

# 2017 ANNUAL REPORT

20

# Different Paths Same Destination

Comprehensive Annual Pinancial Report for the Fiscal Years Ended June 30, 2017 and 2016 Pension and OPEB Trust Funds of the County of Los Angeles, CA



# Different Data by The employees serving Los Angeles County are each on a unique personal journey. LACERA is proud to be a part of that journey, with services that begin the moment a new hire becomes a member and continue throughout his or her career. Regardless of the chosen path, each LACERA member heads toward one common destination: a secure retirement.





### L//.CERA

Los Angeles County Employees Retirement Association

300 N. Lake Avenue Pasadena, CA 91101 626-564-6000 lacera.com

#### **ISSUED BY**

**Robert R. Hill** Interim Chief Executive Officer

James Brekk Interim Deputy Chief Executive Officer

JJ Popowich Assistant Executive Officer

**Bernie Buenaflor** Interim Assistant Executive Officer

# Awards



#### **Certificate of Achievement**

Each year, a Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada (GFOA) to government units and public employee retirement systems whose Comprehensive Annual Financial Reports (CAFRs) achieve the highest standards in government accounting and reporting. This report must satisfy both Generally Accepted Accounting Principles (GAAP) and applicable legal requirements. For the 27th consecutive year, LACERA has earned this prestigious award for its CAFR. We believe our current CAFR continues to meet the Certificate of Achievement Program's requirements, and we will submit it to the GFOA to determine its eligibility for another certificate.



#### **PPCC Award**

LACERA received the Public Pension Coordinating Council's (PPCC)\* Public Pension Standards 2017 Award, in recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards. The Public Pension Standards are intended to reflect minimum expectations for public retirement systems management and administration, and serve as a benchmark by which all defined benefit public plans should be measured. LACERA is a fifteen-time recipient of this important award.

\*A confederation of NASRA, NCPERS, and NCTR.

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# Statistical Section



#### **Robert R. Hill** Interim Chief Executive Officer

- More than 20 years of experience at LACERA
- Served in various senior roles, including as Assistant Executive Officer since 2001
- Involved in guiding virtually every area of the organization

# THE FUND REMAINS STABLE AND POSITIONED TO FINANCE THE PROMISED BENEFITS TO CURRENT AS WELL AS FUTURE RECIPIENTS

#### December 3, 2017

Los Angeles County Employees Retirement Association Board of Retirement/Board of Investments 300 N. Lake Avenue, Suite 820 Pasadena, CA 91101

I am pleased to present the Los Angeles County Employees Retirement Association (LACERA) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2017. This report is intended to provide a detailed review of the association's financial, actuarial, and investment status. LACERA has the duty and authority to administer defined retirement plan benefits for the employees of Los Angeles County and outside districts. It is our mission to produce, protect, and provide the promised benefits to our members and their beneficiaries. In the course of fulfilling that mission, we provide comprehensive customer service to almost 169,000 members, which includes over 63,000 benefit recipients.

#### **Different Paths, One Destination**

Like Los Angeles County with its assortment of cityscapes, beaches, mountains, and deserts, the employees who serve the County are diverse. Many reside in the heart of the city; others call the suburbs their home. For some, sunrise means waking up and driving to work and, for others, it signals the end of their workday. LACERA's active members—the varied workforce of the County, Superior Court, and eligible outside districts—are each on a unique personal journey.

LACERA is proud to be a part of that journey, with services that begin the moment a new hire becomes a member and continue throughout his or her career. The path each member takes leads to one common destination: a secure retirement. Members who meet eligibility requirements receive a lifetime benefit when they retire, with an amount based on their age at retirement, years of service, and final compensation. Our members place their trust in us. We earn this by putting their interests first and safeguarding and maximizing their investment assets. Members can rest assured that, upon retirement, they will be paid a monthly allowance for the rest of their lives.

#### **LACERA and Its Services**

On January 1, 1938, LACERA was established to provide retirement allowances and other benefits to the general and safety members employed by Los Angeles County. Subsequently, LACERA expanded its membership program to include four other outside districts:

- Little Lake Cemetery District
- Local Agency Formation Commission
- · Los Angeles County Office of Education
- South Coast Air Quality Management District

Since its inception, LACERA has been governed by the California Constitution, the County Employees Retirement Law of 1937 (CERL), and the regulations, procedures, and policies adopted by LACERA's Boards of Retirement and Investments. The Los Angeles County Board of Supervisors may also adopt resolutions, as permitted by the CERL, which may affect benefits of LACERA members. On September 12, 2012, California Governor Jerry Brown signed the Public Employees' Pension Reform Act of 2013 (PEPRA) into law. As of January 1, 2013, LACERA is governed by CERL and PEPRA. Both laws are contained in the California Government Code.

The Board of Retirement is responsible for the general management of LACERA. The Board of Investments is responsible for determining LACERA's investment objectives, strategies, and policies. Both Boards appoint a Chief Executive Officer, to whom is delegated the responsibility of overseeing the day-to-day management of LACERA and developing its annual administrative budget. Adoption of the budget is subject to approval by both Boards.

#### **Financial Information**

#### **Internal Control**

The financial attest audit performed by Plante Moran Certified Public Accountants (CPAs) states that LACERA's financial statements, which are prepared by management, are presented in conformity with Generally Accepted Accounting Principles and are free of material misstatement. Management acknowledges it is responsible for the entire contents of this CAFR. In the course of sustaining a rigorous and comprehensive control environment throughout its operations, LACERA practices stringent risk management activities and annually performs a detailed, organization-wide risk assessment in which control objectives and their related processes are reviewed.

Maintaining appropriate internal controls is the responsibility of management; however, management recognizes no control or combination of controls can entirely free an organization from all error or misstatement. At their best, controls provide reasonable assurance such failings do not occur. The concept of reasonable assurance recognizes that the cost of a control should not exceed benefits likely derived; the valuation of costs and benefits requires estimates and judgments by management.

LACERA management is provided such assurance through the ongoing efforts of its Internal Audit and Quality Control Divisions and its Boards. The Executive Office is confident LACERA's established controls and the interactions of those controls detect all significant occurrences and prevent noteworthy inaccuracies.

#### **Analysis**

An overview of LACERA's fiscal operations is presented in the Management's Discussion and Analysis (MD&A) preceding the financial statements. This transmittal letter, when taken into consideration with the MD&A, provides an enhanced picture of the activities of the organization.

#### **Investment Activities**

The Board of Investments adopted an Investment Policy Statement that provides a framework for the management of LACERA's investments. This statement establishes LACERA's investment policies and objectives and defines the principal duties of the Board of Investments, investment staff, investment managers, master custodian, and consultants.



James Brekk Interim Deputy Chief Executive Officer

- Multiple positions in management and information technology
- Responsible for LACERA's cybersecurity program and technology operations
- Plays a key role in enterprise and strategic initiatives

A pension fund's strategic asset allocation policy, implemented in a consistent and disciplined manner, is generally recognized to have the most impact on a fund's investment performance. The asset allocation process determines a fund's optimal long-term asset class mix (target allocation), which is expected to achieve a specific set of investment objectives. LACERA's strategic asset allocation targets are long-term by design because of the Pension Plan's long-term investment horizon and the illiquidity of certain asset classes, such as Private Equity and Real Estate.

The total Pension Plan returned 12.7 percent (net of fees), which was 150 basis points above its Policy Benchmark, which returned 11.2 percent. Over the five-year period ended June 30, 2017, the total Pension Plan's annualized return was 9.0 percent (net of fees).

#### **Actuarial Funding Status**

Pursuant to provisions in the CERL, LACERA engages an independent actuarial firm to perform annual actuarial valuations. A system actuarial valuation is performed every three years (triennial valuation). The economic and non-economic assumptions are updated at the time each triennial valuation is performed. Triennial valuations serve as the basis for changes in member contribution rates necessary to properly fund the system. LACERA also hires an independent actuarial firm to audit the results of each triennial valuation. The latest triennial valuation was conducted as of June 30, 2016.

LACERA is funded by member and employer contributions and investment earnings on those contributions. Normal member contributions are those required to fund a specific annuity at a specified age. Member contribution rates for members who entered LACERA membership prior to January 1, 2013, vary according to the member's plan and age at first membership. The CERL also requires members to pay half the contributions required to fund the cost-of-living benefit, which is affected by changes in both economic and non-economic assumptions.

Liabilities not funded through member contributions are the responsibility of the employer. Changes in any of the economic and non-economic assumptions impact employer contribution rates. The employer is responsible for contributing to cover the cost of benefits expected to be accrued in the future and half of the cost-of-living benefit. These are called normal cost contributions. The employer is responsible also for making additional contributions to eliminate any shortfalls in funding covering liabilities that have accrued in the past, which is known as the Unfunded Actuarial Accrued Liability (UAAL). require equal sharing of normal costs between employers and employees. In January 2013, LACERA established two new retirement plans — General Plan G and Safety Plan C — for members with membership dates on or after January 1, 2013. Contributions for these plans are based on a single flat-rate percentage and are structured in accordance with the required 50/50 cost-sharing. A member's age at first membership is not considered.

The June 30, 2016 valuation, determining the funded ratio to be 79.4 percent, recognized an Unfunded Actuarial Accrued Liability (UAAL) of \$12.8 billion. The Los Angeles County contribution rate was therefore set equal to 11.2 percent of payroll for the amortization of the UAAL over a closed 30-year layered period, plus the normal cost rate of 10.0 percent, for a total contribution rate of 21.2 percent of payroll.

In December 2016, the Board of Investments adopted a decrease in the investment return assumption to 7.25 percent, a decrease in the wage growth assumption to 3.25 percent, a decrease in the CPI assumption to 2.75 percent, and an increase in life expectancies. All assumption changes have been reflected in the June 2016 actuarial valuation, although the impact on the employer contribution rate is being phased in over three years.

#### Summary of Accomplishments for Fiscal Year 2016–2017

During the last fiscal year, Member Services answered more than 118,000 phone inquiries. Administrative Services processed 332,801 pieces of mail and scanned/indexed an impressive 812,900 member documents. Over in Retiree Healthcare, specialists answered more than 54,000 calls and mailed 50,130 insurance packages.

One-on-one counseling was provided to 18,149 members in our offices, and our specialists educated 14,503 attendees at more than 500 workshops and benefit fairs. During the last fiscal year, LACERA expanded services to members by offering neighborhood workshops and counseling sessions in Rowland Heights and Torrance. Because of the positive response, LACERA plans to increase the frequency of these neighborhood workshops around Los Angeles County in the future.

LACERA's Benefits division put 3,002 new retirees and survivors on the retiree payroll. They also ensured that 63,504 retirement allowances were paid on time each month. Meanwhile, our Benefit Protection Unit investigated 351 high-risk cases, which included instances of fraud, lost contact, and elder abuse.



#### **JJ Popowich** Assistant Executive Officer

- Key participant in strategic direction and planning within the organization
- Developed a Leadership Development Program to equip future leaders within LACERA
- Established quality controls in Member Services to ensure excellence in customer service



**Bernie Buenaflor** Interim Assistant Executive Officer

- Key participant in LACERA's ethics, privacy, and security policies
- Assisted LACERA's various divisions through consulting projects and auditing
- Restructured the Benefits division into four groups to streamline processes

#### **Awards and Recognition**

For the 27th consecutive year, the Government Finance Officers Association (GFOA) awarded LACERA its Certificate of Achievement for Excellence in Financial Reporting. This award is in recognition of our CAFR for the fiscal year ended June 30, 2016.

LACERA is a recipient also of the GFOA Award for Outstanding Achievement in Popular Annual Financial Reporting, for the 19th year running. We received this honor for our Popular Annual Financial Report (PAFR) for the fiscal year ended June 30, 2016.

These awards recognize contributions to the practice of government finance exemplifying outstanding financial management. In doing so, they stress practical, documented work that offers leadership to the profession.

The Public Pension Coordinating Council (PPCC) presented its Public Pension Standards Award to LACERA in recognition of compliance with professional standards for plan design and administration for the fiscal year ended June 30, 2017. LACERA is a fifteen-time recipient of this honor, which is judged on a retirement system's Comprehensive Benefit Program, Funding Adequacy, Actuarial Valuation, Independent Audit, Investments, and Communications.

#### **Acknowledgements**

The preparation of this Comprehensive Annual Financial Report in a timely manner is made possible by the dedicated teamwork of LACERA staff under the leadership, dedication, and support of the LACERA Boards. I am sincerely grateful to the LACERA Boards and staff, as well as to all of our professional service providers, who perform so diligently to ensure the successful operation and financial soundness of LACERA.

Respectfully submitted,

Robert R. Hill

Robert R. Hill Interim Chief Executive Officer

#### **Board of Investments**

The Board of Investments is responsible for establishing LACERA's investment policy and objectives, as well as exercising authority and control over the investment management of the Fund. The Board is composed of nine members. Four members are elected: two are elected by active General Members; retired members elect one member, as do Safety Members. Four of its members are appointed by the Los Angeles County Board of Supervisors. The law requires the County Treasurer and Tax Collector to serve as an ex-officio member.

#### **Board of Retirement**

The Board of Retirement is responsible for the administration of the retirement system, the retiree healthcare program, and the review and processing of disability retirement applications. The Board is composed of eleven members. Four members are elected: two are elected by active General Members; retired members elect one member and one alternate member; Safety Members elect one member and also have an alternate member. Four of its members are appointed by the Los Angeles County Board of Supervisors. The law requires the County Treasurer and Tax Collector to serve as an ex-officio member.

In Memoriam November 19, 1965 to April 25, 2017 **Yves Chery** 

Second Member of the Board of Retirement

Since 2006 when he was first elected to the Board of Retirement, Mr. Chery served continuously every year and held various leadership positions, including two years as Board Chair and five years as Board Secretary. We will remember Mr. Chery for being a passionate supporter of members' retirement rights, a strong champion of LACERA's Outreach programs, and for his charismatic, positive energy.



MARVIN ADAMS Board of Retirement Appointed by Board of Supervisors Term expires 2018



ALAN J. BERNSTEIN Board of Retirement Appointed by Board of Supervisors Term expires 2019



ANTHONY BRAVO Board of Retirement Appointed by Board of Supervisors Term expires 2017



YVES CHERY (In Memoriam) Board of Retirement Elected by General Members Term expires 2017



WILLIAM DE LA GARZA Board of Retirement Elected by Retired Members Term expires 2017



VIVIAN H. GRAY Board of Retirement Elected by General Members Term expires 2018



DAVID GREEN Board of Investments Elected by General Members Term expires 2017



SHAWN R. KEHOE Board of Retirement Board of Investments Elected by Safety Members Term expires 2019



JOSEPH KELLY Board of Retirement Board of Investments County Treasurer and Tax Collector Ex-Officio Member



KEITH KNOX Board of Retirement Board of Investments Chief Deputy County Treasurer and Tax Collector, Alternate Ex-Officio Member



WAYNE MOORE Board of Investments Appointed by Board of Supervisors Term expires 2017



DAVID L. MUIR Board of Retirement Alternate Retired Member, Elected by Retired Members Term expires 2017



RONALD A. OKUM Board of Retirement (Term expires 2017) Board of Investments (Term expires 2019) Appointed by Board of Supervisors



WILLIAM R. PRYOR Board of Retirement Alternate Member Elected by Safety Members Term expires 2019



DIANE A. SANDOVAL Board of Investments Elected by Retired Members Term expires 2017



HERMAN B. SANTOS Board of Investments Elected by General Members Term expires 2018



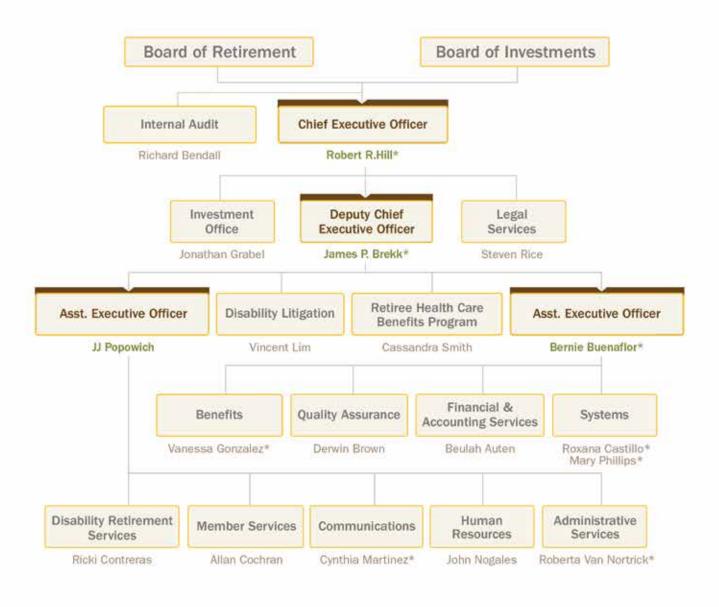
MICHAEL SCHNEIDER Board of Investments Appointed by Board of Supervisors Term expires 2018

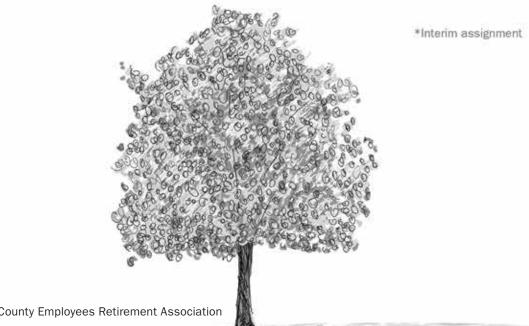


VALERIE ROSE VILLARREAL Board of Investments Appointed by Board of Supervisors Term expires 2017

Even if we do not walk together on the straight path, as long as we have the same destination, that is what's important.

