair value of associated collateral was \$1,731,704,000 (\$863,691,000 of cash collateral and \$868,013,000 of non-cash collateral). Non-cash collateral, which LACERS does not have the ability to sell unless the borrower defaults, is not reported in the Statement of Fiduciary Net Position. LACERS income and expenses related to securities lending were \$9,225,000 and \$1,383,000, respectively, for the year ended June 30, 2017.

### 8. Future and Forward Contracts

LACERS uses derivative financial instruments, primarily to manage portfolio risk. Future and forward contracts are marked to market and are recorded in the Statement of Fiduciary Net Position at fair value. Future contracts have little credit risk, as organized exchanges are the guarantors. Forward agreements are subject to the creditworthiness of the counterparties, which are principally large financial institutions (refer to Note 6 – Credit Risk - Derivatives on pages 39 and 40).

As of June 30, 2017, LACERS had outstanding commodities, equity index, and interest rate future contracts with an aggregate notional amount of \$180,101,000, and foreign exchange future contract with a negative notional amount of \$860,000 due to its short position. In addition, at June 30, 2017, LACERS had outstanding forward purchase commitments with a notional amount of \$199,880,000 and offsetting forward sales commitments with notional amounts of \$199,880,000, which expire through April 2018. LACERS maintains margin collateral on the positions with brokers, consisting of cash and U.S. Treasury Bills. The total collateral margin was \$241,477,000 as of June 30, 2017.

### 9. Commitments and Contingencies

As of June 30, 2017, LACERS was committed to future purchases of real estate and private equity investments at an aggregate cost of approximately \$1,186,080,000 including agreements for acquisition not yet initiated.

The Patient Protection and Affordable Care Act (PPACA) of 2010 contains a provision that would impose a 40% excise tax on the annual value of health plan costs that exceed certain dollar thresholds beginning in 2020. If there is no change in the law or LACERS plan provisions between now and 2020, and if the current medical cost trend stays

substantially the same during the same period, some of LACERS postemployment health care benefits will be subject to the excise tax in 2020 and thereafter. Recently released GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* require the inclusion of the excise tax in the liability. The Statement No. 75 is effective for fiscal years beginning after June 15, 2017 for employer reporting. The impact of potential excise tax imposed by the Affordable Care Act and related statutes on certain health plans in calculating the contribution rates for the employer have been reflected in the valuation for fiscal year June 30, 2017. The inclusion of this excise tax increased the employer's contribution rate by 0.30% of pay.

### 10. Subsequent Events

#### Date of Management's Review

The potential for subsequent events was evaluated through November 21, 2017, which was the date of management's review.

#### Establishment of Enhanced Benefits for Airport Peace Officers

In November 2016, voters approved a ballot measure resulting in approximately 500 sworn Airport peace officers provided an election to opt-out of the LACERS Plan and transfer to the Los Angeles Fire and Police Pension (LAFPP) Plan as Tier 6 Members.

On March 28, 2017, the City Council adopted an ordinance (No. 184853) to amend the Los Angeles Administrative Code authorizing certain sworn Airport Peace Officers (APO) at LACERS to elect to transfer into Tier 6 of LAFPP Plan or to remain in LACERS Plan. All new APO hired after that date would be enrolled in LAFPP Tier 6. Under the ordinance, APO Members who elect to remain in LACERS would be Tier 1 Members, and be eligible for enhanced benefits including more favorable disability benefits, death benefits, and a higher retirement factor of 2.30% (versus 2.16% for all other Tier 1 Members), contingent upon mandatory additional contribution payment of \$5,700 per remaining Member to LACERS. The enhanced benefits will not be effective until January 7, 2018.

As of November 21, 2017, there is no complete information available how many of APO Members will remain in LACERS Plan. The final count will be available by January 7, 2018 after all affected Members file an irrevocable written election. However, it is anticipated that a large number of these Members will stay with the LACERS Plan.

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**REQUIRED SUPPLEMENTARY INFORMATION**

## Required Supplementary Information

### Retirement Plan

The schedules included in the Required Supplementary Information for the Retirement Plan are intended to show information for 10 years. However, the following schedules do not have a full 10-year trend, and therefore, Los Angeles City Employees' Retirement System (LACERS, or the System) presented information only for those years for which information is available:

- 1) Schedule of Net Pension Liability
- 2) Schedule of Changes in Net Pension Liability and Related Ratios
- 3) Schedule of Investment Returns

Additional years will be displayed in the future as they become available.

#### Schedule of Net Pension Liability <sup>(1)</sup> For Years Ended June 30 (Dollars in Thousands)

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Total Pension Liability	\$ 18,458,188	\$ 17,424,996	\$ 16,909,996	\$ 16,248,853	\$ 14,881,663
Plan Fiduciary Net Position	<u>(13,180,516)</u>	<u>(11,809,329)</u>	<u>(11,920,570)</u>	<u>(11,791,079)</u>	<u>(10,154,486)</u>
Plan's Net Pension Liability	<u>\$ 5,277,672</u>	<u>\$ 5,615,667</u>	<u>\$ 4,989,426</u>	<u>\$ 4,457,774</u>	<u>\$ 4,727,177</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	71.4%	67.8%	70.5%	72.6%	68.2%

(1) In calculating the Plan's net pension liability, the total pension liability and the Plan fiduciary net position exclude amounts associated with Family Death, and Larger Annuity Benefits.

#### Note to Schedule:

Refer to the note to the Schedule of Changes in Net Pension Liability and Related Ratios.

**Required Supplementary Information**  
**Retirement Plan**

**Schedule of Changes in Net Pension Liability and Related Ratios <sup>(1)</sup>**  
**For Years Ended June 30**  
**(Dollars in Thousands)**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
<b>Total Pension Liability</b>					
Service cost	\$ 340,759	\$ 322,574	\$ 322,380	\$ 317,185	\$ 312,372
Interest	1,302,278	1,263,556	1,215,151	1,149,966	1,112,561
Changes of benefit terms	-	-	-	-	-
Differences of expected and actual experience	(146,474)	(300,813)	(135,821)	(164,247)	(235,829)
Changes of assumptions	340,718	-	-	785,439	-
Benefit payments, including refunds of Member contributions	(804,089)	(770,317)	(740,567)	(721,153)	(701,400)
<b>Net change in total pension liability</b>	<u>1,033,192</u>	<u>515,000</u>	<u>661,143</u>	<u>1,367,190</u>	<u>487,704</u>
<b>Total pension liability-beginning</b>	<u>17,424,996</u>	<u>16,909,996</u>	<u>16,248,853</u>	<u>14,881,663</u>	<u>14,393,959</u>
<b>Total pension liability-ending (a)</b>	<u>\$ 18,458,188</u>	<u>\$ 17,424,996</u>	<u>\$ 16,909,996</u>	<u>\$ 16,248,853</u>	<u>\$ 14,881,663</u>
<b>Plan fiduciary net position</b>					
Contributions-employer	\$ 453,356	\$ 440,546	\$ 381,141	\$ 357,649	\$ 346,181
Contributions-Member	221,829	206,377	202,463	203,975	197,722
Net investment income	1,517,545	29,358	306,980	1,810,782	1,268,939
Benefit Payments, including refunds of Member contributions	(804,089)	(770,318)	(740,567)	(721,153)	(701,400)
Administrative expense	(17,454)	(17,204)	(15,860)	(12,372)	(13,281)
Other (Transfer to Larger Annuity Reserve) <sup>(2)</sup>	-	-	(4,666)	(2,288)	(2,514)
<b>Net change in Plan fiduciary net position</b>	<u>1,371,187</u>	<u>(111,241)</u>	<u>129,491</u>	<u>1,636,593</u>	<u>1,095,647</u>
<b>Plan fiduciary net position-beginning</b>	<u>11,809,329</u>	<u>11,920,570</u>	<u>11,791,079</u>	<u>10,154,486</u>	<u>9,058,839</u>
<b>Plan fiduciary net position-ending (b)</b>	<u>\$ 13,180,516</u>	<u>\$ 11,809,329</u>	<u>\$ 11,920,570</u>	<u>\$ 11,791,079</u>	<u>\$ 10,154,486</u>
<b>Plan's net pension liability-ending (a)-(b)</b>	<u>\$ 5,277,672</u>	<u>\$ 5,615,667</u>	<u>\$ 4,989,426</u>	<u>\$ 4,457,774</u>	<u>\$ 4,727,177</u>
<b>Plan fiduciary net position as a percentage of the total pension liability (b)/(a)</b>	71.4%	67.8%	70.5%	72.6%	68.2%
<b>Covered payroll</b>	\$ 1,973,049	\$ 1,876,946	\$ 1,835,637	\$ 1,802,931	\$ 1,736,113
<b>Plan's net pension liability as a percentage of covered payroll</b>	267.5%	299.2%	271.8%	247.3%	272.3%

(1) In calculating the Plan's net pension liability, the total pension liability and the Plan fiduciary net position exclude amounts associated with Family Death, and Larger Annuity Benefits.

(2) On July 1, 2015, the System segregated Members' voluntary larger annuity contributions into the (non-pension related) Reserve for Larger Annuity Contributions pursuant to a suggestion made by actuarial consultant. The Reserve balance for Larger Annuity Contributions as of June 30, 2015 was \$5,200,000.

**Note to Schedule:**

**Changes of Assumptions:** The June 30, 2014 calculations reflected various assumption changes based on the triennial experience study for the period from July 1, 2011 through June 30, 2014. The increase of total pension liability for fiscal years ended on June 30, 2014 primarily is due to the lowered assumed investment rate of return from 7.75% to 7.50%, and longer assumed life expectancies for Members and beneficiaries while June 30, 2017 increase primarily is due to the lowered assumed investment rate of return from 7.50% to 7.25%.

**Required Supplementary Information**  
**Retirement Plan**

**Schedule of Contribution History**  
**(Dollars in Thousands)**

<u>Fiscal Year</u>	<u>Actuarially Determined Contributions (ADC)</u>	<u>Contributions in Relation to ADC</u>	<u>Contribution Deficiency</u>	<u>Covered Payroll</u>	<u>Contributions as a Percentage of Covered Payroll</u>
2008	\$288,119	\$288,119	\$ -	\$1,741,850	16.5%
2009	274,555	274,555	-	1,832,796	15.0
2010	258,643	258,643	-	1,827,864	14.2
2011	303,561	303,561	-	1,678,059	18.1
2012	308,540	308,540	-	1,715,197	18.0
2013	346,181	346,181	-	1,736,113	19.9
2014	357,649	357,649	-	1,802,931	19.8
2015	381,141	381,141	-	1,835,637	20.8
2016	440,546	440,546	-	1,876,946	23.5
2017	453,356	453,356	-	1,973,049	23.0

**Notes to Schedule:**

**Valuation Date** Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which the contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method Entry Age Actuarial Cost Method (individual basis).

Amortization Method Level Percent of Payroll.

Amortization Period Multiple layers – closed amortization period.  
 Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 Early Retirement Incentive Program (ERIP), are amortized over 15 years. Future ERIPs will be amortized over five years. Any actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two Governmental Accounting Standards Board (GASB) Statements No. 25/27 layers, were combined and amortized over 30 years.

Asset Valuation Method Fair value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the fair value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the fair value of assets. An Ad Hoc change was made in 2014 to combine the unrecognized returns and losses of prior years as of June 30, 2013 into one layer and recognize it evenly over six years from fiscal year 2013-14 through fiscal year 2018-19.

**Actuarial Assumptions:**

Investment Rate of Return 7.25%, net of pension plan investment expenses, including inflation assumption at 3.00%.  
 Inflation 3.00%  
 Real Across-the-Board Salary Increase 0.50%

## Required Supplementary Information

### Retirement Plan

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#### Schedule of Contribution History (Continued)

##### Notes to Schedule (Continued)

##### Methods and Assumptions Used to Determine Contribution Rates (Continued)

Projected Salary Increases <sup>(1)</sup>	Ranges from 3.90% to 10.00% based on years of service.
Cost of Living Adjustment <sup>(2)</sup>	Tier 1: 3.0% Tier 3: 2.0%
Mortality	Healthy: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no set back for females.

(1) Includes inflation at 3.00% as of June 30, 2017, plus across-the-board salary increase of 0.50% plus merit and promotional increases.

(2) Actual increases are contingent upon Consumer Price Index (CPI) increases with a 3.0% maximum for Tier 1 and a 2.0% maximum for Tier 3.

#### Schedule of Investment Returns

	Fiscal Year 2017	Fiscal Year 2016	Fiscal Year 2015	Fiscal Year 2014
Annual money-weighted rate of return, net of investment expenses	12.6%	0.2%	2.6%	18.2%

##### Note to Schedule:

The rates of investment returns for the fiscal years 2015 and 2016 were much lower compared to the fiscal year 2014 or 2017. It reflected the impact of divergent and volatile global markets on LACERS investment portfolio over the reporting periods.

## Required Supplementary Information

### Postemployment Health Care Plan

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The schedules included in the Required Supplementary Information for the Postemployment Health Care Plan are intended to show information for 10 years. However, the following schedules do not have a full 10-year trend, and therefore, Los Angeles City Employees' Retirement System (LACERS, or the System) presented information only for those years for which information is available:

- 1) Schedule of Net OPEB Liability
- 2) Schedule of Changes in Net OPEB Liability and Related Ratios
- 3) Schedule of Investment Returns

Additional years will be displayed in the future as they become available.

#### Schedule of Net OPEB Liability (Dollars in Thousands)

	<u>June 30, 2017</u>	<u>June 30, 2016</u>
Total OPEB Liability	\$ 3,005,806	\$ 2,793,689
Plan Fiduciary Net Position	<u>(2,438,862)</u>	<u>(2,134,877)</u>
Plan's Net OPEB Liability	<u>\$ 566,944</u>	<u>\$ 658,812</u>
 Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	 81.1%	 76.4%

#### Note to Schedule:

Refer to the note to the Schedule of Changes in Net OPEB Liability and Related Ratios.



**Required Supplementary Information**  
**Postemployment Health Care Plan**

**Schedule of Changes in Net OPEB Liability and Related Ratios**  
**For Years Ended June 30**  
**(Dollars in Thousands)**

	<u>2017</u>	<u>2016</u>
<b>Total OPEB Liability</b>		
Service cost	\$ 68,385	\$ 62,360
Interest	210,170	199,078
Changes of benefit terms	-	17,215
Differences between expected and actual experience	7,216	(22,013)
Changes of assumptions	45,962	-
Benefit payments	(119,616)	(109,940)
<b>Net change in total OPEB liability</b>	<u>212,117</u>	<u>146,700</u>
<b>Total OPEB liability- beginning</b>	<u>2,793,689</u>	<u>2,646,989</u>
<b>Total OPEB liability- ending (a)</b>	<u>\$ 3,005,806</u>	<u>\$ 2,793,689</u>
<b>Plan fiduciary net position</b>		
Contributions- employer	\$ 97,457	\$ 105,983
Net investment income (loss)	330,708	(344)
Benefit Payments	(119,616)	(109,940)
Administrative expense	(4,564)	(4,528)
<b>Net change in Plan fiduciary net position</b>	<u>303,985</u>	<u>(8,829)</u>
<b>Plan fiduciary net position - beginning</b>	<u>2,134,877</u>	<u>2,143,706</u>
<b>Plan fiduciary net position - ending (b)</b>	<u>\$ 2,438,862</u>	<u>\$ 2,134,877</u>
<b>Plan's net OPEB liability - ending (a)-(b)</b>	<u>\$ 566,944</u>	<u>\$ 658,812</u>
<b>Plan fiduciary net position as a percentage of the total OPEB liability (b)/(a)</b>	81.1%	76.4%
<b>Covered payroll</b>	\$ 1,973,049	\$ 1,876,946
<b>Plan's net OPEB liability as a percentage of covered payroll</b>	28.7%	35.1%

**Note to Schedule:**

**Changes of Assumptions:** The OPEB liability from the changes of assumptions for fiscal year ended on June 30, 2017 primarily is due to the lowered assumed investment rate of return, from 7.50% to 7.25%.

**Required Supplementary Information**  
**Postemployment Health Care Plan**

**Schedule of Contribution History**  
**(Dollars in Thousands)**

Fiscal Year	Actuarially Determined Contributions (ADC)	Contributions in Relation to ADC	Contribution Deficiency	Covered Payroll	Contributions as a Percentage of Covered Payroll
2008	\$108,848	\$108,848	\$ -	\$1,741,850	6.3%
2009	95,122	95,122	-	1,832,796	5.2
2010	96,511	96,511	-	1,827,864	5.3
2011	107,396	107,396	-	1,678,059	6.4
2012	115,209	115,209	-	1,715,197	6.7
2013	72,916	72,916	-	1,736,113	4.2
2014	97,841	97,841	-	1,802,931	5.4
2015	100,467	100,467	-	1,835,637	5.5
2016	105,983	105,983	-	1,876,946	5.7
2017	97,457	97,457	-	1,973,049	4.9

**Notes to Schedule:**

**Valuation Date** Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which the contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method Entry Age Actuarial Cost Method (level percent of payroll).

Amortization Method Level Percent of Payroll.

Amortization Period Multiple layers – closed amortization period.  
 Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 Early Retirement Incentive Program (ERIP), are amortized over 15 years. Future ERIPs will be amortized over five years. Any actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two Governmental Accounting Standards Board (GASB) Statements No. 25/27 layers, were combined and amortized over 30 years.

Asset Valuation Method Fair value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the fair value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the fair value of assets. An Ad Hoc change was made in 2014 to combine the unrecognized returns and losses of prior years as of June 30, 2013 into one layer and recognize it evenly over six years from fiscal year 2013-14 through fiscal year 2018-19.

**Actuarial Assumptions:**

Investment Rate of Return 7.25%, net of OPEB plan investment expenses, including inflation assumption at 3.00%.  
 Inflation 3.00%  
 Real Across-the-Board Salary Increase 0.50%

## Required Supplementary Information Postemployment Health Care Plan

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### Schedule of Contribution History (Continued)

#### Notes to Schedule (Continued)

#### Methods and Assumptions Used to Determine Contribution Rates (Continued)

Projected Salary Increases <sup>(1)</sup>	Ranges from 3.90% to 10.00% based on years of service.
Mortality	Healthy: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no set back for females.

- (1) Includes inflation at 3.00% as of June 30, 2017, plus across-the-board salary increase of 0.50% plus merit and promotional increases.

### Schedule of Investment Returns

	Fiscal Year 2017
Annual money-weighted rate of return, net of investment expenses	15.2%

#### Note to Schedule:

The required disclosure about factors that significantly affect trends in the rate of return is not provided this year because the money-weighted rate of return is calculated for the current fiscal year only.