-Grace Poe





14 The Los Angeles County Employees Retirement Association Consulting Actuary Milliman

Auditing Actuary Segal Consulting

Financial Auditor Plante Moran

Commercial Banking and Custodian State Street Bank and Trust Company

Active Member Payroll Data Processing Los Angeles County Internal Services Department

Governance Consultants Glass, Lewis & Company LLC Institutional Shareholder Services Inc

Investment Consultants CGM Customized Fund Investments Group LP Meketa Investment Group Stepstone The Townsend Group

Mortgage Loan Custodians Deutsche Bank National Trust Company

Retiree Healthcare Consultant and Claims Auditor Aon Consulting Inc

Medicare Part D Retiree Drug Subsidy Auditor Milliman Legal Consultants Alston & Bird LLP Andrews Kurth LLP Arent Fox LLP Berman DeValerio Bernstein Litowitz Berger & Grossman LLP Bleichmar Fonti & Auld LLP Chapman & Cutler LLP Cox, Castle & Nicholson LLP **DLA Piper** Donna R. Evans, Attorney at Law Foley & Lardner LLP Foster Pepper PLLC Glaser Weil Fink Jacobs Howard Avchen & Shapiro LLP Goldstein & Russell PC Gordon Rees Scully Mansukhani, LLP Groom Law Group, Chartered **Gutierrez Preciado & House LLP** Jackson Walker LLP Kessler Topaz Meltzer & Check Larson O'Brien LLP Liebert Cassidy Whitmore Lieff Cabraser Heimann & Bernstein LLP Nora Ann Quinn Nossaman LLP **Olson Hagel & Fishburn LLP** Orrick, Harrington & Sutcliffe LLP Paul Hastings LLP Pearson, Simon & Warshaw LLP Pillsbury Winthrop Shaw Pittman LLP Quinn Emanuel Urquhart & Sullivan LLP **Reed Smith LLP** Robbins Geller Rudman & Dowd LLP Seyfarth Shaw LLP Sheppard, Mullin, Richter & Hampton LLP Spector Roseman Kodroff & Willis PC Steptoe & Johnson LLP Susan Woolley Vivian Shultz Winet Patrick Gayer Creighton & Hanes

Please refer to pages 124 and 125 of the Investment Section for the Schedule of Investment Management fees and a list of Investment Managers.



# **Financial Section**

The path to retirement twists, turns, and even doublesback. Members navigate through multiple life stages, and their priorities often change. Enjoying cultural events and nightlife might be a priority at one point, while providing for a family might take precedence later on. As people live their lives, retirement isn't always front-and-center in their minds. It doesn't have to be. Regardless of whether or not members are thinking about retirement, each month they spend in County service contributes to their service credit and, ultimately, to their secure retirement destination.





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

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of Los Angeles County Employees Retirement Association (LACERA), as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise LACERA's 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 audits. We conducted our audits 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 from 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 the entity's 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 the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

#### Opinion

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

#### **Emphasis of Matter**

As explained in Note P, the financial statements include investments valued at \$12,628,199,000 (24 percent of net position) at June 30, 2017 and at \$11,748,565,000 (24 percent of net position) at June 30, 2016, whose fair values have been estimated by management in the absence of readily determinable market values. Given that publically listed prices aren't available, management uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and other similar sources of information to determine the fair value of investments. Our opinion is not modified with respect to this matter.

As explained in Note N, LACERA adopted GASB Statement No. 74 *Financial Reporting for Postemployment Benefit Pans Other Than Pension Plans* during 2017. Adopting this statement resulted in significant changes to the Other Post

Employment Benefits (OPEB) footnote disclosures as well as the required supplementary information schedules. 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 & Analysis and required supplementary information, as identified 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 Governmental Accounting Standards Board 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 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 opinions on the financial statements that collectively comprise the Los Angeles County Employees Retirement Association's basic financial statements. The other supplementary information, as identified in the table of contents and the introductory, investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information, as identified in the table of contents is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information, as identified in the table of contents is fairly stated in all material respects in relation to the basic 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 it.

#### **Report on Prior Year Financial Statements**

The financial statements of the Los Angeles County Employees Retirement Association as of and for the year ended June 30, 2016 were audited by other auditors whose report thereon, dated October 13, 2016, expressed an unmodified opinion on those statements.

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

In accordance with Government Auditing Standards, we have also issued our report dated October 12, 2017 on our consideration of the Los Angeles County Employees Retirement Association's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant 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 report financial report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Los Angeles County Employees Retirement Association's internal control over financial reporting and compliance.

Plante & Moran PLLC Southfield, MI October 12, 2017

Alente ; Moran, PLLC



**Beulah Auten** Chief Financial Officer

#### Introduction

Management is pleased to provide this discussion and analysis of the financial activities of the Los Angeles County Employees Retirement Association (LACERA) for the year ended June 30, 2017. We encourage readers to consider the information presented here in conjunction with additional information in the Letter of Transmittal found in the Introductory Section of the Comprehensive Annual Financial Report (CAFR) and with the Basic Financial Statements.

In addition to historical information, the Management's Discussion and Analysis (MD&A) includes forward-looking statements, which involve certain risks and uncertainties. LACERA's actual results, performance, and achievements may differ materially from the results, performance, and achievements expressed or implied in such prospective statements, due to a wide range of factors, including changes in interest rates, changes in the capital markets, general economic conditions, and legislative changes, as well as other factors.

#### Financial Highlights — Pension Plan

- Net Position Restricted for Benefits, as reported in the Statement of Fiduciary Net Position, totaled \$52.7 billion, an increase of \$4.9 billion or 10.2 percent from the prior year.
- Total Additions, as reflected in the Statement of Changes in Fiduciary Net Position, were \$8.0 billion. This was primarily due to positive investment earnings and increases in member and employer contributions. Total Additions equaled \$6.0 billion or 302.7 percent more than the amounts realized in 2016.
- Total Deductions, as reflected in the Statement of Changes in Fiduciary Net Position, totaled \$3.1 billion, an increase of \$140 million or 4.7 percent from the prior year. The increase was primarily attributable to an increase in retiree benefits paid to Pension Plan members.
- Milliman, LACERA's independent consulting actuary, completed the latest actuarial valuation as of June 30, 2016, and determined the funded status (the ratio of actuarial value of assets to actuarial accrued liabilities) to be 79.4 percent versus 83.3 percent as of June 30, 2015.

#### **Overview of Financial Statements**

This MD&A serves as an introduction to the Basic Financial Statements. The LACERA Basic Financial Statements are comprised of the following components: the Statement of Fiduciary Net Position; the Statement of Changes in Fiduciary Net Position; and the Notes to the Basic Financial Statements. The Basic Financial Statements are prepared in compliance with the accounting principles and reporting guidelines as set forth by the Governmental Accounting Standards Board (GASB), utilizing the accrual basis of accounting as prescribed by Generally Accepted Accounting Principles of the United States (GAAP). The Statement of Fiduciary Net Position is a snapshot of account balances at fiscal year-end. This statement reflects assets available for future payments to retirees and their beneficiaries, reduced by any current liabilities owed as of the report date. The Net Position Restricted for Benefits, which is the assets less the liabilities, or net assets, reflects the funds available for future use.

The California Constitution, the County Employees Retirement Law of 1937, and the California Public Employees' Pension Reform Act of 2013 direct LACERA to administer a defined benefit retirement plan (Pension Plan) for the employees of the County of Los Angeles (County), the Los Angeles Superior Court (Court), and four Outside Districts. The Pension Plan is presented separately in the Statement of Fiduciary Net Position as an irrevocable trust fund. LACERA collects contributions and earns income on invested assets so the Pension Plan balances accumulate over the long term, such that promised benefits can be paid now and in future years.

The County, LACERA, and the Court participate in the irrevocable Other Post-Employment Benefits Trust Fund (OPEB Trust) which excludes the four Outside Districts. The purpose of this fund is for plan sponsors to set aside assets to offset the OPEB liability. The OPEB Trust is presented separately in the Statement of Fiduciary Net Position. The LACERA Board of Investments manages the OPEB Trust for the County, LACERA, and the Court and utilizes separate Investment Policy Statements to diversify OPEB Trust investments. The Net Position Restricted for Benefits at year-end serves as a funding tool for paying expenses associated with other post-employment benefits such as those options provided for in the Retiree Healthcare Program. To distinguish the activities of the OPEB Trust from the Pension Plan, the OPEB Trust is also presented separately in the Statement of Changes in Fiduciary Net Position.

The OPEB Agency fund reflects the activity of the OPEB plan for all participating employers (i.e., County, Court, and LACERA), including those that have not yet established any advanced funding within the OPEB Trust (i.e., Outside Districts). The assets and liabilities related to OPEB operational activities are reported in this manner as the OPEB Agency Fund, which was established as a revocable fund. The funds received and payments made from the OPEB Agency Fund are presented as additions and deductions to the balances. Plan sponsors provide monthly funding, which is used to pay healthcare benefits. LACERA acts as a custodian for these funds on behalf of the plan sponsors and participants. Since these OPEB assets are not in a qualifying trust, only assets and liabilities are reported to reflect the fact that LACERA is holding these assets in an agency capacity.

The Statement of Changes in Fiduciary Net Position reflects all the financial transactions that occurred during the fiscal year and the impact of those additions and deductions on the Net Position Restricted for Benefits. The additions versus deductions trend indicates the condition of LACERA's financial position over time.

The Notes to the Basic Financial Statements (Notes) are an integral part of the financial statements. The Notes provide a detailed discussion of key policies, programs, and activities that occurred during the year. Other information to supplement LACERA's Basic Financial Statements is provided as follows:

*Required Supplementary Information* presents historical trend information based on GASB Statement Nos. 67 and 74 requirements and contributes to the understanding of the changes in the Net Pension Liability and the Net OPEB Liability of participating employers.

Other Supplementary Information includes the schedules of Administrative Expenses, Investment Expenses, Payments to Consultants, and the OPEB Agency Fund's Statement of Assets and Liabilities. This data is presented immediately following the Required Supplementary Information section of this report.

#### FINANCIAL ANALYSIS — PENSION PLAN Net Position Restricted for Benefits

As of June 30, 2017, LACERA's financial position increased by \$4.9 billion or 10.2 percent from the prior year, due primarily to favorable investment market performance.

As of June 30, 2017, LACERA had \$52.7 billion in Net Position Restricted for Benefits, where the Total Assets of \$55.8 billion exceeded Total Liabilities of \$3.1 billion. As of June 30, 2016, LACERA had \$47.8 billion in Net Position Restricted for Benefits as a result of Total Assets of \$50.9 billion exceeding Total Liabilities of \$3.0 billion. The Total Net Position Restricted for Benefits represents funds available for future promised benefits.

#### **Net Position Restricted for Benefits**

As of June 30, 2017, 2016, and 2015 (Dollars in Millions)

				2017-2016	2016-2015
	2017	2016	2015	% Change	% Change
Investments	\$52,225	\$47,899	\$47,990	9.0%	-0.2%
Other Assets	3,594	2,997	3,404	19.9%	-12.0%
Total Assets	55,819	50,896	51,394	9.7%	-1.0%
Total Liabilities	(3,075)	(3,049)	(2,576)	0.9%	18.4%
Net Position Restricted					
for Benefits	\$52,744	\$47,847	\$48,818	<b>10.2</b> %	-2.0%

#### Additions and Deductions to Net Position Restricted for Benefits

The primary sources that finance the promised benefits LACERA provides to members and their beneficiaries are the collection of member and employer retirement contributions and realized investment income. For fiscal year 2017, Total Additions amounted to \$8 billion due primarily to LACERA's diverse investment strategy producing a positive investment performance. For fiscal year 2016, Total Additions amounted to \$2.0 billion, due primarily to member and employer contributions.

The net investment gain for fiscal year 2017 was \$6.1 billion, an increase of \$6.0 billion from the 2016 fiscal year net investment gain of \$80 million. This fiscal year's time-weighted investment returns of 12.7 percent (net of fees) exceeded the actuarial assumed investment earnings rate of 7.25 percent. The investment gains and losses experienced will continue to impact the actuarial funded ratio over time as they are recognized in the future through the actuarial asset-smoothing process.

To finance employer contributions that are due to LACERA, the County makes cash payments that coincide with the employee payroll cycle. For the fiscal years ended June 30, 2017 and June 30, 2016, the County paid all of its employer contributions due to LACERA in the form of cash payments.

The primary uses of LACERA's assets include the payment of the promised benefits to members and their beneficiaries, the refund of contributions to terminated employees, and the cost of administering the Pension Plan. These deductions totaled \$3.1 billion for fiscal year 2017, an increase of \$140 million or 4.7 percent from the prior year. For fiscal year 2016, these deductions totaled \$3.0 billion, an increase of \$125 million or 4.4 percent from fiscal year 2015. The increase in deductions is partly attributable to an increase in the number of LACERA retirees for the fiscal year ended June 30, 2017.

#### Additions and Deductions in Fiduciary Net Position — Pension Plan

For the Fiscal Years Ended June 30, 2017, 2016, and 2015 (Dollars in Millions)

(Dollars in Millions)				2017-	2017-2016 2016-2015		-2015
	2017	2016	2015	Difference	% Change	Difference	% Change
Contributions	\$1,858	\$1,902	\$1,936	\$(44)	-2.3%	\$(34)	-1.8%
Net Investment							
Income/(Loss)	6,135	83	1,991	6,052	7291.6%	(1,908)	-95.8%
<b>Total Additions</b> /							
(Declines)	\$7,993	\$1,985	\$3,927	\$6,008	302.7%	\$(1,942)	-49.5%
Benefits and Refunds	\$(3,030)	\$(2,889)	\$(2,768)	\$(141)	-4.9%	\$(121)	-4.4%
Administrative Expenses							
and Miscellaneous	(67)	(67)	(63)	(0)	0.0%	(4)	-6.3%
Total Deductions	\$(3,097)	\$(2,956)	\$(2,831)	\$(141)	- <b>4.8</b> %	\$(125)	-4.4%
Net Increase/(Decrease) Net Position	\$4,896	\$(971)	\$1,096	\$5,867	-604.2%	\$(2,067)	-188.6%
Beginning of Year	47,847	48,818	47,722	(971)	-2.0%	1,096	2.3%
Net Position at							
End of Year	\$52,743	\$47,847	\$48,818	\$4,896	10.2%	\$(971)	- <b>2.0</b> %

#### **Pension Liabilities**

As GASB Statement No. 67 requires, LACERA reports the Total Pension Liability and the Net Pension Liability as calculated by LACERA's actuary. These liabilities are solely calculated for financial reporting purposes and are not intended to provide information about the employers' funding of such liabilities. The actuarial valuation of retirement benefits provides funding metrics and related information.

The Total Pension Liability as of June 30, 2017, was \$64.0 billion or an increase of 9.4 percent from the Total Pension Liability of \$58.5 billion as of June 30, 2016. LACERA's Net Pension Liability as of June 30, 2017, was \$11.3 billion, representing an increase of 5.7 percent from the Net Pension Liability of \$10.7 billion as of June 30, 2016. Although LACERA experienced a 10.2 percent increase in Fiduciary Net Position, the increase in Total Pension Liability was higher, causing a \$606 million increase in Net Pension Liability.

GASB Statement No. 67 requires the presentation of the Fiduciary Net Position as a percentage of the Total Pension Liability. For the fiscal years ended June 30, 2017 and June 30, 2016, respectively, the Fiduciary Net Position as a percentage of the Total Pension Liability is reported as 82.4 percent and 81.7 percent. This slight increase is due to an offsetting effect of growth in Total Pension Liability of \$5.5 billion compared to a similar increase in LACERA's Fiduciary Net Position of \$4.9 billion.

#### **Net Pension Liability**

As of June 30, 2017, 2016, and 2015 (Dollars in Millions)

		1		2017	- 2010
	2017	2016	2015	\$ Change	% Change
Total Pension Liability	\$64,032	\$58,529	\$56,570	\$5,503	9.4%
Less: Fiduciary Net Position	(52,744)	(47,847)	(48,818)	(4,897)	10.2%
Net Pension Liability	\$11,288	\$10,682	\$7,752	\$606	5.7%
Fiduciary Net Position as a Percentage					
of Total Pension Liability	82.4%	81.7%	86.3%	N/A	N/A

2017 2016

#### **OPEB** Liabilities

GASB Statement No. 74 requires LACERA to report the Total OPEB Liability and the Net OPEB Liability as calculated by LACERA's actuary. These liabilities are solely calculated for financial reporting purposes and are not intended to provide information about the employers' funding of such liabilities. The OPEB Program actuarial valuation report provides funding metrics and related information.

LACERA's Total OPEB Liability as of June 30, 2017, was \$27.2 billion or a decrease of 0.01 percent from the Total OPEB Liability of \$27.2 billion as of June 30, 2016. LACERA's Net OPEB Liability as of June 30, 2017, was \$26.5 billion, representing a decrease of 0.7 percent from the Net OPEB Liability of \$26.7 billion as of June 30, 2016. This \$186 million decrease in Net OPEB Liability was primarily due to the increase in the OPEB Trust's Fiduciary Net Position.

GASB Statement No. 74 requires the Fiduciary Net Position to be presented as a percentage of the Total OPEB Liability. For the fiscal years ended June 30, 2017 and June 30, 2016, respectively, the Fiduciary Net Position as a percentage of the Total OPEB Liability is reported as 2.73 percent and 2.06 percent. This increase is due to a decrease in the Total OPEB Liability of \$4 million, offset by a \$182 million increase in Fiduciary Net Position.

2017-2016

#### **Net OPEB Liability**

As of June 30, 2017 and 2016 (Dollars in Millions)

		0115)		2017	1-2010	
2017	2016	\$ Change	% Change			
\$27,212	\$27,216	\$(4)	-0.01%			
(743)	(561)	(182)	32.44%			
\$26,469	\$26,655	\$(186)	-0.70%			
2.73%	2.06%	N/A	N/A			
	\$27,212 (743) \$26,469	\$27,212       \$27,216         (743)       (561)         \$26,469       \$26,655	2017         2016         \$ Change           \$27,212         \$27,216         \$(4)           (743)         (561)         (182)           \$26,469         \$26,655         \$(186)			

#### **Benefit Provisions — Retiree Healthcare Program**

In June 2014, the County Board of Supervisors authorized, and the LACERA Boards of Retirement and Investments approved, the County's request to modify the existing Agreement between the County and LACERA, which created a new retiree healthcare benefit program in order to lower future retiree healthcare costs. Structurally, the County segregated all then-current employees and retirees, who will be entitled to future benefits, into the Tier 1 LACERA-administered Retiree Healthcare Benefits Program (Tier 1). New employees hired after June 30, 2014, are entitled to benefits under the new Tier 2 Los Angeles County Retiree Healthcare Benefits Program (Tier 2). Recent implementation of these benefit program changes has not yet caused the County to realize significant impacts to the liability and funding aspects of the Retiree Healthcare Program.

#### PLAN ADMINISTRATION LACERA Membership

The following table provides comparative LACERA membership data for the last two fiscal years. The County hired nearly 1,900 new employees for the fiscal year ended June 30, 2017, as evidenced by the 1.8 percent increase in active members from the prior year. There was an increase of 1,402 or 2.3 percent of new retirees between the two fiscal years ended June 30, 2017 and June 30, 2016.

2017 2016

#### LACERA Membership

As of June 30, 2017 and 2016

As of June 30, 2017 and 2016			2017-2016		
	2017	2016	Difference	% Change	
Active Members	105,562	103,682	1,880	1.8%	
Retired Members	63,295	61,893	1,402	2.3%	
Total Membership	168,857	165,575	3,282	2.0%	

#### ADMINISTRATIVE EXPENSES

The LACERA Boards of Retirement and Investments jointly approve the annual operating budget, which controls administrative expenses and represents approximately 0.13 percent of the Net Position Restricted for Benefits.

The County Employees Retirement Law of 1937 (CERL) governing the LACERA Pension Plan requires the annual budget for administrative expenses may not exceed twenty-one hundredths of one percent (0.21 percent) of the actuarial accrued liability as of the prior fiscal year. The cost of legal representation is not to exceed one-hundredth of one percent (0.01 percent) of Pension Plan assets in any budget year. LACERA's appropriation for legal representation is included in the administrative expense allocation.

The table below provides a comparison of the actual administrative expenses for the fiscal years ended 2017 and 2016. The actuarial accrued liability was used to calculate the statutory budget amount. For both years, LACERA's administrative expenditures were well below the limit imposed by law.

#### **Budget-to-Actual Analysis of Administrative Expenses**

As of June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Actual Administrative Expenses	\$66,830	\$67,645
Basis for Budget Calculation (Actuarial Accrued Liability)	56,819,215	54,942,453
Administrative Expenses as a Percentage of		
the Basis for Budget Calculation	0.12%	0.12%
Administrative Expense Budget Limit per CERL	0.21%	0.21%

#### **ACTUARIAL FUNDING VALUATIONS**

In order to determine whether the Net Position Restricted for Benefits will be sufficient to meet future obligations, the actuarial funded status needs to be calculated. An actuarial valuation is similar to an inventory process. On the valuation date, the assets available for the payment of promised benefits are appraised. These assets are compared with the actuarial liabilities, which represent the actuarial present value of all future benefits expected to be paid for each member. The purpose of the valuation is to determine what future contributions by the employees (members) and the employers (plan sponsors) are needed to pay all expected future benefits.

In December 2009, the LACERA Board of Investments adopted a new Retirement Benefit Funding Policy (Funding Policy). In February 2013, the Funding Policy was amended to conform to the new provisions mandated by the California Public Employees' Pension Reform Act of 2013 (PEPRA). In addition, beginning with the June 30, 2012 valuation and on a prospective basis, the LACERA Board of Investments approved inclusion of the STAR Reserve balance. As such, the actuary includes the STAR Reserve as part of actuarial assets available for funding retirement benefits.

Provisions in the Funding Policy impacted the 2016 valuation, including the implementation of a smoothing calculation on actuarial gains and losses. This smoothing process defers investment gains and losses over a five-year period in order to minimize substantial variations in funding ratios. Variances between the actual market value and the actuarially computed expected market value from investment performance at the actuarially determined assumed rate of return are smoothed or recognized over a five-year period.

The Funding Policy also utilizes what is referred to as a "layered" closed amortization method which helps mitigate volatility in employer contribution rates. Under this method, the June 30, 2009 Unfunded Actuarial Accrued Liability (UAAL) is amortized over a closed 30-year period. For each of the subsequent eight fiscal years, gains or losses on the UAAL were amortized over its own closed 30-year period. This process has resulted in eight amortization layers for the UAAL which will help to dampen volatility in the required amortization payments while maintaining a payoff schedule of the UAAL over time.

In December 2016, the LACERA Board of Investments adopted a decrease in the investment return and other economic assumptions. The investment return assumption decreased from 7.50 to 7.25 percent for the June 30, 2016 actuarial valuation. The LACERA Board of Investments adopted decreases in the price and wage inflation assumptions to be made at the same time as each decrease in the investment return assumption.

LACERA's independent consulting actuary, Milliman, performed the actuarial valuation as of June 30, 2016 and determined that the Funded Ratio of the actuarial assets to the actuarial accrued liabilities decreased to 79.4 percent, as compared to 83.3 percent as of the June 30, 2015 valuation. The slightly positive investment return for 2016, which dropped below the actuarial assumed investment earnings rate, resulted in a 3.9 percent decrease in the Funded Ratio using the five-year actuarial asset smoothing method. For the 2015 and 2016 valuations, respectively, the Pension Plan returned 4.1 percent and 0.8 percent (both net of fees), on a market basis, which was less than the assumed rate of 7.50 percent in 2015 and less than the assumed rate of 7.25 percent in 2016. For the fiscal year ended June 30, 2015, there was a loss on market assets relative to the assumed rate of return of 7.50 percent. However, the recognition of net asset gains from prior years partially offset this loss resulting in a return on actuarial assets of 6.5 percent for the fiscal year ended June 30, 2016, which was \$496 million short of the expected return on actuarial assets.

#### FAIR VALUE, RATES OF RETURN, AND FUNDED RATIO

The table below provides a three-year history of investment and actuarial returns and the actuarial funded ratios. As required by GASB Statement Nos. 67 and 74, the money-weighted rate of return is presented as an expression of investment performance, net of investment expense, adjusted for the changing amounts actually invested. For the year ended June 30, 2017, the annual money-weighted rate of return on Pension Plan investments was 12.7 percent (net of fees). For the year ended June 30, 2017, the annual money-weighted rate of return on OPEB Trust investments was 16.0 percent (net of fees).

The positive investment returns varied over the last three years. The LACERA Board of Investments reduced the assumed rate of return (as described above and in the Actuarial section). As a result of applying actuarial asset smoothing, the actuarial funded ratio decreased from fiscal year ended 2015 to 2016.

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For th	e Last Three Fiscal Years Ended June 30	

Total Dancian Invoctment Dates of Deturn

(Dollars in Thousands)

Fiscal Year End	Total Investment Portfolio Fair Value	Total Fund Time-Weighted Return (net of fees) <sup>1</sup>	Total Fund Money-Weighted Return (net of fees)	Return on Smoothed Valuation Assets (net of fees) <sup>2</sup>	Actuarial Assumed Rate of Return	Actuarial Funded Ratio
2015	\$47,990,447	4.1%	4.1%	10.5%	7.50%	83.3%
2016	47,846,694	0.8%	0.7%	6.5%	7.25%	79.4%
<b>2017</b> <sup>3</sup>	52,743,651	<b>12.7</b> %	<b>12.7</b> %	—	—	

<sup>1</sup>Prior year (2015 & 2016) returns are restated to enhance comparability to the current year (2017). <sup>2</sup>Returns calculated using the money-weighted rate of return method.

<sup>3</sup>Actuarial valuation report for June 30, 2017 not available at CAFR publication.

#### INTEREST CREDITS FOR RESERVE ACCOUNTS

Pursuant to CERL, LACERA credits interest semiannually on December 31 and June 30 to all contributions in the Pension Plan that have been on deposit six months prior to such dates. The LACERA Board of Investments' policy is to credit annual interest equal to the current actuarial assumed earnings rate in the same priority as for the allocation of actuarial assets, provided there are sufficient realized earnings for the six-month period to support that interest rate.

The assumed semiannual interest crediting rate during the fiscal year ended June 30, 2017, was 3.75 percent (i.e., 7.50 percent annual rate). This rate was implemented with the LACERA Board of Investments' adoption of the June 30, 2013 actuarial valuation. To provide ample time for the County and LACERA to prepare for the rate change implementation, the new 7.50 percent rate became effective July 1, 2014, which was also when corresponding

employee contribution rates took effect. For the June 30, 2016 valuation, a new assumed actuarial earnings rate will be applied in the next interest crediting cycle. The total Pension Fund's positive return provided realized earnings, which allowed LACERA to fully credit interest at the semiannual rate of 3.75 percent for both periods ended December 31, 2016, and June 30, 2017, respectively, in accordance with the CERL provisions.

#### **OPEB TRUST**

Pursuant to the California Government Code, Los Angeles County established an irrevocable, tax-exempt OPEB Trust for the purpose of holding and investing assets to pre-fund the Retiree Healthcare Program, which LACERA administers.

In May 2012, the County negotiated a Trust and Investment Services Agreement with the LACERA Board of Investments to manage and invest the OPEB Trust assets. The participating employers provide contributions to and administrative cost payments are made from the County OPEB Trust. There are two participating employers in the County OPEB Trust: the County and LACERA.

The Court considered pre-funding its OPEB obligations through a Court OPEB Trust to be effective and initially funded as of June 30, 2016. After discussions and negotiations between the County, the Court, and LACERA, it was determined that a separate OPEB Trust would be established for the Court. A Trust and Investment Services Agreement was negotiated between LACERA and the Court setting forth the terms under which the LACERA Board of Investments will serve as Trustee of the Court OPEB Trust. The Court Agreement was submitted and approved by the Court's Judicial Council in April 2016 and executed in June 2016.

In June 2016, the LACERA Board of Investments approved the use of a unitized fund structure for the investment of the County and Court OPEB Trust funds. This structure created a Master OPEB Trust allowing for unitization of investments at the asset composite level while retaining individual net asset values for each participating employer. The Master OPEB Trust accommodates commingling and co-investing of the County and Court OPEB Trust funds. LACERA and its custodian completed the implementation process. As used in this report, OPEB Trust refers to the Master OPEB Trust and the County and Court Trusts.

#### **Financial Analysis**

As reflected in the Statement of Changes in Fiduciary Net Position, OPEB Trust additions included net investment income of \$94.5 million and deductions of \$0.4 million for administrative expenses, including custodial and investment management fees. The total Net Position Restricted for Benefits for the OPEB Trust as of the fiscal year ended June 30, 2017, was \$742.9 million.

Information related to the OPEB Trust is included in the Financial Section and other CAFR sections to meet financial reporting requirements.

#### NEW PENSION ACCOUNTING AND FINANCIAL REPORTING STANDARDS

LACERA elected the early adoption of GASB Statement No. 82 (GASB 82), Pension Issues, as of June 30, 2016. GASB 82 prescribes additional guidance for the presentation of payroll-related measures in the Required Supplementary Information (RSI) Section, the treatment of deviations from the actuarial standards of practice when selecting actuarial assumptions, and the classification of member contributions (i.e., "pick-up" contributions) for reporting purposes. In addition, GASB 82 assists LACERA in providing information to the plan sponsors for their financial statement reporting.

In June 2015, GASB approved two new standards designed to substantially improve the accounting and decisionusefulness of financial reporting by state and local governments for post-employment benefits other than pensions (other post-employment benefits or OPEB). These new OPEB standards are similar to GASB Statement Nos. 67 and 68, implemented by LACERA and LACERA's sponsoring employers, respectively, in recent fiscal years, which governed accounting for pension benefits.

GASB Statement No. 74 (GASB 74), Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, revises existing guidance for OPEB plans and benefits provided to employees subsequent to their retirement. GASB 74 addresses the financial reports of defined benefit OPEB plans administered through trusts that meet specified criteria. It requires a Statement of Fiduciary Net Position, as well as a Statement of Changes in Fiduciary Net Position. GASB 74 also requires more extensive note disclosures and new RSI schedules related to the measurement of the OPEB liabilities for which assets have been accumulated, including information about the annual money-weighted rates of return on plan investments. LACERA implemented GASB 74 as of the fiscal year ended June 30, 2017.

GASB Statement No. 75 (GASB 75), Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, requires plan sponsors to report a liability on the face of the financial statements for the OPEB that they provide. In addition, plan sponsors that are responsible only for OPEB liabilities related to their own employees and that provide OPEB through a defined benefit OPEB plan administered through a trust that meets specified criteria will report a net OPEB liability, the difference between the total OPEB liability and assets accumulated held in trust restricted to making benefit payments. Among the new note disclosures is a description of the effect on the reported OPEB liability of using a discount rate and a healthcare cost trend rate that are one percentage point higher and one percentage point lower than assumed by the government. The new RSI information includes a schedule showing the causes of increases and decreases in the OPEB liability and a schedule comparing a government's actual OPEB contributions to its contribution requirements. For Los Angeles County, Court, and the other participating Outside Districts, who sponsor the OPEB Program, the new financial reporting provisions are effective for the reporting of their fiscal year ending June 30, 2018.

LACERA continues to spearhead the GASB 74/75 Task Force comprised of key stakeholders from the County, Court, Outside Districts, and external professional service providers to discuss requirements for implementing the GASB 75

accounting standard. As these new provisions apply to plan sponsors, the Task Force provides the opportunity to open the lines of communication among the parties involved and work toward establishing timelines and a framework for executing implementation decisions.

#### **REQUESTS FOR INFORMATION**

This financial report is designed to provide the LACERA Boards of Retirement and Investments, our membership, and interested third parties with a general overview of LACERA's finances and to show accountability for the funds it receives.