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**SUPPLEMENTAL SCHEDULES**

**Schedule of Administrative Expenses**  
**For the Year Ended June 30, 2017**  
**(In Thousands)**

	<u>Retirement Plan</u>	<u>Postemployment Health Care Plan</u>	<u>Total</u>
Personnel Services:			
Salaries	\$ 9,240	\$ 2,046	\$ 11,286
Employee Development and Benefits	<u>3,778</u>	<u>837</u>	<u>4,615</u>
Total Personnel Services	<u>13,018</u>	<u>2,883</u>	<u>15,901</u>
Professional Services:			
Actuarial	188	42	230
Audit	76	17	93
Legal Counsel	620	137	757
Disability Evaluation Services	131	29	160
Retirees' Health Admin Consulting	-	677	677
Benefit Payroll Processing	<u>182</u>	<u>40</u>	<u>222</u>
Total Professional Services	<u>1,197</u>	<u>942</u>	<u>2,139</u>
Information Technology:			
Computer Hardware and Software	385	85	470
Computer Maintenance and Support	<u>141</u>	<u>31</u>	<u>172</u>
Total Information Technology	<u>526</u>	<u>116</u>	<u>642</u>
Leases:			
Office Space	779	173	952
Office Equipment	<u>37</u>	<u>8</u>	<u>45</u>
Total Leases	<u>816</u>	<u>181</u>	<u>997</u>
Other Expenses:			
Fiduciary Insurance	1	1	2
Educational and Due Diligence Travel	38	8	46
Office Expenses	272	60	332
Depreciation	<u>151</u>	<u>33</u>	<u>184</u>
Total Other Expenses	<u>462</u>	<u>102</u>	<u>564</u>
Total Administrative Expenses	<u>\$ 16,019</u>	<u>\$ 4,224</u>	<u>\$ 20,243</u>

**Schedule of Investment Fees and Expenses**  
**For the Year Ended June 30, 2017**  
**(In Thousands)**

	Assets Under Management	Fees and Expenses
<u>Retirement Plan</u>		
Investment Management Fees:		
Fixed Income Managers	\$ 3,228,920	\$ 4,740
Equity Managers	7,619,605	17,814
Subtotal Investment Management Fees	10,848,525	22,554
Other Investment Fees and Expenses:		
Private Equity Consulting Fees	N/A	655
Real Estate Consulting Fees	N/A	176
Other Consulting Fees	N/A	353
Investment Related Administrative Expenses	N/A	1,535
Subtotal Other Investment Fees and Expenses	N/A	2,719
<u>Postemployment Health Care Plan</u>		
Investment Management Fees:		
Fixed Income Managers	594,299	1,050
Equity Managers	1,402,428	3,945
Subtotal Investment Management Fees	1,996,727	4,995
Other Investment Fees and Expenses:		
Private Equity Consulting Fees	N/A	145
Real Estate Consulting Fees	N/A	39
Other Consulting Fees	N/A	78
Investment Related Administrative Expenses	N/A	340
Subtotal Other Investment Fees and Expenses	N/A	602
Total Investment Fees and Expenses excluding Private Equity and Real Estate	\$ 12,845,252	\$ 30,870
Private Equity Managers' Fees and Expenses:		
Retirement Plan	\$ 1,333,256	\$ 26,065
Postemployment Health Care Plan	245,393	5,772
Total Private Equity Managers' Fees and Expenses	\$ 1,578,649	\$ 31,837
Real Estate Managers' Fees and Expenses:		
Retirement Plan	\$ 705,075	\$ 7,481
Postemployment Health Care Plan	129,773	1,656
Total Real Estate Managers' Fees and Expenses	\$ 834,848	\$ 9,137
Total Assets Under Management and Fees and Expenses	\$ 15,258,749 <sup>(1)</sup>	\$ 71,844 <sup>(2)</sup>

(1) Excluding Security Lending Collateral assets of \$863,691,000. Total Investments including Security Lending Collateral was \$16,122,440,000.

(2) Included Investment Management Fees and Expenses of \$69,969,000 and Investment Related Administrative Expenses of \$1,875,000.

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**Investment**



## Report on Investment Activity

December 1, 2017

Board of Administration  
Los Angeles City Employees' Retirement System  
202 W. First Street, Suite 500  
Los Angeles, CA 90012-4401



Dear Members of the Board:

Presented below is a summary report of the Fund's investment activities for the fiscal year 2016-17.

### Market Overview

The 2017 fiscal year was a favorable period for the LACERS investment portfolio, characterized by strong equity market returns with relatively low volatility despite changes in the economic and political landscape. For the one-year period ending June 30, 2017, the LACERS investment portfolio returned 13.3% (gross of fees).

The first quarter of the fiscal year provided positive returns across global markets, mostly led by non-U.S. equities as the U.K. and the rest of Europe bounced back from post-Brexit lows. Emerging market equities also performed well, largely boosted by recovering currencies and strong performance in China. In the U.S., equities recorded positive performance, with value stocks underperforming growth stocks across all market capitalizations. Expectations of higher inflation and a possible rate increase by the Federal Reserve contributed to the rise of U.S. treasury yields.

In the second quarter, ongoing consideration of the impact of the U.S. presidential election on the market was evident. Domestic stocks advanced as anticipated policy changes under President Trump were seen as positive for domestic growth. In December 2016, the Fed raised the target fed funds rate by 0.25% for the second time in a decade, increasing the target fed funds range to 0.50% - 0.75%. Overseas markets dragged as a result of concerns over potential changes to U.S. trade policy under the new administration.

Global markets rallied in the third quarter, amidst widespread changes in the U.S. political arena, populism concerns in European elections, and the continued "normalization" of interest rates by the Federal Reserve. In their ninth year of a bull run, domestic stocks gained 6% in the quarter. The Fed announced another increase of 0.25% for the target fed funds rate in March 2017, increasing the target fed funds range to 0.75% - 1.00% and causing short term yields to rise. In the overseas markets, both international and emerging markets were bolstered by a weakening dollar, softer rhetoric on trade from the administration, and economic growth prospects in China.

The last quarter of the fiscal year demonstrated sustained strength in the global equity markets amid generally positive economic data and a solid corporate earnings season. The returns of U.S. equities were driven mainly by expanding corporate profit margins and higher valuations, and investor optimism seemed to be unwavering despite elevated equity prices relative to historical averages. The Fed raised the target fed funds rate by another quarter-percentage point in June 2017, increasing the target fed funds range to 1.00% - 1.25%. Both developed and emerging markets equities outperformed U.S. equities, helped by a strengthening global economy and a weaker U.S. dollar.

While the 2017 fiscal year was a period of strong returns and low volatility in the markets, LACERS' investment portfolio remains well diversified in order to weather increases in market volatility in the future.

## Investment Performance

LACERS primary investment objective is to maximize the return of the portfolio at a prudent level of risk to meet the obligations of the System. The Fund is managed on a total return basis over a long-term investment horizon. While the System recognizes the importance of capital preservation, it also recognizes that varying degrees of investment risk are generally rewarded with commensurate returns. Consequently, prudent risk-taking is warranted within the context of overall portfolio diversification, which is achieved through the System's strategic asset allocation policy.

LACERS investments are reported at fair value. The total portfolio was \$15.7 billion on June 30, 2017, an increase of \$1.7 billion over the prior fiscal year. The Fund realized a 13.3% (gross of fees) return for the fiscal year. Individual asset class gross returns were: U.S. equity, 18.9%; non-U.S. equity, 20.7%; core fixed income, 0.6%; credit opportunities, 11.0%; private equity, 14.6%; and real assets, 3.4%.

The total portfolio underperformed its policy benchmark by 65 basis points for the fiscal year, mainly attributed to the relative underperformance of private equity and real assets, which underperformed their benchmarks by 743 and 324 basis points, respectively.

The Investment Results table presented on page 67 provides a summary of time-weighted rates of return based on fair value of assets by asset classes and for the total fund.

## Policies, Procedures and Guidelines

During the fiscal year, the Board of Administration continued a comprehensive review of the LACERS Investment Policy that began in fiscal year 2014-15. The Board's approval of all policy changes is expected to occur in the next fiscal year upon completion of the review process.

## Investment Manager Contract Awards and Renewals

As presented in the table on page 68, contracts with 13 investment managers of publicly traded securities were awarded or renewed during the fiscal year: two

with U.S. equity managers, one with a non-U.S. index manager, five with non-U.S. equity managers, three with core fixed income managers, one with a U.S. treasury inflation protected securities manager, and one with an emerging market debt manager.

## Private Investments

LACERS approved 17 private equity and venture capital partnerships totaling \$327 million of committed capital, and two real estate partnerships totaling \$45 million of committed capital, as presented in the table on page 68.

Respectfully submitted,

  
\_\_\_\_\_  
Rodney L. June  
Chief Investment Officer

## Outline of Investment Policies

### Fiscal Year 2016-17

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The Los Angeles City Employees' Retirement System's (LACERS, or the System) general investment goals are consistent with the City Charter citations and State Constitution and are stated below:

- The overall goal of the System's investment assets is to provide plan participants with retirement benefits as set forth in the System documents. This will be accomplished through a carefully planned and executed investment program.
- The System's investment program shall comply, at all times, with existing and future applicable City, state and federal regulations. Investment performance data is calculated in conformance with Global Investment Performance Standards (GIPS).
- All transactions undertaken will be for the sole benefit of the System's participants and beneficiaries and for the exclusive purpose of providing benefits to them and defraying reasonable administrative expenses associated with the System.
- The System has a long-term investment horizon, and utilizes an asset allocation that encompasses a strategic, long run perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of the System's investment performance.
- Investment actions are expected to comply with "prudent person" standards as described: "...with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims."

## Investment Results

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Annualized asset class investment returns compared to policy benchmarks:

Asset Class / Benchmark	Annualized <sup>(1)</sup> (gross of fees)		
	1 Yr. (%)	3 Yrs. (%)	5 Yrs. (%)
<b>U.S. Equity</b>	18.9	9.1	14.8
Russell 3000	18.5	9.1	14.6
<b>Non-U.S. Equity</b>	20.7	2.2	9.1
MSCI ACWI ex U.S.	20.5	0.8	7.2
<b>Private Equity</b>	14.6	9.1	11.5
Russell 3000 plus 300 bps	22.0	12.4	18.0
<b>Core Fixed Income<sup>(2)</sup></b>	0.6	2.7	3.2
Bloomberg Barclays U.S. Aggregate	(0.3)	2.5	2.4
<b>Credit Opportunities<sup>(3)</sup></b>	11.0	4.0	-
Credit Opportunities Blend <sup>(4)</sup>	10.3	4.8	-
<b>Real Assets</b>	3.4	6.8	8.6
CPI plus 5%	6.6	5.9	6.3
<b>LACERS Total Fund</b>	13.3	5.4	9.6
LACERS Policy Benchmark	13.9	5.3	9.2

(1) Time-weighted rate of return based on fair value of assets for all asset classes.

(2) Fixed income mandate changed from core-plus to core on July 1, 2012. Returns reflect core mandate only.

(3) Initial funding of this asset class occurred in the second quarter of 2013.

(4) 65% Bloomberg Barclays U.S. Corp High Yield 2% Capped/35% JP Morgan EMBI-Global Diversified.

## Investment Contract Activity

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Contracts with investment managers of publicly traded securities awarded/renewed/extended:

### Firms

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AJO, LP  
AQR Capital Management, LLC  
Axiom International Investors, LLC  
Dimensional Fund Advisors, LP  
Dimensional Fund Advisors, LP  
  
LM Capital Group, LLC  
Loomis, Sayles & Company, L.P.  
Oberweis Asset Management, Inc.  
Principal Global Investors, LLC  
Prudential Investment Management, Inc.  
Quantitative Management Associates, LLC  
Robert W. Baird & Co., Inc.  
State Street Global Advisors

### Mandate

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Active U.S. Large Cap Value Equities  
Active Non-U.S. Small Cap Equities  
Active Non-U.S. Emerging Markets Growth Equities  
Active Non-U.S. Emerging Markets Value Equities  
Active U.S. Treasury Inflation Protected Securities (TIPS)  
Active Core Fixed Income  
Active Core Fixed Income  
Active Non-U.S. Emerging Markets Core Equities  
Active U.S. Mid Cap Core Equities  
Active Emerging Market Debt  
Active Non-U.S. Emerging Markets Core Equities  
Active Core Fixed Income  
MSCI World Ex-U.S. IMI Index

New private equity and real estate partnerships:

### Investment Funds

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ABRY Heritage Partners, L.P.  
ABRY Senior Equity V, L.P.  
Asana Partners Fund I, L.P.  
Bain Capital Double Impact Fund, L.P.  
BC European Capital X  
Brentwood Associates Private Equity Fund VI, L.P.  
CVC Capital Partners VII, L.P.  
Defy Partners I, L.P.  
EnCap Energy Capital Fund XI, L.P.  
Glendon Opportunities Fund II, L.P.  
Heitman Asia-Pacific Property Investors, L.P.  
Incline Equity Partners IV, L.P.  
New Enterprise Associates 16, L.P.  
Oak HC/FT Partners II, L.P.  
Palladium Equity Partners V, L.P.  
Platinum Equity Capital Partners IV, L.P.  
Polaris Partners VIII, L.P.  
SG Growth Partners IV, L.P.  
Upfront VI, L.P.

### Mandate

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Private Equity – Buyout  
Private Equity – Special Situations  
Real Estate – Non-Core  
Private Equity – Buyout  
Private Equity – Venture Capital  
Private Equity – Buyout  
Private Equity – Buyout  
Private Equity – Venture Capital  
Private Equity – Special Situations  
Private Equity – Growth  
Real Estate – Non-Core  
Private Equity – Buyout  
Private Equity – Venture Capital  
Private Equity – Venture Capital  
Private Equity – Buyout  
Private Equity – Special Situations  
Private Equity – Venture Capital  
Private Equity – Growth  
Private Equity – Venture Capital

Contracts with consultants awarded/renewed/extended:

### Firms

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NEPC, LLC  
Portfolio Advisors, LLC  
Townsend Holdings LLC  
Wilshire Associates Incorporated

### Mandate

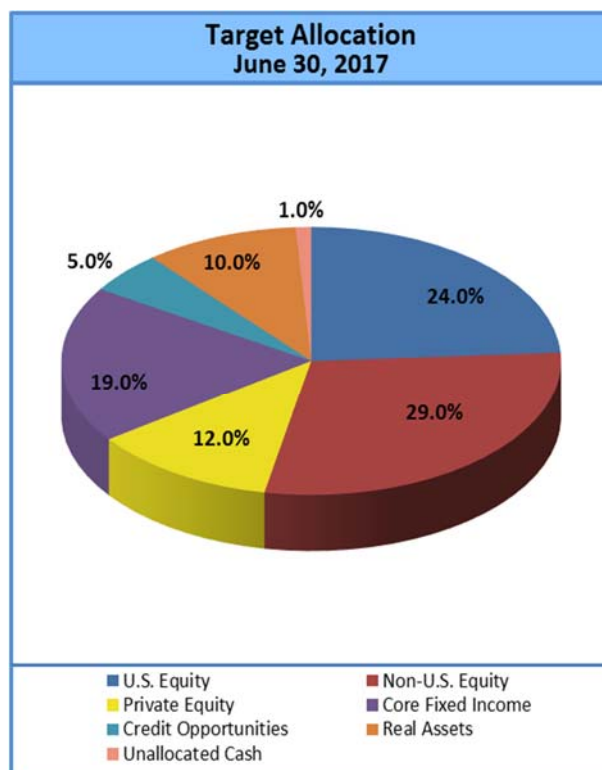
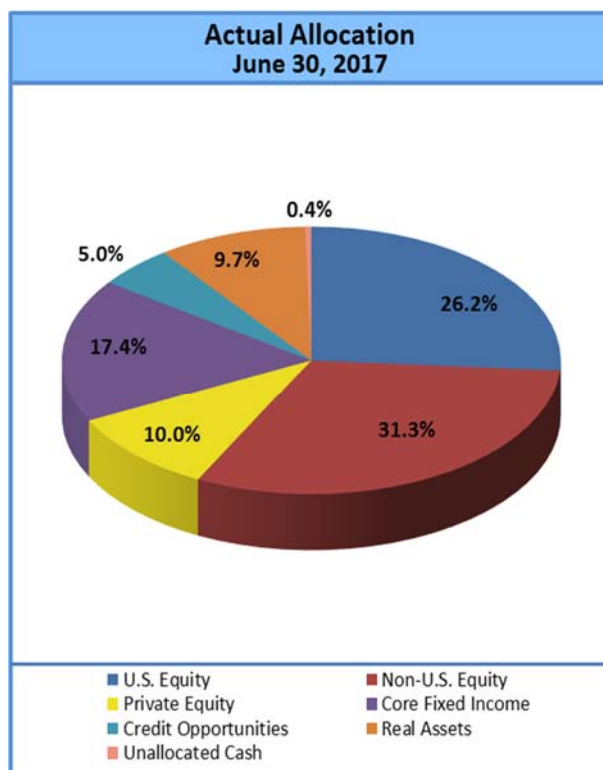
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General Pension Fund Consulting Services  
Private Equity Consulting Services  
Real Estate Consulting Services  
General Pension Fund Consulting Services

## Asset Allocation As of June 30, 2017

	Actual		Target
U.S. Equity	26.2%	U.S. Equity	24.0%
Non-U.S. Equity	31.3	Non-U.S. Equity	29.0
Private Equity <sup>(1)</sup>	10.0	Private Equity	12.0
Core Fixed Income	17.4	Core Fixed Income	19.0
Credit Opportunities	5.0	Credit Opportunities	5.0
Real Assets	9.7	Real Assets	10.0
Unallocated Cash	0.4	Unallocated Cash	1.0
<b>Total</b>	<b>100.0%</b>	<b>Total</b>	<b>100.0%</b>

- (1) The underweight to Private Equity is allocated to U.S. Equity. Private Equity cannot be rebalanced on demand since the general partners control the timing of funding and distributions.



## List of Largest Assets Held by Fair Value

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Displayed below are the ten largest holdings in each asset class along with their fair and share/par values as of June 30, 2017. A complete listing of the System's top 100 holdings is available on [www.LACERS.org](http://www.LACERS.org).

### Largest U.S. Equity Holdings

	Shares	Asset Description	Fair Value (in US\$)
1.	804,962	Apple Inc.	\$ 115,930,627
2.	1,216,664	Microsoft Corp.	83,864,650
3.	61,255	Amazon Inc.	59,294,840
4.	431,601	Johnson & Johnson	57,096,496
5.	364,486	Facebook Inc.	55,030,096
6.	661,207	Exxon Mobil Corp.	53,379,241
7.	547,099	JP Morgan Chase & Co.	50,004,849
8.	265,379	Berkshire Hathaway Inc.	44,947,241
9.	45,948	Alphabet Inc. Class A	42,716,937
10.	46,123	Alphabet Inc. Class C	41,913,354
		<b>Total</b>	<b>\$ 604,178,331</b>

### Largest Non-U.S. Equity Holdings

	Shares	Asset Description	Fair Value (in US\$)
1.	584,938	Nestle SA	\$ 50,971,729
2.	20,022	Samsung Electronic	41,596,202
3.	1,108,600	Tencent Hldgs Ltd.	39,649,408
4.	465,780	Novartis AG	38,812,973
5.	266,312	Alibaba Group Holding Ltd.	37,523,361
6.	146,508	Roche Hldgs AG	37,359,425
7.	284,894	Bayer AG	36,782,738
8.	4,431,903	AIA Group Ltd.	32,388,610
9.	459,642	British American Tobacco	31,249,699
10.	38,929,952	China Construction Bank	30,170,719
		<b>Total</b>	<b>\$ 376,504,864</b>



## List of Largest Assets Held by Fair Value

### Largest U.S. Fixed Income Holdings<sup>(1)</sup>

	Par Value	Asset Description	Fair Value (in US\$)
1.	70,000,000	United States Treas Bills Due 09/07/2017	\$ 69,878,060
2.	56,617,000	United States Treas Notes Inflation Index 0.25% Tb Due 01/15/2025	57,415,518
3.	50,118,000	United States Treas Notes Inflation Index 0.125% Nts Due 07/15/2024	50,699,735
4.	32,262,000	United States Treas Bds Index Linked 2.00% Due 01/15/2026	44,543,135
5.	44,500,000	United States Treas Bills Due 09/21/2017	44,403,747
6.	21,505,000	United States Treas Bds Inflation Index Linked 3.875% Due 04/15/2029	43,427,878
7.	36,035,000	United States Treas Bds Dtd 3.875% Due 08/15/2040	42,880,245
8.	38,124,000	United States Treas Bds Inflation Index 0.625% Due 01/15/2024	40,524,256
9.	40,750,000	United States Treas Notes Inflation Index 0.125% Due 07/15/2026	40,099,302
10.	38,900,000	United States Treas Infl Nts 0.375% Dtd 07/15/2015 Due 07/15/2025	39,811,534
		<b>Total</b>	<b>\$ 473,683,410</b>

### Largest Non-U.S. Fixed Income Holdings<sup>(1)</sup>

	Par Value (in local currency)	Asset Description	Fair Value (in US\$)
1.	4,955,000	Royal Bank Scotland Group Plc 3.498% Due 05/15/2023	\$ 4,987,133
2.	4,670,000	Barclays Plc 3.684% Due 01/10/2023	4,791,691
3.	4,500,000	Anheuser-Busch 3.65% Due 02/01/2026	4,636,215
4.	3,660,000	Anheuser-Busch 4.90% Due 02/01/2046	4,130,826
5.	3,975,000	Toyota Motor Corp 2.10% Due 01/17/2019	3,999,426
6.	3,805,000	Pvtpl Technipfmc Plc Sr Nt 2.00% Due 10/01/2017	3,803,326
7.	3,752,297	Commonwealth Bank 2.25% Due 03/13/2019	3,774,371
8.	3,660,000	Shell International Fin 3.25% Due 05/11/2025	3,738,752
9.	3,500,000	Banco Santander 4.125% Due 11/09/2022	3,654,000
10.	3,520,000	Teva 1.7% Due 07/19/2019	3,488,507
		<b>Total</b>	<b>\$ 41,004,247</b>

(1) The U.S. Fixed Income and Non-U.S. Fixed Income holdings represent the fair value of LACERS separate accounts and the fair value of LACERS ownership in mutual fund-like accounts.