Address questions regarding this report and/or requests for additional financial information to:

Chief Financial Officer LACERA 300 N. Lake Avenue, Suite 650 Pasadena, CA 91101

Respectfully submitted,

Beulah S. Auten

Beulah S. Auten, CPA, CGFM, CGMA Chief Financial Officer

#### **Statement of Fiduciary Net Position**

As of June 30, 2017 and June 30, 2016 (Dollars in Thousands)

	2017			2016			
	Pension Plan	OPEB Trust	OPEB Agency Fund	Pension Plan	OPEB Trust	OPEB Agency Fund	
Assets	• • = • • • • •					*** ***	
Cash and Short-Term Investments Cash Collateral	\$1,523,990	\$83,492	\$85,228	\$846,783	\$56,009	\$68,887	
on Loaned Securities	922,584	—	—	872,139	-	-	
Receivables							
<b>Contributions Receivable</b>	76,587	—	—	78,034	_	_	
Accounts Receivable - Sale							
of Investments	931,020	1,211	—	1,035,640	2,900	3,933	
Accrued Interest and Dividends	106,074	370	364	130,324	249	364	
Accounts Receivable - Other	33,278	_	48,585	34,095	_	46,206	
Total Receivables	1,146,959	1,581	48,949	1,278,093	3,149	50,503	
Investments at Fair Value							
Equity	25,471,070	607,593	_	22,464,826	452,333	_	
Fixed Income	14,126,188	54,323	76,625	13,685,276	50,051	84,627	
Private Equity	5,050,442	_	· _	4,410,209	_	_	
Real Estate	6,139,832	_	_	6,062,780	_	_	
Hedge Funds	1,437,925	_	—	1,275,576	_	_	
Total Investments							
at Fair Value	52,225,457	661,916	76,625	47,898,667	502,384	84,627	
Total Assets	55,818,990	746,989	210,802	50,895,682	561,542	204,017	
iabilities							
Accounts Payable - Purchase of							
Investments	2,074,419	4,020	21	2,104,540	704	3,612	
Retiree Payroll and Other Payables	1,149		150	848	_	133	
Accrued Expenses	38,780	86	257	32,265	88	313	
Tax Withholding Payable	34,914	_	_	32,748	_	_	
Obligations under	,			-, -			
Securities Lending Program	922,584		_	872,139	_	_	
Accounts Payable - Other	3,493	_	115,137	6,448	_	110,999	
Due to Employers		_	95,237	- 1	_	88,960	
Total Liabilities	3,075,339	4,106	210,802	3,048,988	792	204,017	
	¢50 740 054	6740 000	*	¢ 47 0 40 00 4		*	
Net Position Restricted for Benefits	\$52,743,651	\$742,883	\$—	\$47,846,694	\$560,750	\$—	

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

#### **Statement of Changes in Fiduciary Net Position**

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	2017		2016	
	Pension Plan	OPEB Trust	Pension Plan	OPEB Trust
Additions				
Contributions				
Employer <sup>1</sup>	\$1,331,359	\$645,381	\$1,403,712	\$615,275
Member	526,579		498,083	_
Total Contributions	1,857,938	645,381	1,901,795	615,275
Investment Income				
From Investing Activities:				
Net Appreciation/(Depreciation) in				
Fair Value of Investments	3,600,948	42,613	(966,251)	(8,451)
Investment Income/(Loss)	2,672,282	52,278	1,147,978	587
Total Investing Activity Income	6,273,230	94,891	181,727	(7,864)
Less Expenses from Investing Activities	(150,350)	(386)	(106,567)	(231)
Net Investing Activity Income	6,122,880	94,505	75,160	(8,095)
From Securities Lending Activities:				
Securities Lending Income	11,597	_	6,409	_
Less Expenses from Securities Lending Activities:				
Borrower Rebates	(3,710)	_	246	_
Management Fees	(1,467)	—	(1,227)	_
Total Expenses from Securities				
Lending Activities	(5,177)	_	(981)	
Net Securities Lending Income	6,420	_	5,428	_
<b>Total Net Investment Income</b>	6,129,300	94,505	80,588	(8,095)
Miscellaneous	6,370	2	2,781	_
Total Additions	7,993,608	739,888	1,985,164	607,180
Deductions				
Retiree Payroll	3,002,930	_	2,859,011	_
Service Benefits <sup>1</sup>	· · · <u> </u>	557,381		534,597
Administrative Expenses	66,830	374	67,645	192
Refunds	24,452	_	27,092	_
Lump Sum Death Benefits	2,251	_	3,083	_
Miscellaneous	188	_	(11)	_
Total Deductions	3,096,651	557,755	2,956,820	534,789
Net Increase/(Decrease) in Net Position	4,896,957	182,133	(971,656)	72,391
Net Position Restricted for Benefits				
Beginning of Year	47,846,694	560,750	48,818,350	488,359
Deginning er redi				

<sup>1</sup>Fiscal year 2016 Employer Contributions were adjusted to reflect pre-funded contributions made into the OPEB Trust as well as additions to Net Position including amounts for OPEB, as the benefits become due that would be unreimbursed to the employers using OPEB Trust assets. Correspondingly, fiscal year 2016 Service Benefits amounts were added to reflect all benefit payments made through the OPEB Trust or by employers as OPEB payments became due (paragraphs 28a and 31 of GASB Statement 74).

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

#### **NOTE A** — Plan Description

The Los Angeles County Employees Retirement Association (LACERA) was established on January 1, 1938. It is governed by the California Constitution, the County Employees Retirement Law of 1937 (CERL), the California Public Employees' Pension Reform Act of 2013 (PEPRA), and the regulations, procedures, and policies adopted by the LACERA Board of Retirement and the LACERA Board of Investments. The Los Angeles County (County) Board of Supervisors may also adopt resolutions, as permitted by CERL, which may affect the benefits of LACERA members. LACERA operates as a cost-sharing multiple-employer defined benefit plan for Los Angeles County and its affiliated Superior Court, plus four Outside Districts: Little Lake Cemetery District, Local Agency Formation Commission, Los Angeles County Office of Education, and South Coast Air Quality Management District.

#### Governance

The LACERA Board of Retirement is responsible for the administration of the Pension Plan, the Retiree Healthcare Benefits (OPEB) Program, and the review and processing of disability retirement applications. The LACERA Board of Retirement is composed of eleven members. Six members are elected: two are elected by active General Members; retired members elect one member and one alternate member; Safety Members elect one member and also have an alternate member. Four of its members are appointed by the Los Angeles County Board of Supervisors. The law requires the County Treasurer and Tax Collector to serve as an ex-officio member.

The LACERA Board of Investments is responsible for establishing LACERA's investment policy and objectives, as well as exercising authority and control over the investment management of the Fund and the OPEB Trusts and actuarial matters. The LACERA Board is composed of nine members. Four members are elected: two are elected by active General Members; retired members elect one member, as do Safety Members. Four of its members are appointed by the Los Angeles County Board of Supervisors. The law requires the County Treasurer and Tax Collector to serve as an ex-officio member.

#### Membership

LACERA provides retirement, disability, and death benefits to its active, safety, and general members and administers the plan sponsors' Retiree Healthcare Benefits (OPEB) Program. Safety membership includes law enforcement (Sheriff and District Attorney Investigators), firefighting, forester, and lifeguard classifications. General membership is applicable to all other occupational classifications. The retirement benefits within the Pension Plan are tiered based on the date of LACERA membership. Additional information regarding the benefit structure is available by contacting LACERA.

#### LACERA Membership

As of June 30, 2017 and 2016

	2017	2016
Active Members		
Vested	72,037	72,563
Non-Vested	25,184	22,881
Terminated Vested (Deferred)	8,341	8,238
Total Active Members	105,562	103,682
Retired Members		
Service	45,009	43,858
Disability	9,489	9,335
Survivors	8,797	8,700
Total Retired Members	63,295	61,893
Total Membership	168,857	165,575

#### Investments

**Pension Plan:** Assets in the Pension Plan are derived from three sources: employer contributions; employee contributions (made by the employer on behalf of employees pursuant to §414(h)(2) of the Internal Revenue Code); and realized investment earnings. Assets of the Pension Plan are held separate from any other assets and are invested pursuant to policies and procedures adopted by the LACERA Board of Investments. Pension Plan gross income is exempt from federal income taxation under §115 of the Internal Revenue Code.

**OPEB Agency Fund:** The County, Court, and participating Outside District employers provide a health insurance program and death benefits (OPEB Program) for retired employees and their dependents, which LACERA administers. Pursuant to an administrative agreement between the County and LACERA, the County subsidizes, either in whole or in part, insurance premiums covering certain program participants.

LACERA maintains two investment accounts under the **OPEB** Agency Fund: the OPEB Operating Account and **OPEB** Reserve Account. The County and participating Outside District employers own the funds in these accounts, which LACERA reports and invests separately from Pension Plan assets. The funds held within the OPEB agency investment accounts do not meet the definition of a qualifying OPEB Trust under GASB 74 and are not used to reduce the employers' Total OPEB Liability. External managers invest funds in both accounts pursuant to policies and procedures approved by the LACERA Board of Investments. In addition, investment income realized in these types of accounts maintained by government entities generally is exempt from federal income taxation under §115 of the Internal Revenue Code.

**OPEB Operating Account:** This account is primarily used to fund the OPEB Program's operations. Additions include the monthly insurance subsidy collected from the County and its affiliated Superior Court and Outside Districts, payments from program participants, and interest income. Deductions include premium payments to insurance carriers and Program administrative expenses.

**OPEB Reserve Account:** This account was established to help stabilize premium rates over time. Annual surpluses and deficits for the various insurance plans result from the difference between premiums received and the healthcare costs incurred. The accumulated surplus is held in this account to address deficits and/or emergency premiums. Additions include rebates from insurance carriers and other income. Deductions include management fees and Countyauthorized payments to offset waived premium costs (i.e., insurance premium holidays) for both the County and affected participants. In 2013, the LACERA Board of Retirement adopted a policy that establishes an account balance target for the indemnity medical and dental/vision plans of 20 percent of the total annual premium cost, by plan.

**OPEB Trust:** The County and LACERA, as participating employers, established an OPEB Trust for the purpose of holding and investing assets to pre-fund the Retiree Healthcare Benefits Program, which is administered by LACERA, for eligible retired members and eligible dependents and survivors of LACERA members. The Superior Court also started making OPEB pre-funding contributions into the Court OPEB Trust as of June 2016. The OPEB Trusts do not modify the participating employer benefit programs. The assets held within the OPEB Trusts meet the definition of a qualifying trust or equivalent arrangement under GASB 74.

The County hired the LACERA Board of Investments to act as Trustee and Investment Manager by entering into a Trust and Investment Services Agreement in May 2012. The LACERA Board of Investments approved an Investment Policy Statement and initial asset allocation for the purpose of effectively managing and monitoring the assets of the County OPEB Trust. Contributions and transfers to the County OPEB Trust are determined at the County's discretion. The County OPEB Trust's gross income is exempt from federal income taxation under §115 of the Internal Revenue Code (IRC). In August 2014, LACERA obtained a letter ruling from the Internal Revenue Service to this effect.

On June 10, 2016, the LACERA Board of Investments entered into a Trust and Investment Services Agreement with the Los Angeles County Superior Court (Court) to establish an irrevocable trust for the purpose of holding and investing assets to prefund the Retiree Healthcare Benefits Program, which LACERA administers for the Court. The LACERA Board of Investments serves as Trustee with sole and exclusive authority, control over, and responsibility for directing the investment and management of the Court OPEB Trust assets. The LACERA Board of Investments adopted an Investment Policy Statement establishing the asset allocation for the Court OPEB Trust. Contributions to the Court OPEB Trust are in the Court's discretion. The Court OPEB Trust documentation and structure are substantively similar to the County OPEB Trust. The Court OPEB Trust's gross income is exempt from federal income taxation under §115 of the Internal Revenue Code (IRC). In June 2017, LACERA obtained a letter ruling from the Internal Revenue Service to this effect.

On June 8, 2016, the LACERA Board of Investments approved formation of a Master OPEB Trust for the

purpose of commingling funds of the County OPEB Trust and the Court OPEB Trust for investment purposes. The Master OPEB Trust Declaration was made on July 13, 2016. The LACERA Board of Investments serves as Trustee with sole and exclusive authority, control over, and responsibility for directing the investment and management of the Master Trust Assets. The Master OPEB Trust's gross income is exempt from federal income taxation under §115 of the Internal Revenue Code (IRC). In June 2017, LACERA obtained a letter ruling from the Internal Revenue Service to this effect.

## **Benefit Provisions**

Vesting occurs when a member accumulates five years' creditable service under contributory plans or accumulates 10 years of creditable service under the general service non-contributory plan. Benefits are based upon 12 or 36 months' average compensation, depending on the plan, as well as age at retirement and length of service as of the retirement date, according to applicable statutory formula. Vested members who terminate employment before retirement age are considered terminated vested (deferred) members. Service-connected disability benefits may be granted regardless of length of service consideration. Five years of service are required for nonservice-connected disability eligibility according to applicable statutory formula. Members of the noncontributory plan, who are covered under separate long-term disability provisions not administered by LACERA, are not eligible for disability benefits provided by LACERA.

## **Cost-of-Living Adjustment (COLA)**

Each year, the LACERA Board of Retirement considers how the change in the cost of living, a measure of inflation, has affected the purchasing power of monthly allowances paid by LACERA. The cost of living is measured by the Bureau of Labor Statistics, which releases the Consumer Price Index (CPI) for all Urban Consumers in the Los Angeles-Anaheim-Riverside area as of January 1 each year. The difference in the current and previous year's CPI shows whether the cost of living has increased or decreased in this geographic region during the past year.

If the CPI has increased, the LACERA Board of Retirement grants a Cost-of-Living Adjustment (COLA) increase for monthly allowances. If the CPI has decreased, it is possible for the LACERA Board of Retirement to decrease monthly allowances; however, a decrease in allowances has never occurred. In any event, a cost-of-living decrease could not reduce a member's allowance to an amount less than the allowance received at the time of retirement.

# Supplemental Targeted Adjustment for Retirees (STAR) Program

In addition to cost-of-living increases, the CERL also provides the LACERA Board of Retirement the authority to grant supplemental cost-of-living increases. Under this program, known as the STAR Program, excess earnings have been used to restore retirement allowances to 80 percent of the purchasing power held by retirees at the time of retirement. Except for Program Years 2005 and 2010 through 2016, the LACERA Board of Retirement made permanent the 2001 through 2009 STAR Programs at an 80 percent level as authorized in the CERL. There were no new retirees or beneficiaries entitled to additional STAR benefits for Program Years 2005 and 2010 through 2016 due to the modest CPI percentage increase. Thus, all eligible members had COLA Accumulation accounts below the 20 percent threshold for providing STAR benefits.

Future ad hoc increases in the current STAR Program will be subject to approval by the LACERA Board of Retirement on an annual basis, provided sufficient excess earnings are available as determined by the LACERA Board of Investments. Permanent STAR benefits become part of the member's retirement allowance and are payable for life. Ad hoc STAR benefits are payable only for the calendar year approved.

From the inception of the STAR Program in 1990 to the present, the STAR Program received \$1.5 billion in funding. Except for Program Years 2005 and 2010 through 2016, the LACERA Board of Retirement made permanent the 2001-2009 STAR Program benefits, which totaled \$353 million. As of June 30, 2017, there is \$614 million available in the STAR Program reserve to fund future benefits. Total STAR Program costs since inception equaled \$985 million.

The STAR Program is administered on a calendar-year basis. The Statistical Section contains a 10-year trend schedule of costs for the STAR Program.

# NOTE B — Summary of Significant Accounting Policies

## **Reporting Entity**

LACERA, with its own governing Boards, is an independent governmental entity separate and distinct from the County of Los Angeles (County). Because of the nature of the relationship between LACERA and the County, LACERA's Pension Plan and OPEB Trust funds are reflected as fiduciary funds within the County's basic financial statements. LACERA's operations are heavily dependent upon County funding, and the operational results are advantageous to the County, as well as LACERA members. Maintaining appropriate controls and preparing the financial statements are the responsibility of LACERA Management. The LACERA Audit Committee assists the Boards of Retirement and Investments (Boards) in fulfilling their fiduciary oversight responsibilities for LACERA's financial reporting process, the system of internal controls, the audit processes, and the organization's method for monitoring compliance with laws and regulations.

LACERA's real estate investments utilize several different types of Special Purpose Entities (SPE), including Title Holding Corporations (THCs) and Limited Liability Companies (LLCs). The THCs are nonprofit corporations under §501(c)(25) and §501(c)(2) of the Internal Revenue Code (IRC). The LLCs do not have tax-exempt status, but their income is excludable from taxation under IRC §115. Both THCs and LLCs invest in real estate assets located throughout the United States. Under GASB 72, *Fair Value Measurement and Application*, the THCs and LLCs meet GASB's definition of an investment and therefore are included in the accompanying financial statements as investments at fair value.

## **Method of Reporting**

LACERA follows the accounting principles generally accepted in the United States of America (GAAP) as applicable to governmental units. Accounting and financial reporting pronouncements are promulgated by the Governmental Accounting Standards Board (GASB). The financial statements are prepared using the accrual basis of accounting to reflect the overall operations of LACERA. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Member and employer contributions are recognized in the period in which the contributions are due, pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of each benefit plan.

## **Capital Assets (Including Intangible Assets)**

Capital Assets are items that benefit more than one fiscal year. LACERA's potential Capital Assets are largely in information technology. Due to the continual upgrading of information technology systems, LACERA treats these items as expenses, as they are immaterial to LACERA's financial statements. Management reviewed and considered all expenses that could be capitalized as intangible assets and determined these items to be appropriately classified as expenses for the current fiscal year.

## **Accrued Vacation and Sick Leave**

Employees who terminate or retire from active employment are entitled to full compensation for all unused vacation and a percentage of their unused sick leave. The accrued vacation and sick leave balances for LACERA employees as of June 30, 2017 and 2016 was \$3.1 million for each year.

## **Cash and Short-Term Investments**

Cash includes deposits with various financial institutions, the County, and non-U.S. currency holdings translated to U.S. dollars using the exchange rates in effect at June 30, 2017 and 2016.

LACERA classifies fixed income securities with a maturity of 12 months or less as short-term investments. Pending foreign exchange contracts are also included in the category.

## Investments

Investments are carried at fair value. Fair values for investments are derived by various methods, as indicated in the following chart:

Investments	Source
Publicly Traded Securities, such as stocks and bonds. Bonds include obligations of the U.S. Treasury, U.S. agencies, non-U.S. governments, and both U.S. and non-U.S. corporations. Also included are mortgage-backed securities and asset-backed securities.	Valuations are provided by LACERA's custodian based on end-of- day prices from external pricing vendors. Non-U.S. securities reflect currency exchange rates in effect at June 30, 2017 and 2016.
Whole Loan Mortgages	For the LACERA Member Home Loan Program, valuation is performed by LACERA staff based on loan information provided by Ocwen Financial Corporation, the program's mortgage servicer, with fair market value adjustments based on the market returns of the Bloomberg Barclays mortgage-backed securities index.
Real Estate Equity Funds	Fair value as provided by real estate fund managers, based on review of cash flow, exit capitalization rates, and market trends; fund managers commonly subject each property to independent third-party appraisal annually. Investments under development are carried at cumulative cost until developed.
Real Estate: Special Purpose Entities including Title Holding Corporations and Limited Liability Companies	Fair value of the investment as provided by investment managers. Each property is subject to independent third-party appraisals every three years.
Real Estate Debt Investments	Fair value for real estate debt investments as provided by investment managers.
Private Equity	<ul> <li>Fair value provided by investment managers as follows:</li> <li>Private investments – valued by the General Partner giving consideration to financial condition and operating results of the portfolio companies, nature of investment, marketability, and other factors deemed relevant.</li> <li>Public investments – valued based on quoted market prices, less a discount, if appropriate, for restricted securities.</li> <li>Fair values are reviewed by LACERA's private equity consultant.</li> </ul>
Public Market Equity and Fixed Income Investments held in Institutional Commingled Fund/Partnership	Fair value is typically provided by third-party fund administrator, who performs this service for the fund manager.
Derivatives	Over-the-counter derivatives (other than currency forwards) valuations are provided by the fund managers. Currency forward contracts are valued by the custodian bank.
Hedge Fund of Funds	Valuation of the underlying funds is performed by those funds' General Partners. Valuation of the fund of funds portfolios is provided by third- party administrators and by the General Partner for the portfolios held in limited partnership vehicles.

Fair value level breakout provided in Note P – Fair Value.

There are certain market risks, credit risks, foreign currency exchange risks, liquidity risks, and event risks that may subject LACERA to economic changes occurring in certain industries, sectors, or geographies.

Dividend income is recorded on the ex-dividend date. Other investment income is recorded as earned on an accrual basis.

#### **Investment Policies — Pension Plan**

**Investment Policy.** The allocation of investment assets within the LACERA Defined Benefit Pension Plan (Pension Plan) investment portfolio is approved by the LACERA Board of Investments, as outlined in the LACERA Investment Policy Statement. Pension Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the Pension Plan. The Investment Policy Statement calls for an asset liability study to be conducted no later than every three to five years.

The following table displays the LACERA Board of Investments-approved asset allocation targets for the fiscal year ended June 30, 2017. These asset allocation targets were developed through the latest asset liability valuation study that was conducted in August 2015, and amended as of May 2016; the long-term expected rates of return displayed reflect the real expectations for the asset classes as of August 2016 after the effects of inflation, as amended in December 2016 through the 2016 Investigation of Experience. The LACERA Board of Investments is expected to consider potential policy portfolios as part of a new asset allocation study during fiscal year 2018.

Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return (After Expected 2.75% Inflation Rate) (Geometric)
Global Equity	41.4%	5.7%
Fixed Income	27.8%	2.6%
Real Estate	11.0%	4.6%
Private Equity	10.0%	6.9%
Commodities	2.8%	1.6%
Hedge Funds	5.0%	3.1%
Other Opportunities	0.0%	4.5%
Cash	2.0%	-0.2%

#### Schedule of Target Allocation and Long-Term Expected Rate of Return

For the Year Ended June 30, 2017

**Target Allocation.** The LACERA Board of Investments approved the preceding target allocation as a result of the Asset Liability Study completed by Wilshire Consulting in August 2015 and updated by Meketa Investment Group in May 2016. These asset allocation targets provide for diversification of assets in an effort to maximize the total return of the Pension Plan consistent with market conditions and risk control. It is anticipated that an extended period of time may be required to fully implement the asset allocation policy and that periodic revisions will occur.

The LACERA Board of Investments and internal staff implement the asset allocation policy through the use of external managers, who manage portfolios using active and passive investment strategies. In December 2015 and amended in May 2016, the LACERA Board of Investments adopted an implementation plan to reach the new targets over the next few years reducing Global Equities, Private Equity, and Commodities while increasing Fixed Income, Real Estate, and Hedge Funds allocations. A new asset class, Other Opportunities, was also added. The target allocations shown are the final allocations to be reached in December 2018.

Weighted Average Long-Term Expected Real Rate

of Return. The long-term expected real rate of return on Pension Plan investments was determined using a building-block approach, in which a median (or expected) geometric real rate of return is developed for each major asset class. The median rates are combined to produce the long-term expected real rate of return by weighting the expected future real rates of return by the target asset allocation percentages. Estimates of the median geometric real rates of return for each major asset class are shown in the table. The asset class return assumptions are presented on a real basis, after the effects of inflation, and all assumptions incorporate a base inflation rate assumption of 2.75 percent.

**Discount Rate.** GASB Statement No. 67 requires determination of whether the Pension Plan's Fiduciary Net Position is projected to be sufficient to make projected benefit payments. The discount rate used to measure the Total Pension Liability was 7.38 percent. This rate reflects the long-term assumed rate of return on assets for funding purposes of 7.25 percent, net of all expenses, increased by 0.13 percent, gross of administrative expenses.

The projection of cash flows used to determine the discount rate assumed that Pension Plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be sufficient to pay projected benefit payments in all future years. Therefore, 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.

**Money-Weighted Rate of Return.** For the year ended June 30, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 12.7 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. Historical returns are also presented in the Schedule of Investment Returns – Pension Plan in the Required Supplementary Information section of this report.

**Time-Weighted Rate of Return.** For the year ended June 30, 2017, the annual time-weighted rate of return

on Pension Plan investments, net of Pension Plan expense, was 12.7 percent. The time-weighted rate of return expresses investment performance, net of investment expense, while offsetting the effects of investment inflows and outflows. Historical returns are also presented in the Investments Results Based on Fair Value – Pension Plan in the Investment Section.

**Investment Concentrations.** The Pension Plan does not hold investments in any single issuer (other than United States Treasury securities or Agency mortgagebacked securities) that represents 5 percent or more of the Pension Plan's Fiduciary Net Position.

#### **Use of Estimates**

The preparation of LACERA's financial statements in conformity with Generally Accepted Accounting Principles in the United States of America (i.e., GAAP) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes to the financial statements. Actual results could differ from these estimates.

#### Reclassifications

Comparative data for the prior year have been presented in the selected sections of the accompanying Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position. Also, certain accounts presented in the prior year's data may have been reclassified to be consistent with the current year's presentation.

#### **Upcoming GASB Pronouncements**

In June 2017, the Governmental Accounting Standards Board issued GASB Statement No. 87, Leases, which improves accounting and financial reporting for leases by governments. This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-touse lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. LACERA is currently evaluating the impact this standard will have on the financial statements, when adopted. The provisions of this statement are effective for the LACERA's financial statements for the 2020 fiscal year.

#### **NOTE C** — Pension Plan Contributions

In December 2009, the Board of Investments adopted a new Retirement Benefit Funding Policy (Funding Policy). The Funding Policy was amended in February 2013 to conform to the new standards mandated in the California Public Employees' Pension Reform Act of 2013 (PEPRA).

Members and employers contribute to LACERA based on unisex rates recommended by an independent consulting actuary and adopted by the LACERA Board of Investments and the Los Angeles County Board of Supervisors. Contributory plan members are required to contribute between approximately 5 percent and 16 percent of their annual covered salary. Member and employer contributions received from the Outside Districts constitute part of LACERA's Pension Plan as a whole.

Participating employers are required to contribute the remaining amounts necessary to finance the coverage of their employees (members) through monthly or annual prefunded contributions at actuarially determined rates. Rates for contributory plan members who entered the Pension Plan prior to January 1, 2013, are based upon age at entry to the plan and plantype enrollment. As of January 1, 2013, the PEPRA mandated retirement plan contributions are based on a single flat-rate percentage and are structured in accordance with the required 50/50 cost sharing.

Both member rate methodologies are actuarially designed for the employees, as a group, to make the same dollar contributions into the Pension Plan. As a result of collective bargaining, actual member contribution rates for various Plan Types are controlled through these agreements and through additional employer contributions (for some contributory plans), known as the surcharge amount, which is subject to change each year. As required by GASB 67, member contributions paid by the employer are included in the member contribution amounts.

The normal cost is the theoretical contribution rate that will meet the ongoing costs of a group of average new employees. The latest actuarial valuation as of June 30, 2016, increased the Employer normal cost rate from 9.28 percent to 9.97 percent. The change in the normal cost contribution rates from year to year is generally due to a few factors. This year, the normal cost rate was impacted by new assumptions adopted for the 2016 valuation, normal actuarial experience and a change in plan proportion as new members are hired into General Plan G and Safety Plan C. The Employers' required contribution rate to finance the UAAL over a layered 30-year period increased from 8.49 percent to 11.24 percent. Member contribution rates increased for all contributing members effective with the 2016 actuarial valuation due to new assumptions adopted with the 2016 Investigation of Experience.

The Employer contribution rate increased 3.44 percent from the previous valuation. In December 2016, the Board of Investments adopted to recognize the increase in the calculated Employer contribution rate due to new assumptions over a three-year period. After reflecting the phasing in of the assumption change, the combined result is a 1.93 percent increase in the total required Employer contribution rate (from 17.77 percent to 19.70 percent of payroll). The most significant factor causing the increase was the assumption changes adopted effective June 30, 2016, which resulted in a 2.87 percent increase in the employer contribution rate while the recognition of asset losses from the current year resulted in a 0.54 percent increase with all other factors accounting for a 0.03 percent increase. This was partially offset by the deferred recognition of a portion of the assumption change which caused a 1.51 percent decrease.

Los Angeles County, including its affiliated Superior Court and the Outside Districts, paid their employer and employee contributions due to LACERA in the form of cash payments. The Superior Court fully utilized its proportionate share of the County Contribution Credit reserve totaling \$21.9 million to pay for the ten months of its employer contributions due LACERA. For the fiscal years ended June 30, 2017 and June 30, 2016, employer contributions totaled \$1.33 billion and \$1.40 billion, respectively, and employee contributions totaled \$527 million and \$498 million, respectively.

#### **Pension Plan Contributions**

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

ollars in Thousands)	2017	2016
Employer Contributions		
Los Angeles County	\$1,300,709	\$1,349,937
Superior Court <sup>1</sup>	30,547	53,647
Local Agency Formation Commission	84	106
South Coast Air Quality Management District	11	13
Little Lake Cemetery District	6	6
Los Angeles County Office of Education <sup>2</sup>	_	
Total Employer Contributions	1,331,357	1,403,709
Non-Employer Contributing Entity		
Metropolitan Transportation Authority <sup>3</sup>	2	3
Total Employer and Non-Employer Contributions	1,331,359	1,403,712
Employee Contributions	526,579	498,083
Total Contributions	\$1,857,938	\$1,901,795

<sup>1</sup> For the year ended June 30, 2017, additional employer contributions in the amount of \$21.9 million were book transfers from the County Contribution Credit Reserve.

<sup>2</sup> Los Angeles County Office of Education has no participants contributing to the Pension Plan for the fiscal years ended 2017 and 2016.

<sup>3</sup> Contributions received on behalf of LACERA members' participation in the Metropolitan Transportation Authority's (MTA) governing board meetings.

#### **NOTE D** — Pension Plan Reserves

LACERA includes accounts within the Net Position Restricted for Benefits as reserve accounts for various operating purposes as outlined in LACERA's reserves accounting policies. With the exception of the reserves required by CERL §31592, reserves are neither required nor recognized under accounting principles generally accepted in the United States of America (i.e., GAAP). These are not shown separately on the Statement of Fiduciary Net Position, as the sum of these reserves equals the Net Position Restricted for Benefits. Reserves are established from member and employer contributions and the accumulation of realized investment income after satisfying investment and administrative expenses. The reserves do not represent the present value of assets needed, as determined by actuarial valuation, to satisfy retirement and other benefits as they become due.

#### **Pension Plan**

LACERA's major classes of reserves:

**Member Reserves** represent the balance of member contributions. Additions include member contributions and related earnings. Deductions include annuity payments to retirees, refunds to members, and related expenses.

**Employer Reserves** represent the balance of employer contributions for future retirement payments to current active members. Additions include contributions from employers and related earnings. Deductions include annuity payments to retired members, lump-sum death/burial benefit payments to members' survivors, and supplemental disability payments.

#### **County Contribution Credit Reserve (CCCR)**

was created pursuant to the 1994 Retirement System Funding Agreement between LACERA and the County. Seventy-five percent (75%) of excess earnings in fiscal years 1995-1999 were credited into the CCCR. Deductions include payments, as the County or Court authorizes, for current and future employer contributions due to LACERA. For the fiscal year ended June 30, 2017, the Court used its proportionate share as payment for its current employer contributions, depleting the CCCR, which then had no remaining balance.

#### **Supplemental Targeted Adjustment for Retirees**

(STAR) Reserve represents the balance of transfers from the Contingency Reserve for future supplemental cost-of-living adjustment (COLA) increases. Twenty-five percent (25%) of excess earnings in fiscal years 1995-1999 were credited to the STAR Reserve pursuant to the 1994 Retirement System Funding Agreement between LACERA and the County. Additions include transfers from the Contingency Reserve. Deductions include STAR Program payments to retirees and funding for permanent benefits. Except for Program Years 2005 and 2010 through 2016, the Board of Retirement made permanent the 2001 through 2009 STAR Programs at an 80 percent level, as authorized in the County Employees Retirement Law of 1937 (CERL). There were no new retirees or beneficiaries entitled to additional STAR benefits for Program Years 2005 and 2010 through 2016 due to the modest Consumer Price Index (CPI) percentage increase. Thus, all eligible members had COLA Accumulation accounts below the 20 percent threshold for providing STAR benefits.

Future ad hoc increases in the current STAR Program will be subject to approval by the Board of Retirement on an annual basis, provided sufficient excess earnings are available as determined by the Board of Investments. Permanent STAR benefits become part of the member's retirement allowance and are payable for life. Ad hoc STAR benefits are payable only for the calendar year approved.

**Contingency Reserve** represents reserves accumulated for future earning deficiencies, investment losses, and other contingencies. Additions include realized investment income and other revenues. Deductions include investment expenses; administrative expenses; interest allocated to other reserves, in priority order, to the extent that realized earnings are available for the six-month period, as defined in the 2009 Retirement Benefit Funding Policy (Funding Policy) amended in 2013, approved by the LACERA Board of Investments; and funding of the STAR Reserve when excess earnings are available and authorized by the LACERA Board of Retirement. For the fiscal years ended June 30, 2017 and 2016, the net investment earnings were applied to credit interest to some of the reserves in accordance with the Funding Policy, leaving no balance in the Contingency Reserve.

#### **Pension Plan Reserves**

As of June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Member Reserves	\$20,380,431	\$19,346,808
Employer Reserves	21,086,809	20,802,531
County Contribution Credit Reserve	_	21,891
STAR Reserve	614,011	614,011
Contingency Reserve	—	-
Total Reserves at Book Value	42,081,251	40,785,241
Unrealized Investment Portfolio Appreciation	10,662,400	7,061,453
Total Reserves at Fair Value	\$52,743,651	\$47,846,694

#### NOTE E — Pension Plan Liabilities

The County Employees Retirement Law of 1937 (CERL) requires an actuarial valuation to be performed at least every three years for the purpose of measuring the Pension Plan's funding progress and setting contribution rates. LACERA exceeds this requirement by engaging an independent actuarial consulting firm to perform an actuarial valuation for the Pension Plan annually. Employer contribution rates may be updated each year as a result of the valuation.