## Schedules of Fees and Commissions

### Schedule of Fees

	(In Thousands)			
	2017 Assets Under Management		2016 Assets Under Management	
		Fees		Fees
Investment Manager Fees:				
Fixed Income Managers	\$ 3,823,219	\$ 5,790	\$ 3,760,714	\$ 5,653
Equity Managers	9,022,033	21,759	7,542,083	19,840
Real Estate Managers	834,848	9,137	823,132	10,936
Private Equity Managers	1,578,649	31,837	1,418,649	26,614
<b>Total</b>	<b>\$ 15,258,749</b>	<b>\$ 68,523</b>	<b>\$ 13,544,578</b>	<b>\$ 63,043</b>
Investment Consulting Fees	N/A	\$ 1,446	N/A	\$ 1,396
Investment Related Administrative Expense	N/A	1,875	N/A	2,101
<b>Total</b>	<b>N/A</b>	<b>\$ 3,321</b>	<b>N/A</b>	<b>\$ 3,497</b>

### Schedule of Top Ten Brokerage Commissions

	Broker	Shares	Commission	\$/Share
1.	Citigroup Global Markets Inc.	91,496,129	\$ 160,314	\$ 0.002
2.	Merrill Lynch International Limited	33,385,866	133,328	0.004
3.	J.P. Morgan Securities Plc	17,001,837	127,354	0.007
4.	Morgan Stanley and Co., LLC	65,052,100	123,702	0.002
5.	Goldman, Sachs and Co.	44,551,395	95,822	0.002
6.	Societe Generale London Branch	26,857,241	93,560	0.003
7.	UBS Limited	9,505,746	84,073	0.009
8.	Credit Suisse Securities (USA) LLC	6,213,037	81,217	0.013
9.	Instinet Europe Limited	45,790,235	78,119	0.002
10.	Instinet, LLC	22,857,863	76,387	0.003
	<b>Total</b>	<b>362,711,449</b>	<b>1,053,876</b>	<b>0.003</b>
	<b>Total - Other Brokers</b>	<b>631,774,793</b>	<b>2,107,634</b>	<b>0.003</b>
	<b>Grand Total<sup>(1)</sup></b>	<b>994,486,242</b>	<b>\$ 3,161,510</b>	<b>\$ 0.003</b>

(1) OTC Brokers excluded because there is no stated commission.

LACERS has commission recapture arrangements with brokerage firms. For the current fiscal year, LACERS recaptured a total of \$14,634 commission credit from ConvergeX, which was rebated to LACERS in cash.

## Investment Summary

### As of June 30, 2017

Type of investment	Fair Value	% of Total Fair Value	Domestic Fair Value	Foreign Fair Value
<b>Fixed Income</b>				
Government bonds	\$ 1,144,110,017	7.10%	\$ 946,934,877	\$ 197,175,140
Government agencies	83,032,100	0.52	33,689,544	49,342,556
Municipal / provincial bonds	9,386,828	0.06	4,280,056	5,106,772
Corporate bonds	1,230,645,806	7.63	921,082,769	309,563,037
Bank loans	6,360,159	0.04	6,360,159	-
Government mortgage bonds	357,090,911	2.21	357,090,911	-
Commercial mortgage bonds	33,404,872	0.21	33,404,872	-
Opportunistic debts	90,404,165	0.56	77,266,988	13,137,177
Other fixed income (Common Funds Assets)	868,775,034	5.39	868,775,034	-
Derivative Instruments	7,899	-	(100,156)	108,055
<b>Total Fixed Income</b>	<b>3,823,217,791</b>	<b>23.72</b>	<b>3,248,785,054</b>	<b>574,432,737</b>
<b>Equities</b>				
<b>Common stock</b>				
Basic industries	1,136,592,243	7.05	466,019,963	670,572,280
Capital goods industries	521,793,288	3.24	132,680,467	389,112,821
Consumer & services	2,101,327,950	13.03	890,546,121	1,210,781,829
Energy	695,279,077	4.31	342,250,892	353,028,185
Financial services	1,635,198,409	10.14	631,906,920	1,003,291,489
Health care	993,985,384	6.17	602,080,577	391,904,807
Information technology	1,458,828,927	9.05	891,362,845	567,466,082
Real Estate	408,299,236	2.53	251,782,595	156,516,641
Miscellaneous	6,869,149	0.04	3,592,685	3,276,464
<b>Total Common Stock</b>	<b>8,958,173,663</b>	<b>55.56</b>	<b>4,212,223,065</b>	<b>4,745,950,598</b>
Preferred stock	48,330,904	0.30	4,381,059	43,949,845
Stapled securities	13,176,715	0.08	-	13,176,715
Derivative Instruments	2,352,395	0.01	2,982,140	(629,745)
<b>Total Equities</b>	<b>9,022,033,677</b>	<b>55.95</b>	<b>4,219,586,264</b>	<b>4,802,447,413</b>
<b>Real Estate</b>	<b>834,848,188</b>	<b>5.18</b>	<b>800,826,325</b>	<b>34,021,863</b>
<b>Private Equity</b>				
Buyout	899,979,625	5.58	669,020,983	230,958,642
Distressed debt	128,215,626	0.80	90,997,876	37,217,750
Mezzanine	3,142,528	0.02	3,142,528	-
Special Situations	143,847,526	0.89	112,115,855	31,731,671
Venture capital	403,463,854	2.50	365,361,910	38,101,944
<b>Total Private Equity</b>	<b>1,578,649,159</b>	<b>9.79</b>	<b>1,240,639,152</b>	<b>338,010,007</b>
<b>Security Lending Collateral</b>	<b>863,691,212</b>	<b>5.36</b>	<b>815,096,226</b>	<b>48,594,986</b>
<b>Total Fund<sup>(1)</sup></b>	<b>\$ 16,122,440,027</b>	<b>100.00%</b>	<b>\$ 10,324,933,021</b>	<b>\$ 5,797,507,006</b>

(1) Total Fund includes securities lending, but excludes cash and cash equivalents and adjustments to cash.

## Advisory/Consulting/Custody Services

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### Investment Advisors

#### U.S. Equity

AJO  
EAM Investors  
PanAgora Asset Management  
Principal Global Investors  
RhumbLine Advisers

#### Non-U.S. Equity

AQR Capital Management  
Axiom International Investors  
Barrow, Hanley, Mewhinney & Strauss  
Dimensional Fund Advisors  
Lazard Asset Management  
MFS Institutional Advisors  
Oberweis Asset Management  
Quantitative Management Associates  
State Street Global Advisors

#### Fixed Income

LM Capital Group  
Loomis Sayles & Company  
Neuberger Berman  
Robert W. Baird & Co.  
State Street Global Advisors

#### Credit Opportunities

Aegon USA Investment Management  
Prudential Investment Management  
Bain Capital Credit

#### Public Real Assets

CenterSquare Investment Management  
CoreCommodity Management  
Dimensional Fund Advisors

#### Cash & Short-Term

The Northern Trust Company

#### Real Estate

Almanac Realty  
Apollo Global Real Estate  
Asana Partners  
Berkshire Group

Bristol Group  
Bryanston Realty Partners  
Buchanan Street Partners  
CB Richard Ellis  
CIM Group  
CityView  
Clarion Partners  
Colony Investors  
Cornerstone Real Estate Advisors  
DLJ Real Estate Capital Partners  
DRA Advisors  
Gerrity Group  
Hancock Timber Resource Group  
Hunt Realty Investments  
Integrated Capital  
Invesco Real Estate  
Jamestown  
JP Morgan  
LaSalle Investment Management  
Lone Star Funds  
Lowe Hospitality  
MacFarlane Partners  
Mesa West Capital  
Morgan Stanley  
Pacific Coast Capital Partners  
Paladin Realty Partners  
Phoenix Realty Group  
Principal Real Estate Investors  
Realty Associates  
RREEF  
Standard Life Investments  
Stockbridge Real Estate  
Torchlight Investors  
Urdang  
Walton Street Real Estate

#### Private Equity

1315 Capital Management  
ABRY Partners  
Acon-Bastion Partners  
Advent International  
AION Capital Partners  
Alchemy Partners  
American Securities  
Angeleno Group  
Angeles Equity  
Apollo Management  
Ares Management  
Ascribe Capital  
Astorg Partners  
Austin Ventures

## Advisory/Consulting/Custody Services

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### Investment Advisors (Continued)

#### Private Equity (Continued)

Avenue Capital Group  
Bain Capital  
Baring Private Equity Asia Limited  
Black Diamond Capital Management  
Blackstone  
Blue Sea Capital  
Cardinal Health Partners  
Carlyle Group  
Carpenter & Company  
CenterGate Capital  
Charterhouse Capital Partners  
CHS Capital  
CIE Management IX Ltd  
Coller International Partners  
Craton Equity Investors  
CVC Capital Partners  
DFJ  
DFJ Frontier  
EIG Global Energy Partners  
Element Partners  
Encap Energy Capital  
Energy Capital Partners  
Enhanced Equity  
Essex Woodland Health Ventures  
First Israel Mezzanine Investors  
First Reserve Corporation  
Gilde Buy Out Partners  
Glendon Capital Management  
GTCR  
Halifax Capital  
Harvest Partners  
Hellman & Friedman Investors  
High Road Capital Partners  
Hony Capital  
Insight Venture  
Institutional Venture Partners  
The Jordan Company  
JH Whitney & Co.  
Kelso & Company  
Khosla Ventures  
KKR  
KPS Investors  
Leonard Green & Partners  
Levine Leichtman Capital Partners  
Lindsay Goldberg & Bessemer  
Longitude Capital Partners  
Madison Dearborn Partners  
Menlo Ventures  
Nautic Partners  
New Enterprises Associates

New Mountain Partners  
Newbridge Asia  
NGEN Partners  
New Water Capital Partners  
NGP Natural Resources  
Nogales Investors  
Nordic Capital  
Oak HC/FT Partners  
Oak Investment Partners  
Oaktree Capital Management  
Olympus Partners  
Onex Partners  
Palladium Equity Partners  
Permira  
Pharos Capital Partners  
Platinum Equity  
Polaris Venture Partners  
Providence Equity Partners  
Rustic Canyon/Fontis Partners  
Saybrook Capital  
Searchlight Capital Partners  
Spark Capital  
Spire Capital  
SSG Capital Partners  
St. Cloud Capital  
StarVest Partners  
StepStone Group  
Sterling Partners  
Stripes Group  
Sunstone Partners (Formerly TC Growth Partners)  
TA Associates  
Technology Crossover Ventures  
TCW/Crescent Mezzanine  
Texas Pacific Group  
Thoma Bravo  
Trident Capital  
VantagePoint Venture Partners  
Vestar Capital Partners  
Vicente Capital Partners  
Vista Equity Partners  
Weston Presidio  
Wynnchurch Capital  
Yucaipa American Alliance

#### Consultants

Portfolio Advisors  
The Townsend Group  
Wilshire Associates Incorporated

#### Custodian

The Northern Trust Company

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**Actuarial**





## Actuarial Valuation Summary

### Summary of Significant Valuation Results

	June 30, 2017	June 30, 2016	Change	
I. Total Membership				
a. Active Members	25,457	24,446	4.1	%
b. Pensioners and Beneficiaries	18,805	18,357	2.4	%
II. Valuation Salary				
a. Total Annual Projected Payroll	\$ 2,062,316,129	\$ 1,968,702,630	4.8	%
b. Average Projected Monthly Salary	6,751	6,711	0.6	%
III. Benefits to Current Retirees and Beneficiaries <sup>(1)</sup>				
a. Total Annual Benefits	\$ 819,515,912	\$ 778,355,427	5.3	%
b. Average Monthly Benefit Amount	3,632	3,533	2.8	%
IV. Total System Assets <sup>(2)</sup>				
a. Actuarial Value	\$ 15,686,973,131	\$ 14,752,102,625	6.3	%
b. Market Value	15,689,570,310	14,005,059,515	12.0	%
V. Unfunded Actuarial Accrued Liability (UAAL) <sup>(3)</sup>				
a. Retirement Benefits	\$ 5,279,854,069	\$ 4,985,746,123	5.9	%
b. Health Subsidy Benefits	567,348,102	544,935,475	4.1	%

<sup>(1)</sup> Includes July COLA.

<sup>(2)</sup> Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits.

<sup>(3)</sup> Excludes liabilities for enhanced benefits for Airport Peace Officers effective January 7, 2018.

VI. Budget Items	FY 2018-19 <sup>(1),(2)</sup>		FY 2017-18 <sup>(1),(2)</sup>		Change	
	Tier 1	Tier 3	Tier 1	Tier 3	Tier 1	Tier 3
a. Retirement Benefits						
1. Normal Cost as a Percent of Pay	6.70%	3.65%	6.81%	3.85%	(0.11) %	(0.20) %
2. Amortization of UAAL	16.55%	16.55%	15.56%	15.56%	0.99 %	0.99 %
3. Total Retirement Contribution	23.25%	20.20%	22.37%	19.41%	0.88 %	0.79 %
b. Health Subsidy Benefits						
1. Normal Cost as a Percent of Pay	3.59%	4.21%	3.48%	3.83%	0.11 %	0.38 %
2. Amortization of UAAL	1.47%	1.47%	1.43%	1.43%	0.04 %	0.04 %
3. Total Health Subsidy Contribution	5.06%	5.68%	4.91%	5.26%	0.15 %	0.42 %
c. Total Contribution (a+b)	28.31%	25.88%	27.28%	24.67%	1.03 %	1.21 %

<sup>(1)</sup> Contributions are assumed to be made on July 15.

<sup>(2)</sup> After reflecting enhanced benefits for Airport Peace Officers effective January 7, 2018. Actual contribution rates for fiscal year 2017-18 are lower, reflecting only six months of enhanced benefits for that year.

	June 30, 2017	June 30, 2016	Change
VII. Funded Ratio			
(Based on Valuation Value of Assets)			
a. Retirement Benefits	71.4%	71.4%	0.0%
b. Health Subsidy Benefits	81.1%	80.5%	0.6%
c. Total	72.8%	72.6%	0.2%
(Based on Market Value of Assets)			
d. Retirement Benefits	71.4%	67.8%	3.6%
e. Health Subsidy Benefits	81.1%	76.4%	4.7%
f. Total	72.8%	69.0%	3.8%

## Actuarial Valuation Summary

### Summary of Significant Valuation Results (Continued)

	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>Change</u>
<b>VIII. Net Pension Liability<sup>(1)</sup></b>			
Total Pension Liability	\$ 18,458,187,953	\$ 17,424,996,329	5.9 %
Plan Fiduciary Net Position	<u>(13,180,515,725)</u>	<u>(11,809,329,415)</u>	11.6 %
Net Pension Liability	<u>\$ 5,277,672,228</u>	<u>\$ 5,615,666,914</u>	(6.0)%
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	71.4%	67.8%	3.6 %

<sup>(1)</sup> Refer to the Schedule of Changes in Net Pension Liability and Related Ratios on page 86.

	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>Change</u>
<b>IX. Net OPEB Liability<sup>(1)</sup></b>			
Total OPEB Liability	\$ 3,005,806,234	\$ 2,793,688,955	7.6 %
Plan Fiduciary Net Position	<u>(2,438,861,850)</u>	<u>(2,134,877,117)</u>	14.2 %
Net OPEB Liability	<u>\$ 566,944,384</u>	<u>\$ 658,811,838</u>	(13.9)%
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	81.1%	76.4%	4.7 %

<sup>(1)</sup> Refer to the Schedule of Changes in Net OPEB Liability and Related Ratios on page 100.



100 Montgomery Street Suite 500 San Francisco, CA 94104-4308  
T 415.263.8200 www.segalco.com

### Actuarial Certification

November 7, 2017

This is to certify that Segal Consulting (Segal) has conducted an actuarial valuation of the Los Angeles City Employees' Retirement System (LACERS or the "System") retirement program as of June 30, 2017, in accordance with generally accepted actuarial principles and practices. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice (ASOPs). Actuarial valuations are performed annually for this retirement program with the last valuation completed on June 30, 2016. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of the historical funding methods used in determination of the liability for retirement benefits.

The actuarial valuation is based on the plan of benefits verified by LACERS and on participant and financial data provided by LACERS. Segal did not audit LACERS' financial statements, but we conducted an examination of all participant data for reasonableness and we concluded that it was reasonable and consistent with the prior year's data.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the Retirement System's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age cost method.

The actuarial computations made are for funding plan benefits. Accordingly, additional determinations will be needed for other purposes, such as satisfying financial accounting requirements under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68 and judging benefit security at termination of the plan.

Segal prepared all of the supporting schedules in the Actuarial Section of the Comprehensive Annual Financial Report (CAFR) and certain supporting schedules in the Financial Section, based on the results of the June 30, 2017 actuarial valuation. A listing of the supporting schedules Segal prepared for inclusion in the Financial Section as Required Supplementary Information prescribed by GASB, and in the Actuarial Section, is provided below:

#### Financial Section

- 1) Schedule of Net Pension Liability\*
- 2) Schedule of Changes in Net Pension Liability and Related Ratios\*
- 3) Schedule of Contribution History\*

#### Actuarial Section

- 4) Summary of Significant Valuation Results
- 5) Active Member Valuation Data
- 6) Retirees and Beneficiaries Added to and Removed from Retiree Payroll
- 7) Solvency Test
- 8) Schedule of Funding Progress
- 9) Actuarial Analysis of Financial Experience
- 10) Actuarial Balance Sheet
- 11) Schedule of Changes in Net Pension Liability and Related Ratios\*
- 12) Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate of 7.25% and Preparation of GASB 67 Report as of June 30, 2017\*

\* Source: Segal's GASB Statement No. 67 valuation report as of June 30, 2017.

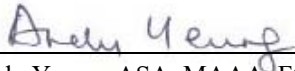
## Retirement Benefits Valuation

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### Actuarial Certification (Continued)

LACERS' staff prepared other trend data schedules in the Statistical Section based on information supplied in Segal's valuation report.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the plan's current funding information. The undersigned is a member of the American Academy of Actuaries and is qualified to render the actuarial opinion contained herein.