Actuarial standards guide the frequency with which an investigation of experience (experience study) is performed. LACERA engages an independent actuarial consulting firm to perform the experience study at least every three years. The economic and demographic assumptions are reviewed and updated as required each time an experience study is completed. The experience study and corresponding annual valuation serve as the basis for changes in employer and member contribution rates necessary to properly fund the Pension Plan.

The LACERA Board of Investments adopted new assumptions beginning with the June 30, 2013 and June 30, 2016 actuarial valuations, based on the results of the 2013 and 2016 triennial experience studies. The most recent changes in assumptions occurred in December 2016 when the LACERA Board

of Investments adopted decreases in the investment return, price inflation, and a corresponding reduction in the wage inflation assumptions.

Actuarial Assumptions. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of the occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the substantive Pension Plan and include the types of benefits provided at the time of each valuation.

The Total Pension Liability at June 30, 2017, was determined by completing a projected-forward calculation based on an actuarial valuation conducted as of June 30, 2016, using the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB Statement No. 67. All actuarial methods and assumptions used for this GASB analysis were the same as those used for the June 30, 2016 funding valuation, except where differences are noted. Key methods and assumptions used to calculate the Total Pension Liability are presented as follows.

# **Actuarial Methods and Significant Assumptions**

Description	Method
Actuarial Cost Method	Individual Entry Age Normal*
Discount Rate	7.38 percent, net of pension plan investment expense, including inflation. This rate was adopted beginning with the June 30, 2016 valuation. Prior assumption applied was 7.63 percent.
Price Inflation	2.75 percent. This rate was adopted beginning with the June 30, 2016 valuation. Prior assumption applied was 3.00 percent.
General Wage Growth	General wage growth: 3.25 percent.
And Projected Salary Increases	This rate was adopted beginning with the June 30, 2016 valuation. Prior assumption applied was 3.50 percent.
	Projected salary increases: 3.51 percent to 11.51 percent.
	The total expected increase in salary includes both merit and the general wage increase assumption of 3.25 percent per annum. The total result is compounded rather than additive. Increases are assumed to occur mid-year (i.e., January 1) and apply only to base salary. The mid-year timing reflects that salary increases occur throughout the year, or on average mid-year.
	These rates were adopted beginning with the June 30, 2016 valuation. Prior assumptions applied were 3.76 percent to 11.78 percent.
Cost-of-Living Adjustments	Post-retirement benefit increases of either 2.75 percent or 2.0 percent per year (a pro-rata portion for Plan E) are assumed.
	This assumption was adopted with the June 30, 2016 valuation. Prior assumptions applied were 3.00 percent and 2.00 percent per year (a pro-rata portion for Plan E). The LACERA Funding Policy calls for the inclusion of the STAR (Supplemental Targeted Adjustment for Retirees) Reserve in the calculation of valuation assets for funding purposes, with no corresponding liability. For the Total Pension Liability, STAR COLA (Cost-of- Living Adjustments) benefits are assumed to be substantively automatic at the 80 percent purchasing power level until the STAR Reserve is projected to be insufficient to pay further STAR benefits. This roll-forward calculation includes a future liability for STAR COLA benefits.
Mortality	Various rates based on the RP-2014 Healthy and Disabled Annuitant mortality tables and including projection for expected future mortality improvement using the MP-2014 Ultimate Projection Scale.
	This assumption was adopted with the June 30, 2016 valuation report. Prior assumption was RP-2000 Combined Mortality Tables for Males and Females, projected to 2025 using Projection Scale AA, with various age set backs depending upon Plan type.

 $\ast$  Differs slightly from actuarial valuation for groups in existence less than five years.

#### **Cost-Of-Living Adjustments (COLA)**

Each year, the Board of Retirement considers how the change in the cost of living, a measure of inflation, has affected the purchasing power of monthly allowances paid by LACERA. Cost of living is measured by the Bureau of Labor Statistics, which releases the Consumer Price Index (CPI) for all Urban Consumers in the Los Angeles-Anaheim-Riverside area as of January 1 each year. The difference in the current and previous year's CPI shows whether the cost of living has increased or decreased in this geographic region during the past year.

If the CPI has increased, the Board of Retirement grants a cost-of-living adjustment (COLA) increase for monthly allowances. If the CPI has decreased, it is possible for the Board of Retirement to decrease monthly allowances; however, a decrease in allowances has never occurred. In any event, a cost-of-living decrease could not reduce a member's allowance to an amount less than the allowance received at the time of retirement.

LACERA members may receive more than one type of COLA:

## COLA ("April 1st COLA")

The COLA percentage increase is effective annually on April 1. Members who retire prior to April 1, or eligible survivors of members who died prior to April 1, are eligible for that year's COLA increase. The increase begins with the April 30 monthly allowance. The COLA provision was added to CERL in 1966, and LACERA's first COLA increase was granted July 1, 1967. Until 2002, only contributory members were eligible for COLA.

#### Plan E COLA

Effective June 4, 2002, Plan E members and their survivors are also eligible for a COLA. The portion of the COLA percentage received by each Plan E member is a ratio of the member's service credit earned on and after June 4, 2002, to total service credit. The portion of the full 2.0 percent increase not provided for may be purchased by the member.

# Supplemental Targeted Adjustment for Retirees (STAR) Program

The STAR percentage increase is effective annually on January 1. The STAR Program is designed to keep the purchasing power of monthly allowances no more than 20 percent behind accumulated cost-of-living adjustments based on the CPI (in other words, to restore at least 80 percent of the original value of the monthly allowance). STAR applies to contributory plans only. Retirees and survivors whose allowances have lost more than 20 percent of their purchasing power are eligible for STAR. The STAR Program became effective January 1, 1990.

#### **Discount Rate**

The long-term expected rate of return was determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. Milliman's December 2016 Investigation of Experience analysis was used to develop the 7.38 percent assumption used for the current reporting date. This is equal to the 7.25 percent long-term investment return assumption adopted by the Board (net of investment and administrative expenses), plus 0.13 percent assumed administrative expenses.

For the fiscal year ended June 30, 2016, the long-term expected rate of return was 7.63 percent, calculated using a 7.50 percent long-term investment return assumption (net of investment and administrative expenses), plus 0.13 percent assumed administrative expenses.

The plan's projected Fiduciary Net Position, after reflecting employee and employer made contributions, was expected to be sufficient to make all future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the Total Pension Liability is equal to the long-term expected rate of return, gross of administrative expenses.

#### **Other Key Assumptions**

Other key actuarial assumptions used to calculate the Total Pension Liability as of the June 30, 2017 measurement date are the same as used to determine the June 30, 2016 actuarial funding valuation. For the determination of the Total Pension Liability as of the June 30, 2016 measurement date, other key actuarial assumptions were the same as used in the June 30, 2015 actuarial funding valuation.

## **Net Pension Liability**

GASB Statement No. 67 requires public pension plans to provide the calculation of a Net Pension Liability. The Net Pension Liability is measured as the Total Pension Liability less the amount of the Pension Plan's Fiduciary Net Position.

The Net Pension Liability is an accounting measurement for financial statement reporting purposes. The funded status of the Plan is calculated separately by the consulting actuary and the results of which are included in the actuarial valuation report. The components of LACERA's (the Pension Plan's) Net Pension Liability at June 30, 2017 and June 30, 2016, were as follows:

## **Schedule of Net Pension Liability**

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Total Pension Liability	\$64,031,677	\$58,528,457
Less: Fiduciary Net Position	(52,743,651)	(47,846,694)
Net Pension Liability	\$11,288,026	\$10,681,763
Fiduciary Net Position as a Percentage of Total Pension Liability	82.37%	81.75%

#### **Sensitivity Analysis**

In accordance with GASB 67, sensitivity of the Net Pension Liability to changes in the discount rate must be reported. The following presents the Net Pension Liability, calculated for the year ended June 30, 2017 using the discount rate of 7.38 percent, as well as what the Net Pension Liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.38 percent) or 1 percentage point higher (8.38 percent) than the current rate (7.38 percent). A corresponding calculation is presented for the year ended June 30, 2016 based on the discount rate in effect for that year:

## **Sensitivity Analysis**

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	2017			2016			
	1% Decrease [6.38%]	Current Discount Rate [7.38%]	1% Increase [8.38%]	1% Decrease [6.63%]	Current Discount Rate [7.63%]	1% Increase [8.63%]	
Total Pension Liability	\$72,707,046	\$64,031,677	\$56,859,822	\$65,996,381	\$58,528,457	\$52,283,508	
Less: Fiduciary Net Position	(52,743,651)	(52,743,651)	(52,743,651)	(47,846,694)	(47,846,694)	(47,846,694)	
Net Pension Liability	\$19,963,395	\$11,288,026	\$4,116,171	\$18,149,687	\$10,681,763	\$4,436,814	

## NOTE F — Partial Annuitization of Benefit Payments

In January 1987, LACERA entered into agreements to purchase single life annuities from two insurance carriers to provide pension benefit payments to a portion of the retired members. Under the terms of the agreements, LACERA continues to administer all pension benefit payments to covered members. There is no effect on covered members, since they retain all pension benefits accorded to other LACERA members, including rights to continuance of benefits to survivors, health insurance subsidies, and COLA. The values of the annuities are entirely allocated to covered members. The monthly annuity reimbursement from the carriers is limited to the straight life annuity payments and statutory COLA increases.

LACERA is responsible for any difference in pension benefit payments payable to covered members who are unreimbursed by the insurance carriers. The reimbursements received are netted with the pension and annuity payments in LACERA's financial statements. During the fiscal year ended June 30, 2017, LACERA paid \$17.1 million to covered members and received \$14.1 million in related reimbursements. During the fiscal year ended June 30, 2016, LACERA paid \$19.3 million to covered members and received \$15.9 million in related reimbursements. As the monthly annuity reimbursement from carriers is allocated to covered members, the fair value of contracts were excluded from Pension Plan assets and actuarially determined information.

## NOTE G — Deposit and Investment Risks

The County Employees Retirement Law of 1937 (CERL) vests the Board of Investments with exclusive control over LACERA's investment portfolio. The Board of Investments established Investment Policy Statements for the management of the LACERA defined benefit retirement plan (Pension Plan) and the LACERA Other Post-Employment Benefit Trust Fund (OPEB Trust). Board of Investments members exercise authority and control over the management of LACERA's Net Position Restricted for Benefits by setting a policy that the Investments staff executes either internally or through the use of prudent external experts.

The Investment Policy Statement encompasses the following:

- U.S. Equity Investment Policy
- Non-U.S. Equity Investment Policy
- Private Equity Investment Policy
- Fixed Income Investment Policy
- Cash and Cash Equivalents Investment Policy
- Real Estate Investment Policy
- Commodities Investment Policy
- Corporate Governance Policy and Principles
- Derivatives Investment Policy
- Emerging Manager Policy
- Manager Monitoring and Review Policy
- Securities Lending Policy
- Placement Agent Policy
- Hedge Fund Policy

## **Credit Risk**

Credit Risk is the risk that an issuer or a counterparty to an investment transaction will not fulfill its obligations and that the investment will default on its payments or lose value. LACERA seeks to maintain a diversified portfolio of fixed income instruments in order to obtain the highest total return for the Pension Plan at an acceptable level of risk within this asset class. To control Credit Risk, credit quality guidelines have been established.

The majority of the Core, Core Plus, and High Yield portfolios use the following guidelines in terms of credit quality.

# Domestic Fixed Income Core and Core Plus Portfolios

A minimum of 80 percent and 70 percent of Core and Core Plus portfolios, respectively, must be invested in securities rated investment-grade by the major credit rating agencies: Moody's Investors Service (Moody's), Standard & Poor's (S&P), and Fitch Ratings (Fitch).

In addition:

- Money market instruments must be rated at least A-2/P-2 or equivalent by at least one major credit rating agency.
- All rated securities, including Rule 144A securities, must be rated at least B- by S&P or equivalent by at least one major credit rating agency at the time of purchase.
- Unrated issues may be purchased provided, in the judgment of the Investment Manager, they would not violate LACERA's minimum credit quality criteria.
- Unrated issues and securities rated BBB+, BBB, or BBB- by S&P or equivalent, in combination, may represent up to 30 percent of the portfolio.

## Domestic High-Yield Fixed Income Portfolios

By definition, high-yield bonds are securities rated below investment grade. Therefore, the majority of bonds in the high-yield portfolios are rated below investment grade by at least one of the major credit rating agencies: Moody's, S&P, and Fitch.

In addition:

- Money market instruments must be rated at least A-2/P-2 or equivalent by at least one major credit rating agency.
- At least 95 percent of all rated securities, including Rule 144A securities, must be rated at least B- by S&P or equivalent by at least one major credit rating agency at the time of purchase.
- Consistent with the preceding requirement, a maximum of 5 percent of the portfolio may be invested in issues rated below B- by S&P or equivalent; however, these issues must be rated at least CCC by S&P or Caa by Moody's.

• Unrated issues may be purchased, provided that in the judgment of the Investment Manager, they would not violate LACERA's minimum credit criteria.

LACERA's Opportunistic Credit portfolios allow for the assumption of more credit risk than other fixed income portfolios by investing in securities that include unrated

bonds, bonds rated below investment grade issued by corporations undergoing financial stress or distress, junior tranches of structured securities backed by residential and commercial mortgages, and bank loans. LACERA utilizes specific investment guidelines for these portfolios that limit maximum exposure by issuer, industry, and sector, which result in well-diversified portfolios.

The following is a schedule for the year ended June 30, 2017 of the credit quality ratings by Moody's, a nationally recognized statistical rating organization, of investments in fixed income securities. Whole loan mortgages included in the Pension Plan portfolio of \$36 million are excluded from this presentation.

#### Credit Quality Ratings of Investments in Fixed Income Securities — Pension Plan

As of June 30, 2017 (Dollars in Thousands)

Quality Ratings	U.S. Treasuries	U.S. Govt. Agencies	Municipals	Corporate Debt/Credit Securities	Pooled Funds	Non-U.S. Fixed Income	Private Placement Fixed Income	Total	Percentage of Portfolio
Aaa	\$2,229,347	\$2,297,738	\$876	\$324,134	\$—	\$234	\$244,342	\$5,096,671	36%
Aa	_	_	29,547	226,205	315,536	1,073	61,115	633,476	4%
А	_	_	8,907	944,815	_	40,495	291,383	1,285,600	9%
Baa	_	2,533	21,681	1,514,842	14,883	5,679	365,703	1,925,321	14%
Ba	_	_	_	561,566	_	19,718	238,352	819,636	6%
В	_	_	88	631,948	30,962	12,889	383,030	1,058,917	8%
Caa	_	_	4,344	230,454	_	772	121,249	356,819	3%
Са	_	_	_	40,075	_	_	9,942	50,017	0%
С	_	_	1,129	270	_	_	329	1,728	0%
Not Rated	_	15,163	4,583	393,395	2,152,036	16,743	279,916	2,861,836	20%
Total	\$2,229,347	\$2,315,434	\$71,155	\$4,867,704	\$2,513,417	\$97,603	\$1,995,361	\$14,090,021	<b>100</b> %

The following is a schedule for the year ended June 30, 2016 of the credit quality ratings by Moody's, a nationally recognized statistical rating organization, of investments in fixed income securities. Whole loan mortgages included in the Pension Plan portfolio of \$50 million are excluded from this presentation.