---

Andy Yeung, ASA, MAAA, FCA, EA  
Vice President and Actuary

## Retirement Benefits Valuation

### Active Member Valuation Data

Valuation Date	Member Population			Change in Annual Average Pay (%)
	Active Members <sup>(1)</sup>	Covered Payroll	Annual Average Pay <sup>(2)</sup>	
06/30/2008	30,236	\$1,977,644,640	\$65,407	4.1%
06/30/2009	30,065 <sup>(3)</sup>	1,816,171,212 <sup>(4)</sup>	65,632 <sup>(4)</sup>	0.3
06/30/2010	26,245	1,817,662,284	69,257	5.5
06/30/2011	25,449	1,833,392,381	72,042	4.0
06/30/2012	24,917	1,819,269,630	73,013	1.3
06/30/2013	24,441	1,846,970,474	75,569	3.5
06/30/2014	24,009	1,898,064,175	79,056	4.6
06/30/2015	23,895	1,907,664,598	79,835	1.0
06/30/2016	24,446	1,968,702,630	80,533	0.9
06/30/2017	25,457	2,062,316,129	81,012	0.6

<sup>(1)</sup> Includes non-vested Members.

<sup>(2)</sup> Reflects annualized salaries for part-time Members.

<sup>(3)</sup> Before reclassifying the 2,393 Early Retirement Incentive Program (ERIP) electing active Members as retired under the program.

<sup>(4)</sup> After ERIP.

### Retirees and Beneficiaries Added to and Removed from Retiree Payroll<sup>(1)</sup>

Valuation Date	No. of New Retirees/ Beneficiaries	Annual Allowances Added <sup>(2)</sup>	No. of Retirees/ Beneficiaries Removed	Annual Allowances Removed	No. of Retirees/ Beneficiaries at 6/30	Annual Allowances at 6/30	Percent Increase in Annual Allowances	Average Annual Allowance
06/30/2008	748	\$40,680,279	609	\$14,956,623	14,975	\$502,357,584	5.4%	\$33,546
06/30/2009	632	36,887,854	616	17,386,042	14,991	521,859,396	3.9	34,812
06/30/2010	2,893 <sup>(3)</sup>	144,594,918 <sup>(3)</sup>	620	17,604,486	17,264	648,849,828	24.3	37,584
06/30/2011	528	24,282,965	595	16,585,589	17,197	656,547,204	1.2	38,178
06/30/2012	620	38,314,256	594	17,986,700	17,223	676,874,760	3.1	39,301
06/30/2013	772	40,966,952	633	18,776,770	17,362	699,064,942	3.3	40,264
06/30/2014	831	38,666,905	661	21,175,777	17,532	716,556,070	2.5	40,871
06/30/2015	1,083	55,849,106	683	22,013,426	17,932	750,391,750	4.7	41,847
06/30/2016	1,082	51,056,286	657	23,092,610	18,357	778,355,426	3.7	42,401
06/30/2017	1,142	65,583,105	694	24,422,619	18,805	819,515,912	5.3	43,580

<sup>(1)</sup> Does not include Family Death Benefit Plan beneficiaries. Table is based on valuation data.

<sup>(2)</sup> Includes the COLA granted in July.

<sup>(3)</sup> Large increase primarily due to accelerated retirements stimulated by the City's Early Retirement Incentive Program (ERIP).

## Retirement Benefits Valuation

### Solvency Test

For Years Ended June 30  
(Dollars in Thousands)

Valuation Date	Aggregate Actuarial Accrued Liabilities For			Valuation Value of Assets	Portion of Aggregate Accrued Liabilities Covered by Reported Assets		
	Active Member Contributions	Retirees, Beneficiaries & Inactive/Vested	Active Members		Active Member Contributions	Retirees, Beneficiaries & Inactive/Vested	Active Members
06/30/2008	\$1,408,074	\$5,665,130	\$4,113,200	\$9,438,318	100.0%	100.0%	57.5%
06/30/2009 <sup>(1)</sup>	1,282,663	7,356,302	3,403,019	9,577,747	100.0	100.0	27.6
06/30/2010	1,379,098	7,507,945	3,707,982	9,554,027	100.0	100.0	18.0
06/30/2011	1,474,824	7,765,071	4,151,809	9,691,011	100.0	100.0	10.9
06/30/2012	1,625,207	7,893,684	4,875,068	9,934,959	100.0	100.0	8.5
06/30/2013	1,757,195	8,066,564	5,057,904	10,223,961	100.0	100.0	7.9
06/30/2014	1,900,068	8,700,896	5,647,889	10,944,751	100.0	100.0	6.1
06/30/2015	2,012,378	9,118,166	5,779,452	11,727,161	100.0	100.0	10.3
06/30/2016	2,137,269	9,439,001	5,848,726	12,439,250	100.0	100.0	14.8
06/30/2017	2,255,048	10,164,403	6,038,737	13,178,334	100.0	100.0	12.6

<sup>(1)</sup> Based on revised June 30, 2009 valuation.

### Schedule of Funding Progress

For Years Ended June 30  
(Dollars in Thousands)

Valuation Date	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
06/30/2008	\$9,438,318	\$11,186,404	\$1,748,086	84.4%	\$1,977,645	88.4%
06/30/2009 <sup>(1)</sup>	9,577,747	12,041,984	2,464,237	79.5	1,816,171	135.7
06/30/2010	9,554,027	12,595,025	3,040,998	75.9	1,817,662	167.3
06/30/2011	9,691,011	13,391,704	3,700,693	72.4	1,833,392	201.9
06/30/2012	9,934,959	14,393,959	4,459,000	69.0	1,819,270	245.1
06/30/2013	10,223,961	14,881,663	4,657,702	68.7	1,846,970	252.2
06/30/2014	10,944,751	16,248,853	5,304,102	67.4	1,898,064	279.5
06/30/2015	11,727,161	16,909,996	5,182,835	69.4	1,907,665	271.7
06/30/2016	12,439,250	17,424,996	4,985,746	71.4	1,968,703	253.3
06/30/2017	13,178,334	18,458,188	5,279,854	71.4	2,062,316	256.0

<sup>(1)</sup> Based on revised June 30, 2009 valuation.

## Retirement Benefits Valuation

### Actuarial Analysis of Financial Experience

#### Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2017

1. Unfunded actuarial accrued liability at beginning of year	\$ 4,985,746,123
2. Normal cost at beginning of year	340,758,622
3. Expected contributions at beginning of year <sup>(1)</sup>	(639,108,356)
4. Interest	<u>351,554,729</u>
5. Expected unfunded actuarial accrued liability	5,038,951,118
6. Changes due to net experience gain <sup>(2)</sup>	(99,814,895)
7. Changes due to new economic assumptions	<u>340,717,846</u>
8. Unfunded actuarial accrued liability at end of year	<u>\$ 5,279,854,069</u>

<sup>(1)</sup> Net of the additional expected employer contributions due to the application of the 40-year minimum amortization required for the two GASB 25/27 layers, since the beginning of year UAAL was developed without the liability associated with those two layers. These additional contributions will serve to reduce the contribution loss (if any) from the scheduled one-year delay in implementing the higher contribution rates calculated in the prior valuation.

<sup>(2)</sup> The breakdown of the net experience gain is as follows:

Gain due to actual contributions more than expected (with interest to end of year)	\$(29,046,903)
Investment loss	75,706,073
Gain due to lower than expected salary increases for continuing actives	(47,159,674)
Gain due to lower than expected COLA granted to retirees and beneficiaries	(99,588,336)
Miscellaneous loss	<u>273,945</u>
Total gain	<u>\$(99,814,895)</u>

### Actuarial Balance Sheet

#### Assets

1. Valuation value of assets (\$15,689,570,310 at market value as reported by LACERS and \$15,686,973,131 at actuarial value <sup>(1)</sup> )	\$ 13,178,333,884
2. Present value of future normal costs	
Employee	\$1,756,585,351
Employer	<u>1,071,055,834</u>
Total	2,827,641,185
3. Unfunded actuarial accrued liability	<u>5,279,854,069</u>
4. Present value of current and future assets	<u>\$ 21,285,829,138</u>

#### Liabilities

5. Present value of future benefits	
Retired Members and beneficiaries	\$ 9,861,673,224
Inactive Members	472,723,550
Active Members	<u>10,951,432,364</u>
Total	<u>\$ 21,285,829,138</u>

<sup>(1)</sup> Market and actuarial values of assets include assets for Retirement, Health, Family Death, and Larger Annuity Benefits.

## Retirement Benefits Valuation

### Schedule of Changes in Net Pension Liability and Related Ratios <sup>(1)</sup>

For Years Ended June 30

(Dollars in Thousands)

	2017	2016	2015	2014	2013
<b>Total Pension Liability</b>					
Service cost	\$ 340,759	\$ 322,574	\$ 322,380	\$ 317,185	\$ 312,372
Interest	1,302,278	1,263,556	1,215,151	1,149,966	1,112,561
Changes of benefit terms	-	-	-	-	-
Differences of expected and actual experience	(146,474)	(300,813)	(135,821)	(164,247)	(235,829)
Changes of assumptions	340,718	-	-	785,439	-
Benefit payments, including refunds of Member contributions	(804,089)	(770,317)	(740,567)	(721,153)	(701,400)
<b>Net change in total pension liability</b>	<b>1,033,192</b>	<b>515,000</b>	<b>661,143</b>	<b>1,367,190</b>	<b>487,704</b>
<b>Total pension liability-beginning</b>	<b>17,424,996</b>	<b>16,909,996</b>	<b>16,248,853</b>	<b>14,881,663</b>	<b>14,393,959</b>
<b>Total pension liability-ending (a)</b>	<b>\$ 18,458,188</b>	<b>\$ 17,424,996</b>	<b>\$ 16,909,996</b>	<b>\$ 16,248,853</b>	<b>\$ 14,881,663</b>
<b>Plan fiduciary net position</b>					
Contributions-Employer	\$ 453,356	\$ 440,546	\$ 381,141	\$ 357,649	\$ 346,181
Contributions-Member	221,829	206,377	202,463	203,975	197,722
Net investment income	1,517,545	29,358	306,980	1,810,782	1,268,939
Benefit Payments, including refunds of Member contributions	(804,089)	(770,318)	(740,567)	(721,153)	(701,400)
Administrative expense	(17,454)	(17,204)	(15,860)	(12,372)	(13,281)
Other (Transfers related to Larger Annuity) <sup>(2)</sup>	-	-	(4,666)	(2,288)	(2,514)
<b>Net change in Plan fiduciary net position</b>	<b>1,371,187</b>	<b>(111,241)</b>	<b>129,491</b>	<b>1,636,593</b>	<b>1,095,647</b>
<b>Plan fiduciary net position-beginning</b>	<b>11,809,329</b>	<b>11,920,570</b>	<b>11,791,079</b>	<b>10,154,486</b>	<b>9,058,839</b>
<b>Plan fiduciary net position-ending (b)</b>	<b>\$ 13,180,516</b>	<b>\$ 11,809,329</b>	<b>\$ 11,920,570</b>	<b>\$ 11,791,079</b>	<b>\$ 10,154,486</b>
<b>Plan's net pension liability-ending (a)-(b)</b>	<b>\$ 5,277,672</b>	<b>\$ 5,615,667</b>	<b>\$ 4,989,426</b>	<b>\$ 4,457,774</b>	<b>\$ 4,727,177</b>
<b>Plan fiduciary net position as a percentage of the total pension liability (b)/(a)</b>	<b>71.4%</b>	<b>67.8%</b>	<b>70.5%</b>	<b>72.6%</b>	<b>68.2%</b>
<b>Covered payroll</b>	<b>\$ 1,973,049</b>	<b>\$ 1,876,946</b>	<b>\$ 1,835,637</b>	<b>\$ 1,802,931</b>	<b>\$ 1,736,113</b>
<b>Plan's net pension liability as a percentage of covered payroll</b>	<b>267.5%</b>	<b>299.2%</b>	<b>271.8%</b>	<b>247.3%</b>	<b>272.3%</b>

(1) In calculating the Plan's net pension liability, total pension liability and the Plan fiduciary net position exclude amounts associated with Family Death and Larger Annuity Benefits.

(2) \$4,666,000 represents the segregation of Members' voluntary larger annuity contributions from the (pension-related) Reserve for Members' Contributions into the (non-pension related) Reserve for Larger Annuity Contributions pursuant to a suggestion made by the actuarial consultant. The Reserve balance for Larger Annuity Contributions as of June 30, 2015 was \$5,200,000.

#### Note to Schedule:

**Changes of Assumptions:** The June 30, 2017 calculations reflected various economic assumption changes based on the Review of Economic Actuarial Assumptions report dated June 30, 2017 and on the Supplemental Information report dated August 10, 2017. The increase in the total pension liability for the fiscal year ended on June 30, 2017 is primarily due to the lowered assumed investment rate of return from 7.50% to 7.25%, offset somewhat by the decrease in the inflation assumption from 3.25% to 3.00%, and the decrease in the across-the-board salary increase assumption from 0.75% to 0.50%.

The June 30, 2014 calculations reflected various assumption changes based on the triennial experience study for the period from July 1, 2011 through June 30, 2014. The increase in the total pension liability for the fiscal year ended on June 30, 2014 is primarily due to the lowered assumed investment rate of return from 7.75% to 7.50%, and longer assumed life expectancies for Members and beneficiaries.



## Retirement Benefits Valuation

### Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate of 7.25% and Preparation of GASB 67 Report as of June 30, 2017

(Dollars in Millions)

Year Beginning July 1	Projected Beginning Plan Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Admin. Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
2016	\$11,809	\$675	\$804	\$17	\$1,518	\$13,181
2017	13,181	681	917	19	943	13,868
2018	13,868	684	946	20	991	14,576
2019	14,576	681	1,005	22	1,040	15,270
2020	15,270	679	1,067	23	1,088	15,948
2021	15,948	697	1,131	24	1,135	16,626
2022	16,626	707	1,197	25	1,182	17,293
2023	17,293	699	1,265	26	1,227	17,928
2024	17,928	659	1,332	26	1,269	18,498
2043	24,126	114 <sup>(1)</sup>	2,269	36	1,660	23,596
2044	23,596	109 <sup>(1)</sup>	2,270	35	1,622	23,021
2045	23,021	103 <sup>(1)</sup>	2,266	34	1,580	22,405
2046	22,405	98 <sup>(1)</sup>	2,259	33	1,535	21,745
2047	21,745	92 <sup>(1)</sup>	2,250	32	1,488	21,043
2080	1,224	11 <sup>(1)</sup>	280	2	78	1,032
2081	1,032	10 <sup>(1)</sup>	243	2	65	863
2082	863	9 <sup>(1)</sup>	209	1	54	716
2083	716	8 <sup>(1)</sup>	179	1	45	589
2084	589	7 <sup>(1)</sup>	151	1	37	481
2100	12	0 <sup>(1),(2)</sup>	4	0	1	10
2101	10	0 <sup>(1),(2)</sup>	3	0	1	8
2102	8	0 <sup>(1),(2)</sup>	2	0	0	6
2103	6	0 <sup>(1),(2)</sup>	2	0	0	5
2104	5	0 <sup>(1),(2)</sup>	1	0	0	4
2105	4	0 <sup>(1),(2)</sup>	1	0	0	3
2106	3	0 <sup>(1),(2)</sup>	1	0	0	3
2107	3	0 <sup>(1),(2)</sup>	1	0	0	2
2108	2	0 <sup>(1),(2)</sup>	1	0	0	2
2109	2	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0	0	1
2110	1	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0	0	1
2111	1	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0	0	1
2112	1	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0	0	1
2113	1	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0	0	0
2114	0	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0	0	0
2115	0	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0	0	0

<sup>(1)</sup> Mainly attributable to employer contributions to fund each year's annual administrative expenses.

<sup>(2)</sup> Less than \$1 million when rounded.

Note that in preparing the above projections, we have not taken into consideration the one-year delay between the date of the contribution rate calculation and the implementation.

## Retirement Benefits Valuation

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### Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate of 7.25% and Preparation of GASB 67 Report as of June 30, 2017 (Continued)

#### Notes to Schedule:

1. Amounts may not total exactly due to rounding.
2. Amounts shown for the year beginning July 1, 2016 row are actual amounts, based on the unaudited financial statements provided by LACERS.
3. Years 2025-42, 2048-79, and 2085-99 have been omitted from this table.
4. Column (a): None of the projected beginning Plan Fiduciary Net Position amounts shown have been adjusted for the time value of money.
5. Column (b): Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active Members as of June 30, 2017); plus employer contributions to the unfunded actuarial accrued liability; plus contributions to fund each year's annual administrative expenses reflecting a 15-year amortization schedule. Contributions are assumed to occur halfway through the year, on average.
6. Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired Members, and beneficiaries as of June 30, 2017. The projected benefit payments reflect the cost of living increase assumptions used in the June 30, 2017 funding valuation report. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 31.b.(1)(e) of GASB Statement No. 67, the long-term expected rate of return on Plan investments of 7.25% was applied to all periods of projected benefit payments to determine the discount rate.
7. Column (d): Projected administrative expenses are calculated as approximately 0.15% of the projected beginning Plan Fiduciary Net Position amount. The 0.15% portion was based on the actual fiscal year 2016-17 administrative expenses as a percentage of the beginning Plan Fiduciary Net Position amount as of July 1, 2016. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.25% per annum.
9. As illustrated in this Schedule, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan Members. In other words, there is no projected 'cross-over date' when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2017 shown in the GASB 67 report, pursuant to paragraph 44 of GASB Statement No. 67.

## Retirement Benefits Valuation

### Summary of Actuarial Assumptions and Actuarial Cost Method

#### Rationale for Assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2011 through June 30, 2014 Actuarial Experience Study dated October 8, 2014, the Review of Economic Actuarial Assumptions report dated June 30, 2017, and in the Supplemental Information report dated August 10, 2017. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both Tier 1 and Tier 3 Members. The following assumptions used to value the Plan liabilities for funding purposes and for financial reporting purposes have been adopted by the Board.

#### Net Investment Return

7.25%<sup>(1)</sup>

<sup>(1)</sup> Net of investment expenses for funding and financial reporting purposes, and net of administrative expenses for funding purposes only.

#### Discount Rate

7.25%

#### Consumer Price Index (CPI)

Increase of 3.00% per year; benefit increases due to CPI subject to 3.00% maximum for Tier 1 and 2.00% maximum for Tier 3.

#### Employee Contribution Crediting Rate

Based on average of 5-year Treasury note rate. An assumption of 3.00% is used to approximate that crediting rate in this valuation.

#### Salary Increases

Inflation: 3.00%; plus additional 0.50% “across the board” salary increases (other than inflation); plus the following merit and promotional increases:

Years of Service	Percentage Increase
0	6.50%
1	6.20%
2	5.10%
3	3.10%
4	2.10%
5	1.10%
6	1.00%
7	0.90%
8	0.70%
9	0.60%
10+	0.40%

### Mortality Rates

After Service Retirement and all Beneficiaries

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

After Disability Retirement

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward eight years for females.

The above mortality tables contain about a 10% margin, based on actual to expected deaths, as a provision to reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

### Termination Rates before Retirement

Pre-Retirement Mortality

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

Rates of termination for Members with less than five years of service are as follows:

Years of Service	Rate (%)	
	Termination (Based on Service)	
0	13.25	
1	11.00	
2	8.75	
3	7.25	
4	5.75	

Age	Rate (%)	
	Disability	Termination <sup>(1)</sup>
25	0.01	5.75
30	0.03	5.75
35	0.05	4.85
40	0.09	3.50
45	0.15	2.70
50	0.19	2.50
55	0.20	2.35
60	0.20	2.25

<sup>(1)</sup> Rates for Members with five or more years of service. Termination rates are zero for Members eligible to retire.

## Retirement Benefits Valuation

### Summary of Actuarial Assumptions and Actuarial Cost Method (Continued)

#### Retirement Rates

Age	Rate (%)			
	Tier 1		Tier 3	
	Non-55/30	55/30	Non-55/30	55/30
50	6.0	0.0	6.0	0.0
51	3.0	0.0	3.0	0.0
52	3.0	0.0	3.0	0.0
53	3.0	0.0	3.0	0.0
54	16.0	0.0	15.0	0.0
55	6.0	20.0	0.0 <sup>(1)</sup>	19.0
56	6.0	14.0	0.0 <sup>(1)</sup>	13.0
57	6.0	14.0	0.0 <sup>(1)</sup>	13.0
58	6.0	14.0	0.0 <sup>(1)</sup>	13.0
59	6.0	14.0	0.0 <sup>(1)</sup>	13.0
60	6.0	14.0	5.0	13.0
61	6.0	14.0	5.0	13.0
62	7.0	15.0	6.0	14.0
63	7.0	15.0	6.0	14.0
64	7.0	16.0	6.0	15.0
65	12.0	17.0	11.0	16.0
66	12.0	17.0	11.0	16.0
67	12.0	17.0	11.0	16.0
68	12.0	17.0	11.0	16.0
69	12.0	17.0	11.0	16.0
70	100.0	100.0	100.0	100.0

<sup>(1)</sup> Not eligible to retire under the provisions of the Tier 3 plan.

#### Retirement Age and Benefit for Inactive Vested Participants

Pension benefit will be paid at the later of age 58 or the current attained age. For reciprocals, compensation increases of 3.90% per annum are assumed.

#### Exclusion of Inactive Members

All inactive participants are included in the valuation.

#### Unknown Data for Members

Same as those exhibited by Members with similar known characteristics. If not specified, Members are assumed to be male.

#### Percent Married/Domestic Partner

76% of male participants; 50% of female participants.

#### Age of Spouse

Male retirees are assumed to be four years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.

#### Service

Employment service is used for eligibility determination purposes. Benefit service is used for benefit calculation purposes.

#### Future Benefit Accruals

1.0 year of service credit per year.

#### Other Reciprocal Service

5% of future inactive vested Members will work at a reciprocal system.

#### Actuarial Value of Assets

The market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets. An Ad Hoc change was made in 2014 to combine the unrecognized losses of prior years as of June 30, 2013 into one layer and recognize it evenly over six years from fiscal year 2013-14 through fiscal year 2018-19.

#### Actuarial Cost Method

Entry Age Cost Method, level percent of salary.

#### Funding Policy

The plan sponsor of the City of Los Angeles Employees' Retirement System makes contributions equal to the normal cost adjusted by an amount to amortize any surplus or unfunded actuarial accrued liability (UAAL). The amortization method for the UAAL is a level percentage of payroll, assuming annual increases in total covered payroll equal to inflation plus across the board increases (other than inflation). Both the normal cost and the actuarial accrued liability are determined under the Entry Age cost method and are calculated on an individual basis. Entry age is calculated as age on the valuation date minus years of employment service.

Under the current funding policy, changes in the UAAL due to actuarial gains/losses are amortized over separate 15-year periods. Any changes in the UAAL due to assumption or method changes are amortized over separate 20-year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15-year periods. Future ERIPs will be amortized over five years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years effective June 30, 2012.

## Retirement Benefits Valuation

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### Summary of Actuarial Assumptions and Actuarial Cost Method (Continued)

#### Funding Policy (Continued)

The recommended contribution is set equal to the greater of the current funding policy or the minimum Annual Required Contribution (ARC) as determined by the then current GASB Statements 25 and 27. In particular, an additional contribution due to the application of the 40-year minimum amortization requirement for both fiscal year 2003-04 and fiscal year 2004-05 is included in the calculation of the recommended contribution.

#### Assumption Changes Since Prior Valuation

The economic assumptions described above have been updated as a result of the 2017 review of economic assumptions.

### Summary of Plan Provisions

The following summarizes the major provisions of LACERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

#### Plan Year

July 1 through June 30

#### Census Date

June 30

#### Membership Eligibility

##### Tier 1 (§ 4.1002(a))

All employees who became Members of LACERS before July 1, 2013, and certain employees who became Members of LACERS on or after July 1, 2013. In addition, pursuant to Ordinance No. 184134, all Tier 2 employees who became Members of LACERS between July 1, 2013 and February 21, 2016 were transferred to Tier 1 effective February 21, 2016 (refer to Note 2 – Retirement Plan Description on pages 29 - 30 regarding the membership).

##### Tier 3 (§ 4.1080.2(a))

All employees who became Members of LACERS on or after February 21, 2016, except as provided otherwise in Section 4.1080.2(b) of the Los Angeles Administrative Code.

### Normal Retirement Benefit

#### Tier 1

Age & Service Requirement (§ 4.1005(a))

- Age 70; or
- Age 60 with 10 years of continuous City service; or
- Age 55 with at least 30 years of City service.

Amount (§ 4.1007(a))

2.16% per year of service credit (not greater than 100%) of the Final Average Monthly Compensation.

#### Tier 3

With less than 30 Years of Service (§ 4.1080.5(a)(2)(i))

Age & Service Requirement

Age 60 with 10 years of service, including 5 years of continuous City service.

Amount

1.50% per year of service credit at age 60 (not greater than 80%<sup>(1)</sup>) of the Final Average Monthly Compensation.

With 30 or more Years of Service (§ 4.1080.5(a)(2)(ii))

Age & Service Requirement

Age 60 with 30 years of service, including 5 years of continuous City service.

Amount

2.00% per year of service credit at age 60 (not greater than 80%<sup>(1)</sup>) of the Final Average Monthly Compensation.

<sup>(1)</sup> Except when benefit is based solely on the annuity component funded by the Member's contributions.

### Early Retirement Benefit

#### Tier 1

Age & Service Requirement (§ 4.1005(b))

- Age 55 with 10 years of continuous City service; or
- Any age with 30 years of City service.

Amount (§ 4.1007(b))

2.16% per year of service credit (not greater than 100%) of the Final Average Monthly Compensation, reduced for retirement ages below age 60 using the following Early Retirement benefit adjustment factors:

## Retirement Benefits Valuation

### Summary of Plan Provisions (Continued)

#### Early Retirement Benefit (Continued)

Age	Factor	Age	Factor
45	0.6250	53	0.8650
46	0.6550	54	0.8950
47	0.6850	55	0.9250
48	0.7150	56	0.9400
49	0.7450	57	0.9550
50	0.7750	58	0.9700
51	0.8050	59	0.9850
52	0.8350	60	1.0000

#### Tier 3

Age & Service Requirement (§ 4.1080.5(a)(1))  
Prior to age 60 with 30 years of service, including 5 years of continuous City service.

Amount (§ 4.1080.5(a)(1))  
2.00% per year of service credit (not greater than 80%<sup>(1)</sup>) of the Final Average Monthly Compensation, reduced for retirement ages below age 55 using the following Early Retirement benefit adjustment factors:

Age	Factor	Age	Factor
45	0.6250	50	0.7750
46	0.6550	51	0.8050
47	0.6850	52	0.8350
48	0.7150	53	0.8650
49	0.7450	54	0.8950
		55 - 60	1.0000

<sup>(1)</sup> Except when benefit is based solely on the annuity component funded by the Member's contributions.

#### Enhanced Retirement Benefit

##### Tier 1

Age & Service Requirement  
Not applicable – see Normal Retirement age and service requirement.

Amount  
Not applicable – see Normal Retirement amount.

##### Tier 3

With less than 30 Years of Service (§ 4.1080.5(a)(3)(i))

Age & Service Requirement  
Age 63 with 10 years of service, including 5 years of continuous City service.

Amount  
2.00% per year of service credit at age 63 (not greater than 80%<sup>(1)</sup>) of the Final Average Monthly Compensation.

With 30 or more Years of Service (§ 4.1080.5(a)(3)(ii))

Age & Service Requirement  
Age 63 with 30 years of service, including 5 years of continuous City service.

Amount  
2.10% per year of service credit at age 63 (not greater than 80%<sup>(1)</sup>) of the Final Average Monthly Compensation.

<sup>(1)</sup> Except when benefit is based solely on the annuity component funded by the Member's contributions.

#### Service Credit

Tiers 1 & 3 (§ 4.1001(a) & § 4.1080.1(a))

The time component of the formula used by LACERS for purposes of calculating benefits.

#### Final Average Monthly Compensation

Tier 1 (§ 4.1001(b))

Equivalent of monthly average salary of highest continuous 12 months (one year); includes base salary plus regularly assigned pensionable bonuses or premium pay. <sup>(1)</sup>

Tier 3 (§ 4.1081(b))

Equivalent of monthly average salary of highest continuous 36 months (three years); limited to base salary and any items of compensation that are designated as pension based. <sup>(1)</sup>

<sup>(1)</sup> IRC Section 401(a)(17) compensation limit would apply to all employees who began membership in LACERS after June 30, 1996.

#### Cost of Living Benefit

Tier 1 (§ 4.1022)

Based on changes to Los Angeles area Consumer Price Index, to a maximum of 3% per year; excess banked.

Tier 3 (§ 4.1080.17)

Based on changes to Los Angeles area Consumer Price Index, to a maximum of 2% per year; excess not banked.

#### Death after Retirement

Tiers 1 & 3 (§ 4.1010(c) & § 4.1080.10(c))

- 50% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of Member's death (or a designated beneficiary selected by Member at the time of retirement)<sup>(1)</sup>; and

## Retirement Benefits Valuation

### Summary of Plan Provisions (Continued)

#### Death after Retirement (Continued)

- \$2,500 lump sum death benefit paid to a designated beneficiary; and
- Any unused contributions if the Member has elected the cash refund annuity option.

<sup>(1)</sup> The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a higher continuance percentage pursuant to the provisions of either Section 4.1015 (Tier 1) or Section 4.1080.14 (Tier 3).

#### Death before Retirement

Tiers 1 & 3 (§ 4.1010(a) & § 4.1080.10(a))

Greater of:

Option #1:

- Eligibility – None.
- Benefit – Refund of employee contributions plus a limited pension benefit equal to 50% of monthly salary paid, according to the following schedule:

Service	Number of Monthly Payments
Less than 1 year	0
1 year	2
2 years	4
3 years	6
4 years	8
5 years	10
6+ years	12

Option #2:

- Eligibility – Duty-related death or after five years of continuous service.
- Benefit – Continuance of service or disability benefit payable under 100% joint and survivor option to an eligible spouse or qualified domestic partner.

#### Member Contributions

Tier 1 (§ 4.1003)

Effective July 1, 2011, the Member contribution rate became 7% for all employees. Of the 7% rate, 0.5% is the survivor contribution portion and 6.5% is the normal contribution. The 7% Member rate shall be paid until June 30, 2026 or until the ERIP Cost Obligation (defined in ERIP Ordinance No. 180926) is fully paid, whichever comes first<sup>(1)</sup>.

Beginning January 1, 2013, all non-represented Members and Members in certain bargaining groups are required to pay an additional 4% Member contribution rate to defray the cost of providing a Retiree Medical Plan premium subsidy (this additional rate has increased to 4.5% for certain Members).

Members with no eligible spouse or domestic partner at retirement can request a refund of the survivor portion of the Member contributions (i.e., generally based on a contribution rate of 0.5% of pay).

<sup>(1)</sup> The Member contribution rate will drop down to 6% afterwards.

Tier 3 (§ 4.1080.3)

The Member contribution rate is 7% for all employees. Of the 7% rate, 0.5% is the survivor contribution portion and 6.5% is the normal contribution.

All Members are required to pay an additional 4% Member contribution rate to defray the cost of providing a Retiree Medical Plan premium subsidy.

Members with no eligible spouse or domestic partner at retirement can request a refund of the survivor portion of the Member contributions (i.e., generally based on a contribution rate of 0.5% of pay).

#### Disability

Tiers 1 & 3

Service Requirement (§ 4.1008(a) & § 4.1080.8(a))  
5 years of continuous service.

Amount<sup>(1)</sup> (§ 4.1008(c) & § 4.1080.8(c))  
1/70 (1.43%) of the Final Average Monthly Compensation per year of service or 1/3 of the Final Average Monthly Compensation, if greater.

<sup>(1)</sup> The benefit calculated using the service retirement formula will be paid if the Member is eligible and that benefit is greater than that calculated under the disability retirement formula.

## Retirement Benefits Valuation

### Summary of Plan Provisions (Continued)

#### Deferred Retirement Benefit (Vested)

Tier 1 (§ 4.1006)

##### Age & Service Requirement

- Age 70 with 5 years of continuous City service; or
- Age 60 with 5 years of continuous City service and at least 10 years elapsed from first date of membership; or
- Age 55 with at least 30 years of service.
- Deferred employee who meets part-time eligibility: age 60 and at least 10 years elapsed from first date of membership.

##### Amount

Normal Retirement Benefit (or refund of contributions and accumulated interest).

##### Age & Service Requirement

- Age 55 with 5 years of continuous City service and at least 10 years elapsed from first date of membership; or
- Age 55 with 10 years of continuous City service.
- Deferred employee who meets part-time eligibility: age 55 and at least 10 years elapsed from first date of membership.

##### Amount

Early Retirement Benefit (or refund of contributions and accumulated interest), using the following Early Retirement benefit adjustment factors:

Age	Factor
55	0.9250
56	0.9400
57	0.9550
58	0.9700
59	0.9850

Tier 3 (§ 4.1080.6)

##### Age & Service Requirement

- Age 60 with 5 years of continuous City service and at least 10 years elapsed from first date of membership; or
- Age 70 with 5 years of continuous City service, regardless of the number of years that have elapsed from first date of membership.

##### Amount

Normal retirement benefit (based on a Retirement Factor of 1.50%; or refund of contributions and accumulated interest).

##### Age & Service Requirement

- Age 60 with 30 years of continuous City service and at least 10 years elapsed from first date of membership; or
- Age 63 with 10 years of service, including 5 years of continuous City Service.

##### Amount

Normal retirement benefit (based on a Retirement Factor of 2.00%; or refund of contributions and accumulated interest).

##### Age & Service Requirement

Age 63 with 30 years of continuous City service and at least 10 years elapsed from first date of membership.

##### Amount

Enhanced retirement (benefit based on a Retirement Factor of 2.10%; or refund of contributions and accumulated interest).

##### Age & Service Requirement

Age 55 (but not yet 60) with 5 years of continuous City service and at least 10 years elapsed from first date of membership.

##### Amount

Early retirement benefit (based on a Retirement Factor of 1.50% instead of 2.00%; or refund of contributions and accumulated interest), using the following Early Retirement benefit adjustment factors:

Age	Factor
55	0.9250
56	0.9400
57	0.9550
58	0.9700
59	0.9850

#### Withdrawal of Contributions Benefit (Ordinary Withdrawal)

Refund of employee contributions with interest.

#### Changes in Plan Provisions

None.<sup>(1)</sup>

<sup>(1)</sup> While the summary of plan provisions has not been updated to reflect enhanced benefits for Airport Peace Officers effective January 7, 2018, the Plan sponsor's contribution rates for FY 2018-19 have been adjusted to reflect the financial impact of the enhanced benefits.





100 Montgomery Street Suite 500 San Francisco, CA 94104-4308  
T 415.263.8200 www.segalco.com

### Actuarial Certification

November 7, 2017

This is to certify that Segal Consulting (Segal) has conducted an actuarial valuation of certain benefit obligations of Los Angeles City Employees' Retirement System's other postemployment benefit programs as of June 30, 2017, in accordance with generally accepted actuarial principles and practices. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice (ASOPs). Actuarial valuations are performed annually for this other postemployment benefit program with the last valuation completed as of June 30, 2016. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of Governmental Accounting Standard Board (GASB) Statement No. 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by LACERS and on participant, premium, claims and financial data provided by LACERS. Segal did not audit LACERS' financial statements, but conducted an examination of all participant data for reasonableness and we concluded that it was reasonable and consistent with the prior year's data.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the Retirement System's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age cost method.

The actuarial computations made are for purposes of funding plan benefits. Accordingly, additional determinations will be needed for other purposes, such as satisfying financial accounting requirements under Governmental Accounting Standards Board (GASB) Statement No. 74 and judging benefit security at termination of the plan.

Segal prepared all of the supporting schedules in the Actuarial Section of the Comprehensive Annual Financial Report (CAFR) and certain supporting schedules in the Financial Section, based on the results of the June 30, 2017 actuarial valuation. A listing of the supporting schedules Segal prepared for inclusion in the Financial Section as Required Supplementary Information prescribed by GASB, and in the Actuarial Section, is provided below:

#### Financial Section

- 1) Schedule of Net Other Postemployment Benefits (OPEB) Liability\*
- 2) Schedule of Changes in Net OPEB Liability and Related Ratios\*
- 3) Schedule of Contribution History\*

#### Actuarial Section

- 4) Summary of Significant Valuation Results
- 5) Active Member Valuation Data
- 6) Retirees and Beneficiaries Added to and Removed from Health Benefits
- 7) Solvency Test
- 8) Schedule of Funding Progress
- 9) Actuarial Analysis of Financial Experience
- 10) Actuarial Balance Sheet
- 11) Schedule of Changes in Net OPEB Liability and Related Ratios\*
- 12) Projection of OPEB Plan's Fiduciary Net Position for Use in Calculation of Discount Rate of 7.25% and Preparation of GASB 74 Report as of June 30, 2017\*

\* Source: Segal's GASB Statement No. 74 valuation report as of June 30, 2017.

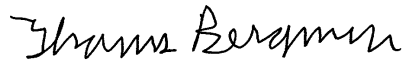
## Health Benefits Valuation

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### Actuarial Certification (Continued)

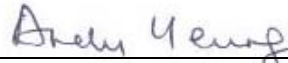
LACERS' staff prepared other trend data schedules in the Statistical Section based on information supplied in Segal's valuation report.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statement No. 45 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, and/or the American Academy of Actuaries, as well as other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.



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Thomas Bergman, ASA, MAAA, EA  
Associate Actuary



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Andy Yeung, ASA, MAAA, FCA, EA  
Vice President and Actuary

## Health Benefits Valuation

### Active Member Valuation Data

#### Member Population

Valuation Date	Active Members <sup>(1)</sup>	Covered Payroll	Annual Average Pay <sup>(2)</sup>	Change in Annual Average Pay (%)
06/30/2008	30,236	\$1,977,644,640	\$65,407	4.1%
06/30/2009	30,065 <sup>(3)</sup>	1,816,171,212 <sup>(4)</sup>	65,632 <sup>(4)</sup>	0.3
06/30/2010	26,245	1,817,662,284	69,257	5.5
06/30/2011	25,449	1,833,392,381	72,042	4.0
06/30/2012	24,917	1,819,269,630	73,013	1.3
06/30/2013	24,441	1,846,970,474	75,569	3.5
06/30/2014	24,009	1,898,064,175	79,056	4.6
06/30/2015	23,895	1,907,664,598	79,835	1.0
06/30/2016	24,446	1,968,702,630	80,533	0.9
06/30/2017	25,457	2,062,316,129	81,012	0.6

(1) Includes non-vested Members.

(2) Reflects annualized salaries for part-time Members.

(3) Before reclassifying the 2,393 Early Retirement Incentive Program (ERIP) electing active Members as retired under the program.

(4) After ERIP.