#### Credit Quality Ratings of Investments in Fixed Income Securities — Pension Plan

As of June 30, 2016 (Dollars in Thousands)

							Private		
				Corporate		Non-U.S.	Placement		
Quality	U.S.	U.S. Govt.		Debt/Credit	Pooled	Fixed	Fixed		Percentage
Ratings	Treasuries	Agencies	Municipals	Securities	Funds	Income	Income	Total	of Portfolio
Aaa	\$2,265,868	\$2,296,958	\$1,344	\$495,730	\$—	\$13,853	\$280,314	\$5,354,067	39%
Aa	_	4,352	37,869	270,413	_	14,326	130,330	457,290	4%
А	—	22,180	13,950	831,368	_	37,867	288,756	1,194,121	9%
Baa	5,024	40,288	21,015	1,488,475	_	10,047	382,720	1,947,569	14%
Ва	4,995	6,972	_	555,508	_	12,891	282,590	862,956	6%
В	12,099	2,296	85	398,820	_	9,297	372,475	795,072	6%
Caa	_	61,657	6,812	192,345	_	_	143,894	404,708	3%
Са	_	1,957	_	14,987	_	_	679	17,623	0%
С	_	2,606	_	5,078	_	_	8,698	16,382	0%
Not Rated	-	19,046	5,672	408,075	2,077,539	22,112	53,510	2,585,954	19%
Total	\$2,287,986	\$ \$2,458,312	\$86,747	\$4,660,799	\$2,077,539	\$120,393	8 \$1,943,966	\$\$13,635,742	100%

## Credit Quality Ratings of Investments in Fixed Income Securities — OPEB Trust

As of June 30, 2017 (Dollars in Thousands)

Quality Ratings	U.S. Treasuries	Corporate Debt/ Credit Securities	Total	Percentage of Portfolio
Ааа	\$9,001	\$8,028	\$17,029	32%
Аа	_	7,268	7,268	13%
А	_	30,026	30,026	55%
Total	\$9,001	\$45,322	\$54,323	100%

## Credit Quality Ratings of Investments in Fixed Income Securities — OPEB Trust

As of June 30, 2016

(Dollars in Thousands)

Quality Ratings	U.S. Treasuries	U.S. Govt. Agencies	Corporate Debt/ Credit Securities	Total	Percentage of Portfolio
Ааа	\$12,056	\$1,002	\$8,602	\$21,660	43%
Aa	_	_	8,806	8,806	18%
A	_	_	18,885	18,885	38%
Ваа	_	_	700	700	1%
Total	\$12,056	\$1,002	\$36,993	\$50,051	<b>100</b> %

## Credit Quality Ratings of Investments in Fixed Income Securities — OPEB Agency Fund

As of June 30, 2017 (Dollars in Thousands)

Quality	Co	Corporate Debt/Credit					
Ratings	U.S. Treasuries	Securities	Total	of Portfolio			
Ааа	\$41,585	\$7,183	\$48,768	63%			
Аа	_	8,264	8,264	11%			
A	_	19,593	19,593	26%			
Total	\$41,585	\$35,040	\$76,625	<b>100</b> %			

## Credit Quality Ratings of Investments in Fixed Income Securities — OPEB Agency Fund

As of June 30, 2016 (Dollars in Thousands)

Quality	Co	orporate Debt/Cred	it	Percentage
Ratings	U.S. Treasuries	Securities	Total	of Portfolio
Ааа	\$52,900	\$4,632	\$57,532	68%
Аа	_	6,024	6,024	7%
A	_	21,071	21,071	25%
Total	\$52,900	\$31,727	\$84,627	100%

## **Custodial Credit Risk**

LACERA's contract with its primary custodian State Street Bank and Trust (Bank) provides that the Bank may hold LACERA's securities registered in the Bank's or its agent's nominee name, in bearer form, in bookentry form, with a clearing house corporation, or with a depository, so long as the Bank's records clearly indicate that the securities are held in custody for LACERA's account. The Bank may also hold securities in custody in LACERA's name when required by LACERA. When held in custody by the Bank, the securities are not at risk of loss in the event of the Bank's financial failure, because the securities are not property (assets) of the Bank. Cash invested overnight in the Bank's depository accounts is subject to the risk that in the event of the Bank's failure, LACERA might not recover all or some of those overnight deposits. This risk is mitigated when the overnight deposits are insured or collateralized.

LACERA's policy as incorporated in its current contract with the Bank requires the Bank to certify it has taken all steps to assure all LACERA monies on deposit with the Bank are eligible for and covered by "pass-through insurance," in accordance with applicable law and FDIC rules and regulations. The steps taken by the Bank include paying deposit insurance premiums when due, maintaining a "prompt corrective action" capital category of "well capitalized," and identifying on the Bank's records that it acts as a fiduciary for LACERA with respect to the monies on deposit. In addition, the Bank is required to provide evidence of insurance and to maintain a Financial Institution Bond, which would cover the loss of money and securities with respect to any and all property the Bank or its agents hold in or for LACERA's account, up to the amount of the bond. To implement certain investment strategies in a cost-effective manner, some of LACERA's assets are invested in investment managers' pooled vehicles. The securities in these vehicles may be held by a different custodian.

## **Counterparty Risk**

Counterparty Risk for investments is the risk that, in the event of the failure of the counterparty to complete a transaction, LACERA would not be able to recover the value of the investment or collateral securities that are in the possession of an outside party.

## **Concentration of Credit Risk**

No more than 5 percent of the Core, Core Plus, or High-Yield portfolios may be invested in securities of a single issuer, except: U.S. Treasury securities, governmentguaranteed debt (including G-7 countries), agency debt, agency mortgage-backed securities, and approved commingled funds.

As of June 30, 2017, LACERA did not hold any investments in any one issuer that would represent 5 percent or more of the Pension Plan Fiduciary Net Position. Investments issued or explicitly guaranteed by the U.S. government and pooled investments are excluded from this requirement.

## **Interest Rate Risk**

Interest Rate Risk is the risk that the changes in interest rates will adversely affect the fair value of an investment. Duration is a measure of the price sensitivity of a fixed income portfolio to changes in interest rates. It is calculated as the weighted average time to receive a bond's coupon and principal payments. The longer the duration of a portfolio, the greater its price sensitivity to changes in interest rates. To manage Interest Rate Risk, the modified adjusted duration of the Domestic Fixed Income Core, Core Plus, and High-Yield portfolios is restricted to +/- 25.0 percent of the duration of the portfolios' respective benchmarks. Deviations from any of the stated guidelines require prior written authorization from LACERA.

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The Duration in Fixed Income Securities – Pension Plan schedule for the year ended June 30, 2017 presents the duration by investment type. Whole loan mortgages included in the Pension Plan portfolio of \$36 million are excluded from this presentation.

#### **Duration in Fixed Income Securities — Pension Plan**

As of June 30, 2017 (Dollars in Thousands)

		Portfolio-Weighted
Investment	Fair	Average Effective
Туре	Value	Duration*
U.S. Treasury, U.S. Government Agency, and Municipal Instruments:		
U.S. Treasury	\$2,229,347	7.74
U.S. Government Agency	2,315,434	2.89
Municipal/Revenue Bonds	71,155	7.92
Subtotal U.S. Treasury, U.S. Government Agency, and		
Municipal Instruments	\$4,615,936	
Corporate Bonds and Credit Securities:		
Asset-Backed Securities	\$387,503	0.73
Commercial Mortgage-Backed Securities	373,618	2.92
Corporate and Other Credit	4,100,817	4.20
Fixed Income Swaps	5,766	N/A
Pooled Investments	2,513,417	N/A
Subtotal Corporate Bonds and Credit Securities	\$7,381,121	
Non-U.S. Fixed Income	\$97,603	5.07
Private Placement Fixed Income	1,995,361	3.61
Subtotal Non-U.S. and Private Placement Securities	\$2,092,964	
Total Fixed Income Securities	\$14,090,021	

\*Effective Duration is a measure of a bond's sensitivity to interest rates. It is calculated as the percentage change in a bond's price caused by a change in the bond's yield. For example, a modified duration of 5 indicates that a 1 percent increase in a bond's yield will cause the bond price to decline 5 percent. The Duration in Fixed Income Securities – Pension Plan schedule for the year ended June 30, 2016 presents the duration by investment type. Whole loan mortgages included in the Pension Plan portfolio of \$50 million are excluded from this presentation.

#### **Duration in Fixed Income Securities — Pension Plan**

As of June 30, 2016 (Dollars in Thousands)

		Portfolio-Weighted
Investment	Fair	<b>Average Effective</b>
Туре	Value	Duration*
U.S. Treasury, U.S. Government Agency, and Municipal Instruments:		
U.S. Treasury	\$2,287,986	7.96
U.S. Government Agency	2,458,312	2.12
Municipal/Revenue Bonds	86,747	9.86
Subtotal U.S. Treasury, U.S. Government Agency, and		
Municipal Instruments	\$4,833,045	
Corporate Bonds and Credit Securities:		
Asset-Backed Securities	\$347,688	1.32
Commercial Mortgage-Backed Securities	431,451	1.92
Corporate and Other Credit	3,929,560	4.88
Fixed Income Swaps	(47,900)	N/A
Pooled Investments	2,077,539	N/A
Subtotal Corporate Bonds and Credit Securities	\$6,738,338	
Non-U.S. Fixed Income	\$120,393	4.51
Private Placement Fixed Income	1,943,966	4.10
Subtotal Non-U.S. and Private Placement Securities	\$2,064,359	
Total Fixed Income Securities	\$13,635,742	

\*Effective Duration is a measure of a bond's sensitivity to interest rates. It is calculated as the percentage change in a bond's price caused by a change in the bond's yield. For example, a modified duration of 5 indicates that a 1 percent increase in a bond's yield will cause the bond price to decline 5 percent.

#### **Duration in Fixed Income Securities — OPEB Trust**

As of June 30, 2017 (Dollars in Thousands)

Investment Type	Fair Value	Portfolio-Weighted Average Effective Duration*
U.S. Treasury and U.S. Government Agency Instruments:		
U.S. Treasury	\$9,001	0.59
Subtotal U.S. Treasury and U.S. Government Agency Instruments	\$9,001	
Corporate Bonds and Credit Securities:		
Asset-Backed Securities	\$5,755	0.19
Corporate and Other Credit	39,567	0.49
Subtotal Corporate Bonds and Credit Securities	\$45,322	
Total Fixed Income Securities	\$54,323	

\*Effective Duration is a measure of a bond's sensitivity to interest rates. It is calculated as the percentage change in a bond's price caused by a change in the bond's yield. For example, a modified duration of 5 indicates that a 1 percent increase in a bond's yield will cause the bond price to decline 5 percent.

## **Duration in Fixed Income Securities — OPEB Trust**

As of June 30, 2016 (Dollars in Thousands)

Investment Type	Fair Value	Portfolio-Weighted Average Effective Duration*
U.S. Treasury and U.S. Government Agency Instruments:		
U.S. Treasury	\$12,056	0.84
U.S. Government Agency	1,002	0.64
Subtotal U.S. Treasury and U.S. Government Agency Instruments	\$13,058	
Corporate Bonds and Credit Securities:		
Asset-Backed Securities	\$6,609	0.23
Corporate and Other Credit	30,384	0.71
Subtotal Corporate Bonds and Credit Securities	\$36,993	
Total Fixed Income Securities	\$50,051	

\*Effective Duration is a measure of a bond's sensitivity to interest rates. It is calculated as the percentage change in a bond's price caused by a change in the bond's yield. For example, a modified duration of 5 indicates that a 1 percent increase in a bond's yield will cause the bond price to decline 5 percent.

#### **Duration in Fixed Income Securities — OPEB Agency Fund**

As of June 30, 2017

(Dollars in Thousands)

Fair Value	Portfolio-Weighted Average Effective Duration*
\$41,585	2.18
6,562	1.57
28,478	1.73
\$35,040	
\$76,625	
	Value \$41,585 6,562 28,478 \$35,040

\*Effective Duration is a measure of a bond's sensitivity to interest rates. It is calculated as the percentage change in a bond's price caused by a change in the bond's yield. For example, a modified duration of 5 indicates that a 1 percent increase in a bond's yield will cause the bond price to decline 5 percent.

#### **Duration in Fixed Income Securities — OPEB Agency Fund**

## As of June 30, 2016

(Dollars in Thousands)

Investment Type	Fair Value	Portfolio-Weighted Average Effective Duration*
U.S. Treasury	\$52,900	2.12
Corporate Bonds and Credit Securities:		
Asset-Backed Securities	4,001	1.26
Corporate and Other Credit	27,726	1.66
Subtotal Corporate Bonds and Credit Securities	\$31,727	
Total Fixed Income Securities	\$84,627	

\*Effective Duration is a measure of a bond's sensitivity to interest rates. It is calculated as the percentage change in a bond's price caused by a change in the bond's yield. For example, a modified duration of 5 indicates that a 1 percent increase in a bond's yield will cause the bond price to decline 5 percent.

## **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. LACERA's authorized managers are permitted to invest in approved countries or regions, as stated in their respective investment guidelines. To mitigate Foreign Currency Risk, LACERA has implemented a passive currency hedging program, which hedges into U.S. dollars approximately 50 percent of LACERA's foreign currency exposure for developed market equities. The following schedule represents LACERA's exposure to Foreign Currency Risk in U.S. dollars. LACERA is invested in several non-U.S. commingled funds. This means LACERA owns units of commingled funds, and the fund holds actual securities and/or currencies. The values shown include LACERA's pro rata portion of non-U.S. commingled fund holdings.

## Non-U.S. Holdings at Fair Value — Pension Plan

As of June 30, 2017

Currency	Equity	Fixed Income	Foreign Currency	Real Estate Commingled Funds	Private Equity Investments	Forward Contracts	Total
AFRICA							
CFA Franc (W. African)	\$1,151	\$—	\$—	\$—	\$—	\$—	\$1,151
Ghana New Cedi	1,914	_	_	—	_	_	1,914
GSC	26	_	_	_	_	_	26
Kenyan Shilling	3,024	_	_	_	_	_	3,024
Moroccan Dirham	3,086	—	—	—	—	—	3,086
Nigerian Naira	10,639	_	—	—	—	—	10,639
South African Rand	212,212	_	772	—	—	—	212,984
Tunisian Dinar	1,409	_	_	_	—	—	1,409
AMERICAS							
Argentine Peso	204	_	_	—	_	(5,253)	(5,049)
Bermudan Dollar	9,354	_	_	—	—	—	9,354
Brazilian Real	166,376	_	40	—	_	_	166,416
Canadian Dollar	899,858	581	360	_	_	(14,912)	885,887
Chilean Peso	22,608	_	_	_	_	_	22,608
Columbian Peso	9,196	_	_	_	_	_	9,196
Mexican Peso	109,196	40,436	1,783	_	_	(60)	151,355
Peruvian New Sol	15,769	_	_	_	_	_	15,769
Uruguayan Peso	_	1,139	_	—	—	_	1,139
ASIA							
Australian Dollar	576,788	_	3,731	_	_	_	580,519
Chinese Renminbi	65,469	_	_	_	_	_	65,469
Hong Kong Dollar	980,759	_	9,976	_	_	685	991,420
Indian Rupee	316,121	_	_	_	_	_	316,121
Indonesian Rupiah	57,956	_	19	_	_	_	57,975
Japanese Yen	2,049,184	1,350	1,976	_	_	21,625	2,074,135
Malaysian Ringgit	56,348	_	112	_	_	_	56,460
New Taiwan Dollar	302,870	_	1,565	_	_	_	304,435
New Zealand Dollar	20,153	234	355	_	_	(626)	20,116
Pakistan Rupee	2,874	_	_	_	_	_	2,874
Philippine Peso	26,606	_	_	_	_	_	26,606
Singapore Dollar	164,277	_	5,104	_	_	(790)	168,591
South Korean Won	469,837	_	38	_	_	_	469,875
Thai Baht	84,470	_	10	_	_	_	84,480
Vietnamese Dong	23,553	_	_	_	_	-	23,553

# Non-U.S. Holdings at Fair Value continued — Pension Plan

As of June 30, 2017

		Fixed	Foreign	Real Estate Commingled	Private Equity	Forward	
Currency	Equity	Income	Currency	Funds	Investments	Contracts	Total
EUROPE							
British Pound Sterling	1,729,802	11,224	4,924	2,020	22,057	(16,314)	1,753,713
Czech Republic Koruna	2,208	_	—	—	_	_	2,208
Danish Krone	189,600	892	37	—	_	(3,050)	187,479
Euro	2,860,597	36,109	13,170	180,545	262,137	(52,238)	3,300,320
Hungarian Forint	9,252	_	—	—	_	_	9,252
Norwegian Krone	68,322	—	90	—	_	(482)	67,930
Polish Zloty	33,480	—	—	—	_	—	33,480
Romanian New Leu	5,945	_	_	_	_	_	5,945
Russian Ruble	95,323	5,638	402	_	_	_	101,363
Swedish Krona	321,249	_	_	_	_	(6,805)	314,444
Swiss Franc	720,515	_	33	—	_	(9,267)	711,281
MIDDLE EAST							
Egyptian Pound	4,543	_	_	_	_	_	4,543
Israeli New Shekel	62,533	_	18	_	_	(678)	61,873
Lebanese Pound	1,062	_	_	_	_	_	1,062
Qatari Rial	10,605	_	31	_	_	_	10,636
Turkish Lira	70,687	_	2	_	_	_	70,689
UAE Dirham	11,511	_	_	_	_	_	11,511
Total Holdings							
Subject to Foreign							
Currency Risk	\$12,860,521	\$97,603	\$44,548	\$182,565	\$284,194	\$(88,165)	\$13,381,266