### Retirees and Beneficiaries Added to and Removed from Health Benefits

Valuation Date	No. of New Retirees/Beneficiaries	Annual Subsidies Added <sup>(1)</sup>	No. of Retirees/Beneficiaries Removed	Annual Subsidies Removed	No. of Retirees/Beneficiaries at 6/30	Annual Subsidies at 6/30	Percent Increase in Annual Subsidies	Average Annual Subsidy
06/30/2008	1,139	\$ 6,472,277	471	\$ 2,051,109	12,004	\$ 71,023,368	6.6%	\$ 5,917
06/30/2009	376	5,542,283	487	2,697,150	11,893	73,868,501	4.0	6,211
06/30/2010	2,104 <sup>(2)</sup>	23,010,841 <sup>(2)</sup>	555	2,670,987	13,442	94,208,355	27.5	7,009
06/30/2011	431	5,670,390	437	2,774,684	13,436	97,104,061	3.1	7,227
06/30/2012	433	(540,583)	438	2,516,835	13,431	94,046,643	(3.1)	7,002
06/30/2013	635	9,263,844	474	2,463,967	13,592	100,846,520	7.2	7,420
06/30/2014	616	7,160,148	522	3,047,436	13,686	104,959,232	4.1	7,669
06/30/2015	860	10,844,333	534	3,174,045	14,012	112,629,520	7.3	8,038
06/30/2016	837	2,185,058	536	3,102,492	14,313	111,712,086	(0.8)	7,805
06/30/2017	913	13,706,185	574	3,316,380	14,652	122,101,891	9.3	8,333

(1) Also reflects changes in subsidies for continuing retirees and beneficiaries.

(2) Large increase primarily due to accelerated retirements stimulated by the City's Early Retirement Incentive Program (ERIP).

## Health Benefits Valuation

### Solvency Test

For Years Ended June 30  
(Dollars in Thousands)

Valuation Date	Aggregate Actuarial Accrued Liabilities For				Portion of Aggregate Accrued Liabilities Covered by Reported Assets		
	Inactive/ Vested Members	Retirees, Beneficiaries & Dependents	Active Members	Valuation Value of Assets	Inactive/ Vested Members	Retirees, Beneficiaries & Dependents	Active Members
06/30/2008	\$25,933	\$849,972	\$1,052,138	\$1,342,920	100%	100%	44%
06/30/2009 <sup>(1)</sup>	26,182	1,118,520 <sup>(2)</sup>	913,475	1,342,497	100	100	22
06/30/2010	34,455	1,124,254	1,075,166	1,425,726	100	100	25
06/30/2011	19,964	1,066,351	882,393	1,546,884	100	100	52
06/30/2012	24,454	1,083,168	1,184,778	1,642,374	100	100	45
06/30/2013	26,869	1,104,833	1,280,783	1,734,733	100	100	47
06/30/2014	41,188	1,196,769	1,424,896	1,941,225	100	100	49
06/30/2015	42,943	1,210,067	1,393,980	2,108,925	100	100	61
06/30/2016	50,413	1,275,604	1,467,671	2,248,753	100	100	63
06/30/2017	62,252	1,379,357	1,564,197	2,438,458	100	100	64

<sup>(1)</sup> Based on revised June 30, 2009 valuation.

<sup>(2)</sup> Includes liabilities for the 2,393 ERIP-electing Members.

### Schedule of Funding Progress

For Years Ended June 30  
(Dollars in Thousands)

Valuation Date	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
06/30/2008	\$1,342,920	\$1,928,043	\$585,123	69.7 %	\$1,977,645	29.6 %
06/30/2009	1,342,497	2,058,177	715,680	65.2	1,816,171	39.4
06/30/2010	1,425,726	2,233,874	808,148	63.8	1,817,662	44.5
06/30/2011	1,546,884	1,968,708	421,824	78.6	1,833,392	23.0
06/30/2012	1,642,374	2,292,400	650,026	71.6	1,819,270	35.7
06/30/2013	1,734,733	2,412,484	677,751	71.9	1,846,970	36.7
06/30/2014	1,941,225	2,662,853	721,628	72.9	1,898,064	38.0
06/30/2015	2,108,925	2,646,989	538,064	79.7	1,907,665	28.2
06/30/2016	2,248,753	2,793,688	544,935	80.5	1,968,703	27.7
06/30/2017	2,438,458	3,005,806	567,348	81.1	2,062,316	27.5

## Health Benefits Valuation

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### Actuarial Analysis of Financial Experience

#### Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2017

1. Unfunded actuarial accrued liability as of June 30, 2016	\$ 544,935,475
2. Employer normal cost as of June 30, 2016	68,385,120
3. Expected employer contributions during 2016-17 fiscal year	(96,567,926)
4. Interest	<u>38,756,451</u>
5. Expected unfunded actuarial accrued liability as of June 30, 2017	555,509,120
6. Adjustment due to prior year's UAAL payment limited to reflect a 30-year effective amortization period	655,398
7. Change due to investment gain	(40,687,726)
8. Change due to miscellaneous demographic gains and losses	5,599,147
9. Change due to new economic assumptions	121,183,087
10. Change due to updated 2017-18 premium and subsidy levels	(22,045,062)
11. Change due to adopted future medical trend rates after 2017-18	(87,671,160)
12. Change due to reflecting projected ACA excise tax on high-cost health plan under the old economic assumptions	<u>34,805,298</u>
13. Unfunded actuarial accrued liability as of June 30, 2017	<u>\$ 567,348,102</u>

Note that the expected employer contribution in (3) reflects a 30-year effective amortization of the UAAL.

### Actuarial Balance Sheet

#### Assets

1. Actuarial value of assets	\$ 2,438,458,132
2. Present value of future normal costs	644,065,970
3. Unfunded actuarial accrued liability	<u>567,348,102</u>
4. Present value of current and future assets	<u>\$ 3,649,872,204</u>

#### Liabilities

5. Actuarial present value of total projected benefits	<u>\$ 3,649,872,204</u>
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## Health Benefits Valuation

### Schedule of Changes in Net OPEB Liability and Related Ratios

For Years Ended June 30  
(Dollars in Thousands)

	<u>2017</u>	<u>2016</u>
<b>Total OPEB Liability</b>		
Service cost	\$ 68,385	\$ 62,360
Interest	210,170	199,078
Changes of benefit terms	-	17,215
Differences between expected and actual experience	7,216	(22,013)
Changes of assumptions	45,962	-
Benefit payments	<u>(119,616)</u>	<u>(109,940)</u>
<b>Net change in total OPEB liability</b>	212,117	146,700
<b>Total OPEB liability- beginning</b>	<u>2,793,689</u>	<u>2,646,989</u>
<b>Total OPEB liability- ending (a)</b>	<u>\$ 3,005,806</u>	<u>\$ 2,793,689</u>
<b>Plan fiduciary net position</b>		
Contributions- employer	\$ 97,457	\$ 105,983
Net investment income (loss)	330,708	(344)
Benefit Payments	(119,616)	(109,940)
Administrative expense	<u>(4,564)</u>	<u>(4,528)</u>
<b>Net change in Plan fiduciary net position</b>	303,985	(8,829)
<b>Plan fiduciary net position - beginning</b>	<u>2,134,877</u>	<u>2,143,706</u>
<b>Plan fiduciary net position - ending (b)</b>	<u>\$ 2,438,862</u>	<u>\$ 2,134,877</u>
<b>Plan's net OPEB liability - ending (a)-(b)</b>	<u>\$ 566,944</u>	<u>\$ 658,812</u>
<b>Plan fiduciary net position as a percentage of the total OPEB liability (b)/(a)</b>	81.1%	76.4%
<b>Covered payroll</b>	\$ 1,973,049	\$ 1,876,946
<b>Plan's net OPEB liability as a percentage of covered payroll</b>	28.7%	35.1%

#### Note to Schedule:

**Changes of Assumptions:** The June 30, 2017 calculations reflected the lowered assumed investment rate of return from 7.50% to 7.25% based on the Review of Economic Actuarial Assumptions report dated June 30, 2017 and on the Supplemental Information report dated August 10, 2017.

## Health Benefits Valuation

### Projection of OPEB Plan's Fiduciary Net Position for Use in Calculation of Discount Rate of 7.25% and Preparation of GASB 74 Report as of June 30, 2017

(Dollars in Millions)

Year Beginning July 1	Projected Beginning OPEB Plan Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Admin. Expenses (d)	Projected Investment Earnings (e)	Projected Ending OPEB Plan Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
2016	\$2,135	\$97	\$120	\$5	\$331	\$2,439
2017	2,439	102	128	5	176	2,584
2018	2,584	101	137	6	186	2,728
2019	2,728	100	150	6	196	2,867
2020	2,867	99	164	6	205	3,002
2021	3,002	101	178	6	215	3,133
2022	3,133	101	191	7	224	3,260
2023	3,260	99	205	7	232	3,379
2024	3,379	94	219	7	240	3,488
2043	4,901	32 <sup>(1)</sup>	428	10	341	4,836
2044	4,836	31 <sup>(1)</sup>	431	10	336	4,762
2045	4,762	30 <sup>(1)</sup>	433	10	331	4,679
2046	4,679	29 <sup>(1)</sup>	437	10	324	4,584
2047	4,584	27 <sup>(1)</sup>	440	10	317	4,479
2080	433	5 <sup>(1)</sup>	93	1	28	372
2081	372	4 <sup>(1)</sup>	82	1	24	317
2082	317	4 <sup>(1)</sup>	73	1	21	268
2083	268	4 <sup>(1)</sup>	64	1	17	225
2084	225	3 <sup>(1)</sup>	55	0 <sup>(2)</sup>	14	187
2100	4	0 <sup>(1),(2)</sup>	1	0 <sup>(2)</sup>	0 <sup>(2)</sup>	2
2101	2	0 <sup>(1),(2)</sup>	1	0 <sup>(2)</sup>	0 <sup>(2)</sup>	2
2102	2	0 <sup>(1),(2)</sup>	1	0 <sup>(2)</sup>	0 <sup>(2)</sup>	1
2103	1	0 <sup>(1),(2)</sup>	1	0 <sup>(2)</sup>	0 <sup>(2)</sup>	1
2104	1	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	1
2105	1	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2106	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2107	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2108	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2109	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2110	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2111	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2112	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2113	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2114	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>
2115	0 <sup>(2)</sup>	0 <sup>(1),(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>	0 <sup>(2)</sup>

<sup>(1)</sup> Mainly attributable to employer contributions to fund each year's annual administrative expenses.

<sup>(2)</sup> Less than \$1 million when rounded.

Note that in preparing the above projections, we have not taken into consideration the one-year delay between the date of the contribution rate calculation and the implementation.

## Health Benefits Valuation

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### Projection of OPEB Plan's Fiduciary Net Position for Use in Calculation of Discount Rate of 7.25% and Preparation of GASB 74 Report as of June 30, 2017 (Continued)

#### Notes to Schedule:

1. Amounts may not total exactly due to rounding.
2. Amounts shown for the year beginning July 1, 2016 row are actual amounts, based on the unaudited financial statements provided by LACERS.
3. Years 2025-42, 2048-79, and 2085-99 have been omitted from this table.
4. Column (a): None of the projected beginning OPEB Plan Fiduciary Net Position amounts shown have been adjusted for the time value of money.
5. Column (b): Projected total contributions include employer normal cost contributions based on closed group projections (based on covered active Members as of June 30, 2017); plus employer contributions to the unfunded actuarial accrued liability; plus contributions to fund each year's annual administrative expenses reflecting a 15-year amortization schedule. Contributions are assumed to occur halfway through the year, on average.
6. Column (c): Projected benefit payments have been determined in accordance with paragraph 43 of GASB Statement No. 74, and are based on the closed group of active, inactive vested, retired Members, and beneficiaries as of June 30, 2017. The projected benefit payments reflect the excise tax as imposed by the ACA and related statutes reflected in the June 30, 2017 funding valuation report. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 49 of GASB Statement No. 74, the long-term expected rate of return on Plan investments of 7.25% was applied to all periods of projected benefit payments to determine the discount rate.
7. Column (d): Projected administrative expenses are calculated as approximately 0.21% of the projected beginning OPEB Plan Fiduciary Net Position amount. The 0.21% portion was based on the actual fiscal year 2016-17 administrative expenses as a percentage of the beginning OPEB Plan Fiduciary Net Position amount as of July 1, 2016. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.25% per annum.
9. As illustrated in this Schedule, the OPEB Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan Members. In other words, there is no projected 'cross-over date' when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the Total OPEB Liability as of June 30, 2017 shown in the GASB 74 report, pursuant to paragraph 49 of GASB Statement No. 74.



## Health Benefits Valuation

### Summary of Actuarial Assumptions and Actuarial Cost Method

#### Rationale for Assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2011 through June 30, 2014 Actuarial Experience Study dated October 8, 2014, the Review of Economic Actuarial Assumptions report dated June 30, 2017, the Supplemental Information report dated August 10, 2017, and the retiree health assumptions letter dated September 20, 2017. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both Tier 1 and Tier 3 Members. These assumptions have been adopted by the Board.

#### Data

LACERS provided detailed census data and financial information for post-employment benefits.

#### Post-Retirement Mortality Rates

Healthy Members and all Beneficiaries

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

Disabled Members

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward eight years for females.

The above mortality tables contain about a 10% margin, based on actual to expected deaths, as a provision to anticipate future mortality improvement, based on a review of mortality experience as of the measurement date.

#### Termination Rates before Retirement

Pre-Retirement Mortality

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

Rates of termination for Members with less than five years of service are as follows:

Years of Service	Rate (%)
0	13.25
1	11.00
2	8.75
3	7.25
4	5.75

Age	Rate (%)	
	Disability	Termination <sup>(1)</sup>
25	0.01	5.75
30	0.03	5.75
35	0.05	4.85
40	0.09	3.50
45	0.15	2.70
50	0.19	2.50
55	0.20	2.35
60	0.20	2.25

<sup>(1)</sup> Rates for Members with five or more years of service. Termination rates are zero for Members eligible to retire.

#### Retirement Rates

Age	Rate (%)			
	Tier 1		Tier 3	
	Non-55/30	55/30	Non-55/30	55/30
50	6.0	0.0	6.0	0.0
51	3.0	0.0	3.0	0.0
52	3.0	0.0	3.0	0.0
53	3.0	0.0	3.0	0.0
54	16.0	0.0	15.0	0.0
55	6.0	20.0	0.0 <sup>(1)</sup>	19.0
56	6.0	14.0	0.0 <sup>(1)</sup>	13.0
57	6.0	14.0	0.0 <sup>(1)</sup>	13.0
58	6.0	14.0	0.0 <sup>(1)</sup>	13.0
59	6.0	14.0	0.0 <sup>(1)</sup>	13.0
60	6.0	14.0	5.0	13.0
61	6.0	14.0	5.0	13.0
62	7.0	15.0	6.0	14.0
63	7.0	15.0	6.0	14.0
64	7.0	16.0	6.0	15.0
65	12.0	17.0	11.0	16.0
66	12.0	17.0	11.0	16.0
67	12.0	17.0	11.0	16.0
68	12.0	17.0	11.0	16.0
69	12.0	17.0	11.0	16.0
70	100.0	100.0	100.0	100.0

<sup>(1)</sup> Not eligible to retire under the provisions of the Tier 3 plan.

#### Retirement Age and Benefit for Inactive Vested Participants

Assume retiree health benefit will be paid at the later of age 58 or the current attained age.

#### Exclusion of Inactive Vested

Inactive vested with less than 10 years of service are excluded.

## Health Benefits Valuation

### Summary of Actuarial Assumptions and Actuarial Cost Method (Continued)

#### Unknown Data for Members

Same as those exhibited by Members with similar known characteristics. If not specified, Members are assumed to be male.

#### Service

Employment service is used for eligibility determination purposes. Benefit service is used for benefit calculation purposes.

#### Future Benefit Accruals

1.0 year of service credit per year

#### Discount Rate

7.25%

#### Salary Increases

Inflation: 3.00%; plus additional 0.50% “across the board” salary increases (other than inflation); plus the following merit and promotional increases:

Years of Service	Percentage Increase
0	6.50%
1	6.20%
2	5.10%
3	3.10%
4	2.10%
5	1.10%
6	1.00%
7	0.90%
8	0.70%
9	0.60%
10+	0.40%

#### Per Capita Cost Development

The assumed costs on a composite basis are the future costs of providing postemployment health care benefits at each age. To determine the assumed costs on a composite basis, historical premiums are reviewed and adjusted for increases in the cost of health care services.

2017-18 Fiscal Year		
Carrier	Election Percent	Maximum Monthly Dental Subsidy
Delta Dental PPO	79.0%	\$44.50
DeltaCare USA	21.0%	\$12.50

Maximum Monthly Medical Subsidy (Not Subject to Medical Subsidy Cap) Participant Under Age 65 or Not Eligible for Medicare A & B 2017-18 Fiscal Year				
Carrier	Observed and Assumed Election Percent	Single Party Subsidy	Married/with Domestic Partner Subsidy	Eligible Survivor Subsidy
Kaiser HMO	61.9%	\$839.91	\$1,679.82	\$839.91
Anthem BC PPO	22.5%	\$1,226.65	\$1,763.84	\$839.91
Anthem BC HMO	15.6%	\$1,018.18	\$1,763.84	\$839.91

Maximum Monthly Medical Subsidy (Not Subject to Medical Subsidy Cap) Participant Eligible for Medicare A & B 2017-18 Fiscal Year				
Carrier	Observed and Assumed Election Percent	Single Party Subsidy	Married/with Domestic Partner Subsidy	Eligible Survivor Subsidy
Kaiser Senior Adv. HMO	58.0%	\$251.25	\$502.50	\$251.25
Anthem BC Medicare Supplement	30.3%	\$524.22	\$1,034.95	\$524.22
UHC Medicare Adv. HMO for California <sup>(1)</sup>	11.7%	\$267.26	\$529.98	\$267.26

<sup>(1)</sup> Rates for CA plan.

## Health Benefits Valuation

### Summary of Actuarial Assumptions and Actuarial Cost Method (Continued)

#### Per Capita Cost Development (Continued)

Members who are subject to the retiree medical subsidy cap will have monthly health insurance subsidy maximums fixed at the levels in effect at July 1, 2011, as shown in the table below:

	Maximum Monthly Medical Subsidy (Subject to Medical Subsidy Cap)		
	Single Party Subsidy	Married/With Domestic Partner Subsidy	Eligible Survivor Subsidy
Under Age 65: All Plans	\$1,190.00	\$1,190.00	\$593.62
Age 65 and Over: Kaiser HMO	\$203.27	\$406.54	\$203.27
Blue Cross Medicare Supplement	\$478.43	\$482.19	\$478.43
UHC Medicare Adv. HMO for California	\$219.09	\$390.92	\$219.09

Adjustments to per-capita costs based on age, gender, and status are as follows:

Age	Retiree		Spouse	
	Male	Female	Male	Female
55	0.9003	0.9295	0.7085	0.8025
60	1.0692	1.0019	0.9485	0.9308
64	1.2266	1.0628	1.1974	1.0476
65	0.9188	0.7809	0.9188	0.7809
70	1.0648	0.8416	1.0648	0.8416
75	1.1475	0.9059	1.1475	0.9059
80+	1.2357	0.9766	1.2357	0.9766

#### Spouse/Domestic Partner Coverage

60% of male and 30% of female retirees who receive a subsidy are assumed to be married or have a qualified domestic partner and elect dependent coverage. Of these covered spouses/domestic partners, 100% are assumed to continue coverage if the retiree predeceases the spouse/domestic partner.

#### Spouse Age Difference

Male retirees are assumed to be four years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.

### Participation

Retiree Medical and Dental Coverage Participation:

Years of Service Range	Percent Covered <sup>(1)</sup>
10 – 14	65%
15 – 19	80%
20 – 24	90%
25 and Over	95%

<sup>(1)</sup> Inactive Members are assumed to elect coverages at 50% of the rates shown above.

100% of retirees becoming eligible for Medicare are assumed to be covered by both Parts A and B.

#### Health Care Cost Subsidy Trend Rates

Trends to be applied in following fiscal years, to all health plans.

First Fiscal Year (July 1, 2017 through June 30, 2018)

Plan	Trend to be applied to 2017-18 Fiscal Year premium
Anthem BC HMO, Under Age 65	7.18%
Anthem BC PPO, Under Age 65	7.23%
Kaiser HMO, Under Age 65	5.16%
Anthem BC Medicare Supplement, Age 65 and Over	6.85%
Kaiser Senior Adv. HMO, Age 65 and Over	5.72%
UHC Medicare Adv. HMO, Age 65 and Over	5.74%

The fiscal year trend rates are based on the following calendar year trend rates:

Fiscal Year	Trend (Approx.)		Calendar Year	Trend (applied to calculate following year premium)	
	Non- Medicare	Medicare		Non- Medicare	Medicare
2018-19	6.87%	6.37%	2018	7.00%	6.50%
2019-20	6.62%	6.12%	2019	6.75%	6.25%
2020-21	6.37%	5.87%	2020	6.50%	6.00%
2021-22	6.12%	5.62%	2021	6.25%	5.75%
2022-23	5.87%	5.37%	2022	6.00%	5.50%
2023-24	5.62%	5.12%	2023	5.75%	5.25%
2024-25	5.37%	4.87%	2024	5.50%	5.00%
2025-26	5.12%	4.62%	2025	5.25%	4.75%
2026-27	4.87%	4.50%	2026	5.00%	4.50%
2027-28	4.62%	4.50%	2027	4.75%	4.50%
2028-29 and later	4.50%	4.50%	2028	4.50%	4.50%

## Health Benefits Valuation

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### Summary of Actuarial Assumptions and Actuarial Cost Method (Continued)

#### Health Care Cost Subsidy Trend Rates (Continued)

Dental Premium Trend: 4.50% for all years.

Medicare Part B Premium Trend: 4.50% for all years.

#### Health Care Reform

As directed by LACERS, the impact of potential excise tax imposed by the Affordable Care Act (ACA) and related statutes on certain health plans was reflected in the current valuation in calculating the contribution rates for the employer. Statements No. 74 and No. 75 by the Governmental Accounting Standards Board (GASB) for financial reporting purposes are expected to require the inclusion of the excise tax in the liability. Statement No. 74 is effective for fiscal years beginning after June 15, 2016 for plan reporting and Statement No. 75 is effective for fiscal years beginning after June 15, 2017 for employer reporting.

#### Administrative Expenses

No administrative expenses were valued separately from the premium costs.

#### Actuarial Value of Assets

The market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets. An Ad Hoc change was made in 2014 to combine the unrecognized losses of prior years as of June 30, 2013 into one layer and recognize it evenly over six years from fiscal year 2013-14 through fiscal year 2018-19.

#### Actuarial Cost Method

Entry Age Cost Method, level percent of salary.

#### Funding Policy

The plan sponsor of the City of Los Angeles Employees' Retirement System makes contributions equal to the normal cost adjusted by an amount to amortize any surplus or unfunded actuarial accrued liability (UAAL). The amortization method for the UAAL is a level percentage of payroll, assuming annual increases in total covered payroll equal to inflation plus across the board increases (other than inflation). Both the normal cost and the actuarial

accrued liability are determined under the Entry Age cost method and are calculated on an individual basis.

Entry age is calculated as age on the valuation date minus years of employment service.

Under the current funding policy, changes in the UAAL due to actuarial gains/losses are amortized over separate 15-year periods. Any changes in the UAAL due to assumption or method changes are amortized over separate 20-year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15-year periods. Future ERIPs will be amortized over five years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP, were combined and amortized over 30 years effective June 30, 2012. Health trend and premium assumption changes are amortized over 15 years.

#### Assumption Changes since Prior Valuation

The discount rate was lowered from 7.50% to 7.25%.

The salary scale assumption was updated.

Different trend rates for Medicare and Non-Medicare medical plans was introduced. The ultimate trend rate was reduced from 5.00% to 4.50%.

Starting premium costs and first year trends were revised to reflect 2018 calendar year premium data.

Medical and dental carrier election assumptions were updated.

### Summary of Plan Provisions

The following summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

#### Membership Eligibility

Tier 1 (§4.1002(a))

All employees who became Members of LACERS before July 1, 2013, and certain employees who became Members of LACERS on or after July 1, 2013. In addition, pursuant to Ordinance No. 184134, all Tier 2 employees who became Members of LACERS between July 1, 2013 and February 21, 2016 were transferred to Tier 1 effective February 21, 2016 (refer to Note 3 – Postemployment Health Care Plan Description on page 34 regarding the membership).

# Health Benefits Valuation

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## Summary of Plan Provisions (Continued)

### Membership Eligibility (Continued)

#### Tier 3 (§4.1080.2(a))

All employees who became Members of LACERS on or after February 21, 2016, except as provided otherwise in Section 4.1080.2(b) of the Los Angeles Administrative Code.

### Benefit Eligibility

#### Tier 1 (§4.1111(a)) and Tier 3 (§4.1126(a))

Retired age 55 or older with at least 10 years of service (including deferred vested Members who terminate employment and receive a retirement benefit from LACERS), or if retirement date is between October 2, 1996, and September 30, 1999 at age 50 or older with at least 30 years of service. Benefits are also payable to spouses, domestic partners, or other qualified dependents while the retiree is alive. The health subsidy is not payable to a disabled retiree before the Member reaches age 55.

### Medical Subsidy for Members Not Subject to Cap

Under Age 65 or Over Age 65 Without Medicare Part A:

#### Tier 1 (§4.1111(d)) and Tier 3 (§4.1126(c))

Both Tier 1 and Tier 3 Members will be eligible for 40% of maximum medical plan premium subsidy for 1 – 10 whole years of service credit, and eligible Members earn 4% per year of service credit for their annual medical subsidy accrual after 10 years of service (limited to actual premium). As of July 1, 2017, the maximum monthly health subsidy is \$1,736.88, increasing to \$1,790.80 in calendar year 2018.

Over Age 65 and Enrolled in Both Medicare Parts A and B:

#### Tier 1 (§4.1111(e)) and Tier 3 (§4.1126(d))

For retirees, a maximum health subsidy shall be paid in the amount of the single-party monthly premium of the approved Medicare supplemental or coordinated plan in which the retiree is enrolled, subject to the following vesting schedule:

Completed Years of Service Credit	Vested Percentage
1-14	75%
15-19	90%
20+	100%

### Subsidy Cap for Tier 1

#### Tier 1 (§4.1111(b))

As of the June 30, 2011 valuation, the retiree health benefits program was changed to cap the medical subsidy for non-retired Members who do not contribute an additional 4.0% or 4.5% of employee contributions to the System.

The capped subsidy is different for Medicare and non-Medicare retirees.

The cap applies to the medical subsidy limits at the 2011 calendar year level.

The cap does not apply to the dental subsidy or the Medicare Part B premium reimbursement.

### Dependents

#### Tier 1 (§4.1111(e)(4)) and Tier 3 (§4.1126(d)(4))

An additional amount is added for coverage of dependents which shall not exceed the amount provided to a retiree not enrolled in Medicare Parts A and B and covered by the same medical plan with the same years of service credit. The combined Member and dependent subsidy shall not exceed the actual premium.

### Dental Subsidy for Members

#### Tier 1 (§4.1114(b)) and Tier 3 (§4.1129(b))

The System will pay 4% of the maximum dental subsidy (limited to actual premium) for each year of Service Credit, up to 100% of the maximum dental subsidy. As of July 1, 2017, the maximum dental subsidy is \$44.60 per month; remaining unchanged in calendar year 2018.

There is no subsidy available to spouses or domestic partners or for dependent coverage. There is also no reimbursement for dental plans not sponsored by the System.

### Medicare Part B Subsidy for Members

#### Tier 1 (§4.1113) and Tier 3 (§4.1128)

If a retiree is covered by both Medicare Parts A and B, and enrolled in a LACERS medical plan or participates in the LACERS Retiree Medical Premium Reimbursement Program, LACERS will reimburse the retiree the basic Medicare Part B premium.

## Health Benefits Valuation

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### Summary of Plan Provisions (Continued)

#### Medical Subsidy for Surviving Spouse

Tier 1 (§4.1115) and Tier 3 (§4.1129.1)

The surviving spouse or domestic partner will be entitled to a health subsidy (limited to the actual lowest cost plan available single-party premium) based on the Member's years of service credit and the surviving dependent's eligibility for Medicare.

Under Age 65 or Over Age 65 Without Medicare Part A

The maximum health subsidy available for survivors is the lowest cost plan available (currently Kaiser) single-party premium (\$826.43 per month as of July 1, 2017, increasing to \$853.39 on January 1, 2018).

Over Age 65 and Enrolled in Both Medicare Parts A and B:

For survivors, a maximum health subsidy limited to the single-party monthly premium of the plan in which the survivor is enrolled, is provided subject to the following vesting schedule:

Completed Years of Service Credit	Vested Percentage
1-14	75%
15-19	90%
20+	100%

#### Changes in Plan Provisions

None. <sup>(1)</sup>

<sup>(1)</sup> While the summary of plan provisions has not been updated to reflect enhanced benefits for Airport Peace Officers effective January 7, 2018, the Plan sponsor's contribution rates for FY 2018-19 have been adjusted to reflect the financial impact of the enhanced benefits.

**Statistical**





## Statistical Section

The Statistical Section of the System's Comprehensive Annual Financial Report provides additional historical trend information to assist the reader in gaining a more comprehensive understanding of the current fiscal year's financial statements, note disclosures, and required supplementary information, which cover the System's Retirement Plan and the Postemployment Health Care Plan. This section also provides multi-year trending of financial and operating information to facilitate comprehensive understanding of how the System's financial position and performance has changed over time. More specifically, the financial and operating information provides contextual data for the System's revenues (additions), expenses (deductions), net increase or decrease in fiduciary net position, benefit expenses by type, number of retirees by different types of benefits, and average monthly benefit payments.

The financial and operating trend information is as follows:

### Schedule of Additions by Source - Retirement Plan

(Dollars in Thousands)

Fiscal Year	Member Contributions	Employer Contributions <sup>(1)(2)</sup>		Net Investment Income (Loss) <sup>(4)</sup>	Total Additions
		Amounts	As a % of Annual Covered Payroll <sup>(3)</sup>		
2008	\$ 114,678	\$ 302,810	16.5%	\$ (550,386)	\$ (132,898)
2009	118,592	288,516	15.0	(1,800,906)	(1,393,798)
2010	126,961	266,240	14.2	911,088	1,304,289
2011	114,731	306,737	18.1	1,654,824	2,076,292
2012	178,246	308,712	18.0	72,705	559,663
2013	197,881	346,350	19.9	1,275,612	1,819,843
2014	204,136	357,818	19.8	1,820,266	2,382,220
2015	207,564	381,299	20.8	308,557	897,420
2016	211,345	440,704	23.5	27,638	679,687
2017	227,532	453,504	23.0	1,524,533	2,205,569

(1) Contributions received at the beginning of the fiscal year with discounted rate for fiscal year 2008.

(2) Contributions received on July 15<sup>th</sup> of the fiscal year with discounted rate starting fiscal year 2009.

(3) Starting fiscal year 2014, when a new benefit tier was added, % of annual covered payroll is an aggregate rate for all tiers and it is based on actual covered payroll.

(4) Includes changes in unrealized gains and losses of investments. Investment related administrative expenses are included starting fiscal year 2014 pursuant to GASB Statement No. 67.

### Schedule of Deductions by Type - Retirement Plan

(In Thousands)

Fiscal Year	Benefit Payments	Refunds of Contributions	Administrative Expenses <sup>(1)</sup>	Miscellaneous Expenses	Total Deductions
2008	\$ 484,549	\$ 15,149	\$ 11,987	\$ 5,366 <sup>(2)</sup>	\$ 517,051
2009	510,634	21,325	12,829	-	544,788
2010	569,938	27,971	14,204	-	612,113
2011	654,384	18,215	13,232	-	685,831
2012	664,626	11,100	12,995	-	688,721
2013	687,362	17,697	13,352	-	718,411
2014	708,956	15,982	12,438	-	737,376
2015	734,736	10,121	15,946	-	760,803
2016	767,264	7,719	15,576	-	790,559
2017	799,221	9,803	16,019	-	825,043

(1) Excludes investment related administrative expenses starting fiscal year 2014.

(2) Transfers to Los Angeles Fire and Police Pension.

## Statistical Section

### Schedule of Additions by Source - Postemployment Health Care Plan

(Dollars in Thousands)

Fiscal Year	Employer Contributions <sup>(1)(2)</sup>		Miscellaneous Income	Net Investment Income (Loss) <sup>(4)</sup>	Total Additions
	Amounts	As a % of Annual Covered Payroll <sup>(3)</sup>			
2008	\$ 108,848	6.3%	\$ 11,000 <sup>(5)</sup>	\$ (96,007)	\$ 23,841
2009	95,122	5.2	-	(309,334)	(214,212)
2010	96,511	5.3	-	155,745	252,256
2011	107,396	6.4	-	295,324	402,720
2012	115,209	6.7	-	10,314	125,523
2013	72,916	4.2	-	253,632	326,548
2014	97,841	5.4	-	375,504	473,345
2015	100,467	5.5	-	59,435	159,902
2016	105,983	5.7	-	(721)	105,262
2017	97,457	4.9	-	330,368	427,825

(1) Contributions received at the beginning of the fiscal year with discounted rate for fiscal year 2008.

(2) Contributions received on July 15<sup>th</sup> of the fiscal year with discounted rate starting fiscal year 2009.

(3) Starting fiscal year 2014, when a new benefit tier was added, % of annual covered payroll is an aggregate rate for all tiers and it is based on actual covered payroll.

(4) Includes changes in unrealized gains and losses of investments. Investment related administrative expenses are included starting fiscal year 2014 pursuant to GASB Statement No. 67.

(5) Return of Excess Reserve.

### Schedule of Deductions by Type - Postemployment Health Care Plan

(In Thousands)

Fiscal Year	Benefit Payments	Administrative Expenses <sup>(1)</sup>	Miscellaneous Expenses	Total Deductions
2008	\$ 70,096	\$ 2,367	\$ 854 <sup>(2)</sup>	\$ 73,317
2009	73,839	2,569	-	76,408
2010	83,196	2,859	-	86,055
2011	98,156	2,786	-	100,942
2012	91,437	2,931	-	94,368
2013	97,946	3,197	-	101,143
2014	101,628	3,327	-	104,955
2015	103,599	3,932	-	107,531
2016	109,940	4,151	-	114,091
2017	119,616	4,224	-	123,840

(1) Excludes investment related administrative expenses starting fiscal year 2014.

(2) Transfers to Los Angeles Fire and Police Pension.

## Statistical Section

### Net Increase (Decrease) in Fiduciary Net Position - Retirement Plan Last Ten Fiscal Years

(In Thousands)

Fiscal Year	Additions				Deductions					Net In(De)crease in Fiduciary Net Position
	City Contributions	Member Contributions	Net Investment Income (Loss)	Total Additions	Benefit Payments	Refunds of Contributions	Admin. Expenses <sup>(1)</sup>	Misc. Expenses	Total Deductions	
2008	\$ 302,810	\$ 114,678	\$ (550,386)	\$ (132,898)	\$ 484,549	\$ 15,149	\$ 11,987	\$ 5,366 <sup>(2)</sup>	\$ 517,051	\$ (649,949)
2009	288,516	118,592	(1,800,906)	(1,393,798)	510,634	21,325	12,829	-	544,788	(1,938,586)
2010	266,240	126,961	911,088	1,304,289	569,938	27,971	14,204	-	612,113	692,176
2011	306,737	114,731	1,654,824	2,076,292	654,384	18,215	13,232	-	685,831	1,390,461
2012	308,712	178,246	72,705	559,663	664,626	11,100	12,995	-	688,721	(129,058)
2013	346,350	197,881	1,275,612	1,819,843	687,362	17,697	13,352	-	718,411	1,101,432
2014	357,818	204,136	1,820,266	2,382,220	708,956	15,982	12,438	-	737,376	1,644,844
2015	381,299	207,564	308,557	897,420	734,736	10,121	15,946	-	760,803	136,617
2016	440,704	211,345	27,638	679,687	767,264	7,719	15,576	-	790,559	(110,872)
2017	453,504	227,532	1,524,533	2,205,569	799,221	9,803	16,019	-	825,043	1,380,526

(1) Excludes investment related administrative expenses starting fiscal year 2014.

(2) Transfers to Los Angeles Fire and Police Pension.

### Net Increase (Decrease) in Fiduciary Net Position - Postemployment Health Care Plan Last Ten Fiscal Years

(In Thousands)

Fiscal Year	Additions				Deductions				Net In(De)crease in Fiduciary Net Position
	City Contributions	Misc. Income	Net Investment Income (Loss)	Total Additions	Benefit Payments	Admin. Expenses <sup>(1)</sup>	Misc. Expenses	Total Deductions	
2008	\$ 108,848	\$ 11,000 <sup>(2)</sup>	\$ (96,007)	\$ 23,841	\$ 70,096	\$ 2,367	\$ 854 <sup>(3)</sup>	\$ 73,317	\$ (49,476)
2009	95,122	-	(309,334)	(214,212)	73,839	2,569	-	76,408	(290,620)
2010	96,511	-	155,745	252,256	83,196	2,859	-	86,055	166,201
2011	107,396	-	295,324	402,720	98,156	2,786	-	100,942	301,778
2012	115,209	-	10,314	125,523	91,437	2,931	-	94,368	31,155
2013	72,916	-	253,632	326,548	97,946	3,197	-	101,143	225,405
2014	97,841	-	375,504	473,345	101,628	3,327	-	104,955	368,390
2015	100,467	-	59,435	159,902	103,599	3,932	-	107,531	52,371
2016	105,983	-	(721)	105,262	109,940	4,151	-	114,091	(8,829)
2017	97,457	-	330,368	427,825	119,616	4,224	-	123,840	303,985

(1) Excludes investment related administrative expenses starting fiscal year 2014.

(2) Return of Excess Reserve.

(3) Transfers to Los Angeles Fire and Police Pension.

## Statistical Section

### Schedule of Benefit Expenses by Type - Retirement Plan

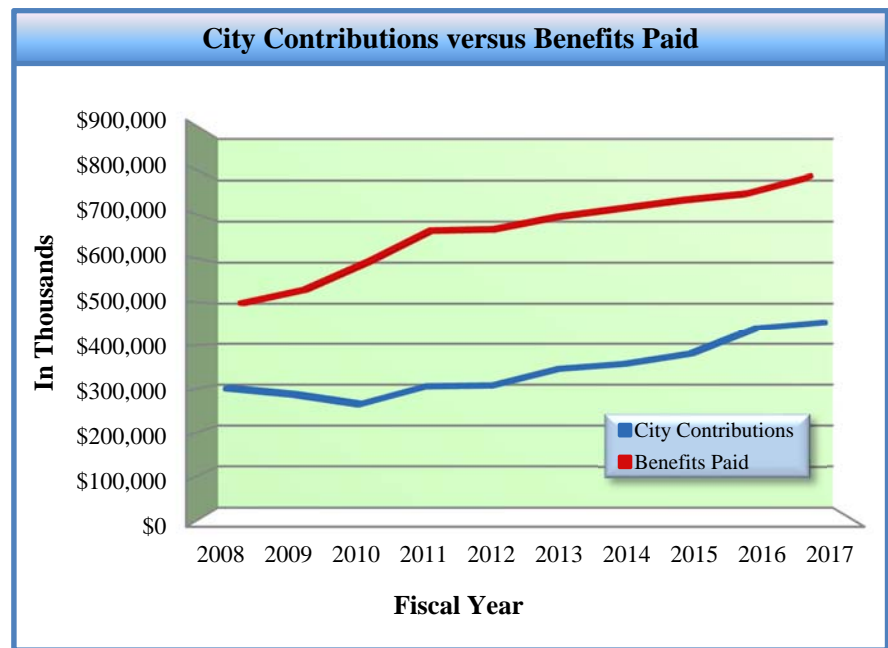
(In Thousands)

Fiscal Year	Age & Service Benefits		Death in Service Benefits	Disability Benefits			Refunds of Contributions				Total Benefits Paid	
	Retirants	Survivors		Retirants	Survivors	Sub-total	Separation	Death in Service	Unused Contributions	Misc.		Sub-Total
2008	\$ 406,891	\$ 53,064	\$ 2,600	\$ 15,390	\$ 6,604	\$ 484,549	\$ 10,973	\$ 1,279	\$ 1,048	\$1,849	\$ 15,149	\$ 499,698
2009	428,819	56,716	2,735	15,462	6,902	510,634	17,081	1,312	1,390	1,542	21,325	531,959
2010	483,295	60,299	2,699	16,268	7,377	569,938	21,814	1,269	1,094	3,794	27,971	597,909
2011	563,254	64,160	2,674	16,544	7,752	654,384	13,951	1,640	1,281	1,343	18,215	672,599
2012	570,633	66,735	2,477	16,720	8,061	664,626	6,765	2,416	965	954	11,100	675,726
2013	588,035	70,298	2,776	17,810	8,443	687,362	13,103	2,515	1,006	1,073	17,697	705,059
2014	606,135	73,477	2,669	17,657	9,018	708,956	12,295	1,509	1,184	994	15,982	724,938
2015	627,865	76,619	2,537	18,348	9,367	734,736	3,891	1,848	1,342	3,040	10,121	744,857
2016	657,810	78,441	2,315	19,001	9,697	767,264	4,241	1,231	883	1,364	7,719	774,983
2017	686,172	81,250	2,738	18,810	10,251	799,221	4,213	3,015	1,027	1,548	9,803	809,024

### City Contributions versus Benefits Paid - Retirement Plan

(In Thousands)

Fiscal Year	City Contributions	Benefits Paid
2008	\$ 302,810	\$ 499,698
2009	288,516	531,959
2010	266,240	597,909
2011	306,737	672,599
2012	308,712	675,726
2013	346,350	705,059
2014	357,818	724,938
2015	381,299	744,857
2016	440,704	774,983
2017	453,504	809,024



## Statistical Section

### Schedule of Benefit Expenses by Type - Postemployment Health Care Plan

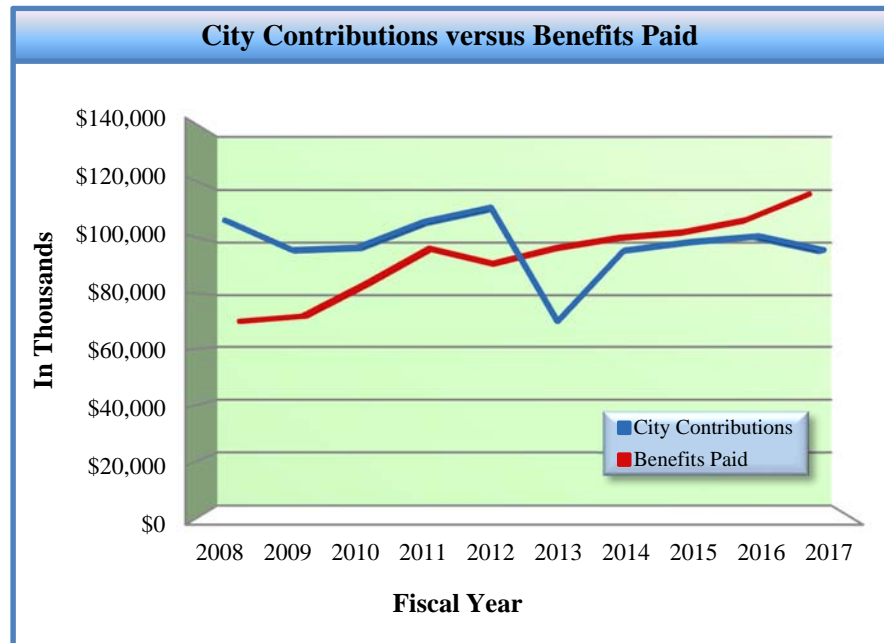
(In Thousands)

Fiscal Year	Age & Service Benefits		Death in Service Benefits	Disability Benefits		Total Benefits Paid
	Retirants	Survivors		Retirants	Survivors	
2008	\$ 58,863	\$ 7,676	\$ 376	\$ 2,226	\$ 955	\$ 70,096
2009	62,009	8,201	396	2,236	997	73,839
2010	70,548	8,802	394	2,375	1,077	83,196
2011	84,487	9,624	401	2,481	1,163	98,156
2012	78,506	9,181	341	2,300	1,109	91,437
2013	83,792	10,017	396	2,538	1,203	97,946
2014	86,889	10,533	382	2,531	1,293	101,628
2015	88,530	10,803	358	2,587	1,321	103,599
2016	94,256	11,240	332	2,723	1,389	109,940
2017	102,697	12,160	410	2,815	1,534	119,616

### City Contributions versus Benefits Paid - Postemployment Health Care Plan

(In Thousands)

Fiscal Year	City Contributions	Benefits Paid
2008	\$ 108,848	\$ 70,096
2009	95,122	73,839
2010	96,511	83,196
2011	107,396	98,156
2012	115,209	91,437
2013	72,916	97,946
2014	97,841	101,628
2015	100,467	103,599
2016	105,983	109,940
2017	97,457	119,616



## Statistical Section

### Schedule of Retired Members by Type of Benefits - Retirement Plan

Amount of Monthly Benefits <sup>(1)</sup>	Number of Retirants <sup>(1)</sup>	Type of Benefits <sup>(2)</sup>										
		1	2	3	4	5	6	7	8	9	10	11
\$ 1 to \$1,000	1,882	406	392	9	469	80	176	97	252	1	387	16
1,001 to 2,000	3,746	1,224	900	68	471	639	76	212	156	-	64	1
2,001 to 3,000	3,188	2,033	561	86	205	166	16	64	57	-	15	-
3,001 to 4,000	3,080	2,606	255	74	98	13	2	11	21	-	3	-
4,001 to 5,000	2,616	2,386	158	28	33	4	-	1	6	-	1	-
5,001 to 6,000	1,699	1,569	95	11	21	-	-	-	3	-	-	-
6,001 to 7,000	1,014	951	43	4	15	-	-	-	1	-	-	-
7,001 to 8,000	570	520	31	7	12	-	-	-	-	-	-	-
8,001 to 9,000	340	319	11	6	4	-	-	-	-	-	-	-
9,001 to 10,000	247	233	10	2	2	-	-	-	-	-	-	-
Over \$10,000	367	349	13	1	4	-	-	-	-	-	-	-
<b>Total</b>	<b>18,749</b>	<b>12,596</b>	<b>2,469</b>	<b>296</b>	<b>1,334</b>	<b>902</b>	<b>270</b>	<b>385</b>	<b>496</b>	<b>1</b>	<b>470</b>	<b>17</b>

(1) Larger Annuity and Larger Annuity Continuance type of benefits are not included in counting the total number of retirants since both benefits are voluntary supplementary benefits to the retirants.

(2) Type of Benefits

- |                             |                                 |
|-----------------------------|---------------------------------|
| 1 - Service Retirement      | 7 - Disability Survivorship     |
| 2 - Service Continuance     | 8 - DRO Life Time Annuity       |
| 3 - Service Survivorship    | 9 - DRO Term Annuity            |
| 4 - Vested Right Retirement | 10 - Larger Annuity             |
| 5 - Disability Retirement   | 11 - Larger Annuity Continuance |
| 6 - Disability Continuance  |                                 |

## Statistical Section

### Schedule of Retired Members by Type of Benefits - Postemployment Health Care Plan

Amount of Monthly Benefits	Number of Retirants	Type of Benefits <sup>(3)</sup>								
		1	2	3	4	5	6	7		
Medical Subsidy										
\$ 0 to \$ 200	768	493	76	10	63	84	22	20		
201 to 400	4,452	3,101	969	80	153	81	30	38		
401 to 600	4,324	3,677	393	45	136	44	11	18		
601 to 800	204	107	22	14	30	16	4	11		
801 to 1,000	1,533	1,221	95	26	123	62	2	4		
1,001 to 1,200	2,007	1,906	-	-	80	21	-	-		
1,201 to 1,400	52	42	-	-	10	-	-	-		
1,401 to 1,737 <sup>(1)</sup>	1,150	1,110	-	-	35	5	-	-		
<b>Total</b>	<b>14,490</b>	<b>11,657</b>	<b>1,555</b>	<b>175</b>	<b>630</b>	<b>313</b>	<b>69</b>	<b>91</b>		
Dental Subsidy										
\$ 0 to \$ 10	2,506	568	1,325	150	113	183	69	98		
11 to 20	2,203	2,072	-	-	82	49	-	-		
21 to 30	860	644	-	-	135	81	-	-		
31 to 40	996	816	-	-	142	38	-	-		
41 to 45 <sup>(2)</sup>	7,740	7,591	-	-	130	19	-	-		
<b>Total</b>	<b>14,305</b>	<b>11,691</b>	<b>1,325</b>	<b>150</b>	<b>602</b>	<b>370</b>	<b>69</b>	<b>98</b>		

(1) Maximum medical subsidy for plan year 2017.

(2) Maximum dental subsidy for plan year 2017.

(3) Type of Benefits

- |                             |                             |
|-----------------------------|-----------------------------|
| 1 - Service Retirement      | 5 - Disability Retirement   |
| 2 - Service Continuance     | 6 - Disability Continuance  |
| 3 - Service Survivorship    | 7 - Disability Survivorship |
| 4 - Vested Right Retirement |                             |

## Statistical Section

### Schedule of Average Benefit Payments - Retirement Plan

Retirement Effective Dates July 1, 2007 to June 30, 2017	Years of Credited Service					
	0-10 yrs	11-15 yrs	16-20 yrs	21-25 yrs	26-30 yrs	Over 30 yrs
<b>Period 7/1/07 to 6/30/08</b>						
Average Monthly Benefit at Retirement	\$ 883	\$ 1,191	\$ 2,105	\$ 3,246	\$ 3,818	\$ 5,127
Average Final Monthly Salary <sup>(1)</sup>	\$ 3,846	\$ 4,336	\$ 5,139	\$ 5,922	\$ 6,482	\$ 6,754
Number of Retirees Added	22	36	50	91	69	229
<b>Period 7/1/08 to 6/30/09</b>						
Average Monthly Benefit at Retirement	\$ 759	\$ 1,626	\$ 2,348	\$ 3,109	\$ 4,150	\$ 5,513
Average Final Monthly Salary <sup>(1)</sup>	\$ 4,561	\$ 5,739	\$ 5,820	\$ 6,078	\$ 6,241	\$ 6,954
Number of Retirees Added	25	21	51	63	55	121
<b>Period 7/1/09 to 6/30/10</b>						
Average Monthly Benefit at Retirement	\$ 907	\$ 1,964	\$ 2,810	\$ 3,911	\$ 4,674	\$ 5,818
Average Final Monthly Salary <sup>(1)</sup>	\$ 3,755	\$ 5,525	\$ 6,030	\$ 6,316	\$ 6,514	\$ 6,708
Number of Retirees Added <sup>(2)</sup>	94	140	137	365	559	1,238
<b>Period 7/1/10 to 6/30/11</b>						
Average Monthly Benefit at Retirement	\$ 768	\$ 1,414	\$ 2,369	\$ 3,146	\$ 3,721	\$ 5,920
Average Final Monthly Salary <sup>(1)</sup>	\$ 5,266	\$ 5,175	\$ 6,141	\$ 6,424	\$ 6,409	\$ 7,882
Number of Retirees Added	51	42	27	55	42	37
<b>Period 7/1/11 to 6/30/12</b>						
Average Monthly Benefit at Retirement	\$ 784	\$ 1,379	\$ 2,362	\$ 3,453	\$ 4,008	\$ 6,003
Average Final Monthly Salary <sup>(1)</sup>	\$ 4,995	\$ 5,052	\$ 6,338	\$ 7,165	\$ 6,804	\$ 8,238
Number of Retirees Added	46	37	30	70	43	48
<b>Period 7/1/12 to 6/30/13</b>						
Average Monthly Benefit at Retirement	\$ 976	\$ 1,888	\$ 2,253	\$ 3,355	\$ 4,101	\$ 5,487
Average Final Monthly Salary <sup>(1)</sup>	\$ 6,025	\$ 6,713	\$ 6,055	\$ 6,819	\$ 7,007	\$ 7,573
Number of Retirees Added	63	57	34	94	87	107
<b>Period 7/1/13 to 6/30/14</b>						
Average Monthly Benefit at Retirement	\$ 708	\$ 1,966	\$ 2,459	\$ 3,716	\$ 4,520	\$ 6,204
Average Final Monthly Salary <sup>(1)</sup>	\$ 4,551	\$ 6,868	\$ 6,343	\$ 7,551	\$ 7,482	\$ 8,350
Number of Retirees Added	60	65	47	83	120	95
<b>Period 7/1/14 to 6/30/15</b>						
Average Monthly Benefit at Retirement	\$ 969	\$ 1,875	\$ 2,775	\$ 3,735	\$ 4,707	\$ 6,307
Average Final Monthly Salary <sup>(1)</sup>	\$ 5,309	\$ 6,386	\$ 7,040	\$ 7,289	\$ 7,795	\$ 8,379
Number of Retirees Added	66	108	62	111	234	212
<b>Period 7/1/15 to 6/30/16</b>						
Average Monthly Benefit at Retirement	\$ 943	\$ 1,756	\$ 2,514	\$ 3,796	\$ 4,514	\$ 5,498
Average Final Monthly Salary <sup>(1)</sup>	\$ 5,095	\$ 6,077	\$ 6,786	\$ 7,656	\$ 7,731	\$ 7,876
Number of Retirees Added	117	116	89	77	255	228
Average Monthly Continuance Benefit <sup>(3)</sup>	\$ 886	\$ 1,068	\$ 1,388	\$ 1,521	\$ 1,657	\$ 2,568
Number of Continuance Benefit Added <sup>(3)</sup>	79	29	24	41	32	65
<b>Period 7/1/16 to 6/30/17</b>						
Average Monthly Benefit at Retirement	\$ 1,076	\$ 1,764	\$ 2,546	\$ 3,412	\$ 4,789	\$ 5,745
Average Final Monthly Salary <sup>(1)</sup>	\$ 5,553	\$ 6,326	\$ 6,974	\$ 7,696	\$ 8,053	\$ 8,204
Number of Retirees Added	105	99	104	107	263	271
Average Monthly Continuance Benefit <sup>(3)</sup>	\$ 1,154	\$ 1,022	\$ 1,360	\$ 1,949	\$ 1,869	\$ 2,916
Number of Continuance Benefit Added <sup>(3)</sup>	70	19	30	38	50	55

(1) Average Final Monthly Salary = Average of last or highest 12 consecutive months' salary.

(2) Large increase primarily due to accelerated retirements stimulated by the City's Early Retirement Incentive Program (ERIP).

(3) Additional information for Continuance Benefit is provided starting fiscal year 2016.



## Statistical Section

### Schedule of Average Benefit Payments - Postemployment Health Care Plan

Retirement Effective Dates July 1, 2007 to June 30, 2017	Years of Credited Service				
	Under 10 yrs <sup>(1)</sup>	10-15 yrs	16-20 yrs	21-25 yrs	Over 25 yrs
<b>Period 7/1/07 to 6/30/08</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 348	\$ 425	\$ 580	\$ 646
Number of Retirees Added	3	33	60	86	327
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 12	\$ 20	\$ 25	\$ 28
Number of Retirees Added	2	32	50	85	315
<b>Period 7/1/08 to 6/30/09</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 354	\$ 508	\$ 613	\$ 661
Number of Retirees Added	-	20	56	50	251
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 12	\$ 16	\$ 20	\$ 23
Number of Retirees Added	2	20	51	48	251
<b>Period 7/1/09 to 6/30/10</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 385	\$ 562	\$ 634	\$ 786
Number of Retirees Added <sup>(2)</sup>	8	116	110	267	1,978
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 12	\$ 21	\$ 26	\$ 28
Number of Retirees Added <sup>(2)</sup>	11	120	102	261	1,987
<b>Period 7/1/10 to 6/30/11</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 465	\$ 440	\$ 688	\$ 648
Number of Retirees Added	1	31	31	69	145
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 12	\$ 17	\$ 22	\$ 17
Number of Retirees Added	2	26	26	68	130
<b>Period 7/1/11 to 6/30/12</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 372	\$ 581	\$ 660	\$ 642
Number of Retirees Added	-	34	27	84	136
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 10	\$ 17	\$ 28	\$ 25
Number of Retirees Added	4	25	24	75	131
<b>Period 7/1/12 to 6/30/13</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 428	\$ 596	\$ 790	\$ 840
Number of Retirees Added	1	64	33	102	243
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 14	\$ 21	\$ 28	\$ 26
Number of Retirees Added	2	55	27	95	235

## Statistical Section

### Schedule of Average Benefit Payments - Postemployment Health Care Plan (Continued)

Retirement Effective Dates July 1, 2007 to June 30, 2017	Years of Credited Service				
	Under 10 yrs <sup>(1)</sup>	10-15 yrs	16-20 yrs	21-25 yrs	Over 25 yrs
<b>Period 7/1/13 to 6/30/14</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 447	\$ 619	\$ 831	\$ 876
Number of Retirees Added	1	57	41	93	276
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 15	\$ 20	\$ 30	\$ 27
Number of Retirees Added	2	53	36	91	266
<b>Period 7/1/14 to 6/30/15</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 543	\$ 700	\$ 914	\$ 1,080
Number of Retirees Added	-	85	40	105	409
Dental Insurance					
Average Monthly Benefit at Retirement	\$ -	\$ 17	\$ 26	\$ 32	\$ 36
Number of Retirees Added	1	78	35	102	399
<b>Period 7/1/15 to 6/30/16</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ 309	\$ 515	\$ 729	\$ 926	\$ 1,099
Number of Retirees Added	12	88	62	61	447
Dental Insurance					
Average Monthly Benefit at Retirement	\$ 11	\$ 16	\$ 24	\$ 34	\$ 35
Number of Retirees Added	16	89	57	60	453
<b>Period 7/1/16 to 6/30/17</b>					
Health Insurance					
Average Monthly Benefit at Retirement	\$ 411	\$ 493	\$ 717	\$1,136	\$ 1,184
Number of Retirees Added	17	76	79	85	487
Dental Insurance					
Average Monthly Benefit at Retirement	\$ 11	\$ 18	\$ 25	\$ 34	\$ 38
Number of Retirees Added	10	75	78	82	483

(1) Effective February 21, 2016, retiree health benefits are provided to part-time employees who retired with 10 years of service but less than 10 years of service credit. Previously, they were allowed to enroll in LACERS Health Care Plan at their own cost, but not eligible for health benefits.

(2) Large increase primarily due to accelerated retirements stimulated by the City's Early Retirement Incentive Program (ERIP).



Direct questions concerning any of the information provided in this report to:

LACERS

Fiscal Management Section  
202 W. First Street, Suite 500  
Los Angeles, CA 90012-4401

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(800) 779-8328

(888) 349-3996 TDD

(213) 473-7297 FAX

[www.LACERS.org](http://www.LACERS.org)