## Non-U.S. Holdings at Fair Value — Pension Plan

As of June 30, 2016

Currency	Equity	Fixed Income	Foreign Currency	Real Estate Commingled Funds	Private Equity Investments	Forward Contracts	Total
AFRICA							
CFA Franc (W. African)	\$1,762	\$—	\$—	\$—	\$—	\$—	\$1,762
Ghana New Cedi	1,322	_	_	_	_	_	1,322
Kenyan Shilling	4,086	_	_	_	_	_	4,086
Moroccan Dirham	1,475	_	_	—	—	_	1,475
Nigerian Naira	7,618	_	_	_	_	_	7,618
South African Rand	134,740	_	3	_	_	_	134,743
Tunisian Dinar	1,204	_	_	_	_	_	1,204
AMERICAS							
Argentine Peso	1,683	_	_	—	_	_	1,683
Bermudan Dollar	6,485	_	_	_	_	_	6,485
Brazilian Real	127,828	_	243	_	_	(22)	128,049
Canadian Dollar	806,651	4,613	132	_	_	1,875	813,271
Chilean Peso	14,642	_	_	_	_	_	14,642
Colombian Peso	6,535	_	_	_	_	_	6,535
Mexican Peso	83,404	32,378	1,062	_	_	115	116,959
Peruvian New Sol	15,452	_	_	_	_	_	15,452
ASIA							
Australian Dollar	511,096	6,139	385	_	_	7,960	525,580
Chinese Renminbi	43,557	_	_	_	_	52	43,609
Hong Kong Dollar	693,132	_	3,192	_	_	24	696,348
Indian Rupee	227,495	_	_	_	_	_	227,495
Indonesian Rupiah	34,143	_	17	_	_	_	34,160
Japanese Yen	1,675,178	9,683	2,961	_	_	(76,039)	1,611,783
Malaysian Ringgit	42,585	_	27	_	_	_	42,612
New Taiwan Dollar	199,933	_	_	_	_	_	199,933
New Zealand Dollar	20,657	6,345	4	_	_	(580)	26,426
Philippine Peso	25,731	5,386	_	_	_	_	31,117
Singapore Dollar	160,730		3,677	_	_	(378)	164,029
South Korean Won	301,497	_	191	_	_	<u> </u>	301,688
Sri Lankan Rupee	235	_		_	_	_	235
Thai Baht	62,668	_	1	_	_	_	62,669
Vietnamese Dong	2,339	_	_	_	_	_	2,339

# Non-U.S. Holdings at Fair Value continued — Pension Plan

As of June 30, 2016

_		Fixed	Foreign	Real Estate Commingled	Private Equity	Forward	
Currency	Equity	Income	Currency	Funds	Investments	Contracts	Total
EUROPE							
British Pound Sterling	1,539,934	12,893	2,856	2,142	29,018	51,152	1,637,995
Czech Republic Koruna	1,778	_	_	_	_	_	1,778
Danish Krone	155,126	6,965	_	_	_	1,029	163,120
Euro	2,331,488	31,991	3,831	174,171	271,582	14,945	2,828,008
Hungarian Forint	4,829	_	_	_	_	_	4,829
Norwegian Krone	56,165	_	84	_	_	423	56,672
Polish Zloty	15,192	_	_	_	_	_	15,192
Romanian New Leu	2,781	_	_	_	_	_	2,781
Russian Ruble	72,149	4,000	_	_	_	_	76,149
Swedish Krona	260,449	_	_	_	_	4,679	265,128
Swiss Franc	654,188	_	_	_	_	(935)	653,253
MIDDLE EAST							
Egyptian Pound	4,870	_	_	_	_	_	4,870
Israeli New Shekel	47,466	_	_	_	_	448	47,914
Qatari Rial	9,014	_	31	_	_	_	9,045
Saudi Riyal	3,635	_	_	_	_	_	3,635
Turkish Lira	52,263	_	7	_	_	_	52,270
UAE Dirham	7,599	_	_	_	_	_	7,599
Total Holdings							
Subject to Foreign							
Currency Risk	\$10,434,789	\$120,393	\$18,704	\$176,313	\$300,600	\$4,748	\$11,055,547

## Non-U.S. Holdings at Fair Value — OPEB Trust

As of June 30, 2017 (Dollars in Thousands)

Currency	Equity
AFRICA	
South African Rand	\$4,374
AMERICAS	
Brazilian Real	4,314
Canadian Dollar	19,198
Chilean Peso	790
Colombian Peso	304
Mexican Peso	2,491
Peruvian New Sol	243
ASIA	
Australian Dollar	13,974
Chinese Renminbi	18,348
Hong Kong Dollar	6,805
Indian Rupee	6,501
Indonesian Rupiah	1,701
Japanese Yen	49,454
Malaysian Ringgit	1,701
New Taiwan Dollar	9,052
New Zealand Dollar	608
Pakistan Rupee	182
Philippine Peso	790
Singapore Dollar	2,734
South Korean Won	10,693
Thai Baht	1,458
EUROPE	
British Pound Sterling	36,028
Czech Republic Koruna	122
Danish Krone	3,645
Euro	63,549
Hungarian Forint	182
Norwegian Krone	1,519
Polish Zloty	911
Russian Ruble	1,944
Swedish Krona	6,683
Swiss Franc	16,221

Currency	Equity					
MIDDLE EAST						
Egyptian Pound	122					
Israeli New Shekel	1,640					
Qatari Rial	486					
Turkish Lira	790					
UAE Dirham	486					
Total Holdings						
Subject to Foreign						
Currency Risk \$290,043						

## Non-U.S. Holdings at Fair Value — OPEB Trust

As of June 30, 2016 (Dollars in Thousands)

Currency	Equity
AFRICA	
South African Rand	\$3,347
AMERICAS	
Brazilian Real	3,166
Canadian Dollar	14,654
Chilean Peso	588
Colombian Peso	226
Mexican Peso	1,900
Peruvian New Sol	181
ASIA	
Australian Dollar	10,539
Chinese Renminbi	12,031
Hong Kong Dollar	4,794
Indian Rupee	4,206
Indonesian Rupiah	1,266
Japanese Yen	36,410
Malaysian Ringgit	1,447
New Taiwan Dollar	6,106
New Zealand Dollar	498
Philippine Peso	724
Singapore Dollar	2,126
South Korean Won	7,327
Thai Baht	1,176
EUROPE	
British Pound Sterling	28,223
Czech Republic Koruna	91
Danish Krone	2,849
Euro	43,013
Hungarian Forint	136
Norwegian Krone	1,131
Polish Zloty	498
Russian Ruble	1,583
Swedish Krona	4,704
Swiss Franc	12,845

Currency	Equity		
MIDDLE EAST			
Egyptian Pound	91		
Israeli New Shekel	1,266		
Qatari Rial	407		
Turkish Lira	633		
UAE Dirham 407			
Total Holdings			
Subject to Foreign			
Currency Risk	\$210,589		

#### NOTE H — Securities Lending Program

The Board of Investments' policies authorize LACERA to participate in a securities lending program. Securities lending is an investment management activity that mirrors the fundamentals of a loan transaction. Securities are lent to brokers and dealers (borrower), and in turn, LACERA receives cash as collateral. LACERA pays the borrower interest on the collateral received and invests the collateral with the goal of earning a higher yield than the interest rate paid to the borrower.

LACERA's securities lending program is managed by two parties: LACERA's custodian bank, State Street Bank and Trust, and a third-party lending agent, Goldman Sachs Agency Lending (GSAL). State Street Bank and Trust lends LACERA's non-U.S. equities, U.S. Treasury, and U.S. Agency securities. GSAL lends LACERA's U.S. equities and corporate bonds. Collateralization is set on non-U.S. loans at 105 percent and on U.S. loans at 102 percent of the market value of securities on loan.

State Street Global Advisors invests the collateral received from both lending programs. The collateral is invested in short-term highly liquid instruments. The maturities of the investments made with cash collateral typically do not match the maturities of their securities loans. Loans are marked-to-market daily, so that if the market value of a security on loan rises, LACERA receives additional collateral. Conversely, if the market value of a security on loan declines, then the borrower receives a partial return of the collateral. Earnings generated in excess of the interest paid to the borrowers represent net income. LACERA shares this net income with the two lending agents based on contractual agreements.

Under the terms of their lending agreements, both lending agents provide borrower default indemnification in the event a borrower does not return securities on loan. The terms of the lending agreements entitle LACERA to terminate all loans upon the occurrence of default and purchase a like amount of "replacement securities" when loaned securities are not returned. LACERA does not have the ability to pledge assets received as collateral without a borrower default. In the event the purchase price of replacement securities exceeds the amount of collateral, the lending agent is liable to LACERA for the difference, plus interest. Either LACERA or the borrower of the security can terminate a loan on demand.

At year-end, LACERA had no credit risk exposure to borrowers because the amount of collateral received exceeded the value of securities on loan. LACERA had no losses on securities lending transactions resulting from the default of a borrower for the years ended June 30, 2017 and 2016.

As of June 30, 2017, the fair value of securities on loan was \$1.4 billion, with a value of cash collateral received of \$923 million and non-cash collateral of \$495 million. As of June 30, 2016, the fair value of securities on Ioan was \$1.4 billion, with a value of cash collateral received of \$872 million and non-cash collateral of \$515 million. LACERA's income, net of expenses from securities lending, was \$6.4 million and \$5.4 million for the years ended June 30, 2017 and 2016, respectively. The following table shows the fair value of securities on loan as well as cash and non-cash collateral received.

## **Securities Lending**

As of June 30, 2017 and 2016 (Dollars in Thousands)

	2017			2016			
Securities on Loan	Fair Value of Securities on Loan	Cash Collateral Received	Non-Cash Collateral Received	Fair Value of Securities on Loan	Cash Collateral Received	Non-Cash Collateral Received	
U.S. Equities	\$297,066	\$303,905	\$—	\$318,126	\$326,023	\$—	
U.S. Fixed Income	974,874	599,557	428,428	862,018	492,311	418,152	
Non-U.S. Equities	80,056	19,122	67,028	141,836	53,805	96,689	
Total	\$1,351,996	\$922,584	\$495,456	\$1,321,980	\$872,139	\$514,841	

#### **NOTE I — Derivative Financial Instruments**

LACERA's Investment Policy Statement and Manager Guidelines allow the use of derivatives by certain investment managers. Derivatives are financial instruments that derive their value, usefulness, and marketability from an underlying instrument that represents direct ownership of an asset or an obligation of an issuer whose payments are based on or derived from the performance of some agreed-upon benchmark. Managers are required to mark-to-market derivative positions daily and may trade only with counterparties with a credit rating of A3/A-, as defined by Moody's Investors Service (Moody's) and Standard & Poor's (S&P), respectively. Trades with counterparties with a minimum credit rating of BBB/ Baa2 may also be allowed with the posting of initial collateral. Gains and losses from derivatives are included in net investment income. The following types of derivatives are permitted: futures, currency forwards, options, and swaps. Given that hedge fund managers may already have discretion to use derivatives in the funds they manage, LACERA's Derivatives Policy will not apply to hedge fund investments.

#### **Futures**

Futures are financial agreements to buy or sell an underlying asset at a specified future date and price. Futures are standardized instruments traded on organized exchanges, and they are marked-to-market daily. The futures exchange reduces counterparty credit risk by acting as a central counterparty. It does this by collecting a daily margin payment from one trade participant and crediting it to the other, based on price changes in the underlying asset.

## **Currency Forwards**

Similar to futures agreements, forwards represent an agreement to buy or sell an underlying asset at a specified future date and price. However, forwards are non-standardized agreements tailored to each specific transaction. Payment for the transaction is generally delayed until the settlement or expiration date. Forward contracts are privately negotiated and do not trade on a centralized exchange; therefore, they are considered "over the counter" instruments. Currency forward contracts are used to manage currency exposure, implement the passive currency hedge, and facilitate the settlement of international security purchases and sales.

## **Currency Forwards Analysis**

As of June 30, 2017

(Dollars in Thousands)

Currency Name	Options	Net Receivables	Net Payables	Swaps	Total Exposure	
Australian Dollar	\$19	\$1,883	\$(7,135)	\$—	\$(5,233)	
British Pound Sterling	172	10,263	(26,577)	(401)	(16,543)	
Canadian Dollar	_	1,578	(16,490)	_	(14,912)	
Danish Krone	_	411	(3,460)	_	(3,049)	
Euro	262	13,459	(65,697)	(443)	(52,419)	
Hong Kong Dollar	_	(12)	698	_	686	
Israeli New Shekel	_	183	(861)	_	(678)	
Japanese Yen	_	(3,695)	25,320	638	22,263	
Mexican Peso	_	96	(156)	(182)	(242)	
New Zealand Dollar	(120)	31	(657)	_	(746)	
Norwegian Krone	_	66	(548)	_	(482)	
Singapore Dollar	_	7	(797)	_	(790)	
Swedish Krona	_	2,130	(8,934)	_	(6,804)	
Swiss Franc	_	1,536	(10,803)	_	(9,267)	
Total	\$333	\$27,936	\$(116,097)	\$(388)	\$(88,216)	

**Currency Forward Contracts** 

## **Options**

An option contract is a type of derivative in which a buyer (purchaser) has the right, but not the obligation, to buy or sell a specified amount of an underlying security at a fixed price by exercising the option before its expiration date. The seller (writer) has an obligation to buy or sell the underlying security if the buyer decides to exercise the option.

## **Swaps**

A swap is an agreement between two or more parties to exchange a sequence of cash flows over a period of time in the future. The cash flows exchanged by the counterparties are tied to a notional amount. A swap agreement specifies the time period over which the periodic payments will be exchanged. The fair value represents the gains or losses since the prior mark-tomarket. The Investment Derivatives schedule below reports the fair value balances, changes in fair value, and notional amounts of derivatives outstanding as of and for the year ended June 30, 2017, classified by type.

#### **Investment Derivatives**

As of June 30, 2017 (Dollars in Thousands)

Derivative Type	Net Appreciation/ (Depreciation) in Fair Value For the Fiscal Year Ended June 30, 2017	Fair Value at June 30, 2017	Notional Value (Dollars)	Notional Shares (Units)
Commodity Futures Long	\$(28,672)	\$—	\$—	339,359
Commodity Futures Short	241	_	_	(44,579)
Credit Default Swaps Bought	(2,225)	(6,916)	80,357	_
Credit Default Swaps Written	1,659	1,900	76,486	_
Equity Options Bought	(1,131)	124	_	71
Fixed Income Futures Long	(12,938)	_	_	762,545
Fixed Income Futures Short	12,104	_	_	(534,113)
Fixed Income Options Bought	(1,754)	1,490	_	103,625
Fixed Income Options Written	3,079	(1,088)	_	(491,241)
Foreign Currency Options Bought	(760)	378	_	199,331
Foreign Currency Options Written	272	(494)	_	(58,795)
Futures Options Bought	(7,922)	2,318	_	10,517
Futures Options Written	7,641	(1,346)	_	(9,612)
FX Forwards	92,137	(88,164)	8,501,246	_
Index Futures Long	(45)	_	_	_
Pay Fixed Interest Rate Swaps	44,630	2,512	849,472	_
Receive Fixed Interest Rate Swaps	(1,325)	(550)	52,951	_
Rights	1,003	275	1,130	_
Total Return Swaps Bond	(5,813)	(216)	42,935	_
Total Return Swaps Equity	(18,295)	6,992	(416,628)	_
Warrants	39	39	31,412	_
Total	\$81,925	\$(82,746)	\$9,219,361	277,108

All investment derivative positions are included as part of Investments at Fair Value in the Statement of Fiduciary Net Position. All changes in fair value are reported as part of Net Appreciation/(Depreciation) in Fair Value of Investments in the Statement of Changes in Fiduciary Net Position.

Investment information was provided either by investment managers or LACERA's custodian bank, State Street Bank and Trust.

## **Counterparty Credit Risk**

LACERA is exposed to counterparty credit risk on investment derivatives that are traded over the counter and are reported in asset positions. Derivatives exposed to counterparty credit risk include currency forward contracts and swap agreements. To minimize counterparty credit risk exposure, LACERA's investment managers continuously monitor credit ratings of counterparties. Should there be a counterparty failure, LACERA would be exposed to the loss of the fair value of derivatives that have unrealized gains and any collateral provided to the counterparty, net of the effect of applicable netting arrangements. LACERA requires investment managers to have Master Agreements in place that permit netting in order to minimize credit risk. Netting arrangements provide LACERA with a legal right of setoff in the event of bankruptcy or default by the counterparty. The schedule displays the fair value of investments with each counterparty's S&P, Fitch, and Moody's credit rating by counterparty's name alphabetically.

## **Counterparty Credit Risk Analysis**

As of June 30, 2017 (Dollars in Thousands)

	Total Fair	S&P	Fitch	Moody's
Counterparty Name	Value	Rating	Rating	Rating
Bank Of America, N.A.	\$22	A+	A+	A1
Barclays	51	A-	А	A1
Barclays Bank PLC	353	A-	А	A1
Barclays De Zoete Wedd	10	A-	А	A1
BNP Paribas SA	474	А	A+	A1
Citibank N.A.	2,293	A+	A+	A1
Credit Suisse FOB CME	3,147	А	А	A1
Credit Suisse FOB ICE	237	А	А	A1
Credit Suisse FOB LCH	2,785	А	А	A1
Credit Suisse International	6,745	А	А	A1
Credit Suisse Securities (USA) LLC	234	А	А	A1
Deutsche Bank AG	6,998	A-	A-	Baa2
Goldman Sachs Bank USA	38	BBB+	А	A3
Goldman Sachs CME	2,168	BBB+	А	A3
Goldman Sachs International	12,720	A+	А	A1
JP Morgan Securities Inc	802	A-	A+	A3
JP Morgan Chase Bank	1,888	A+	AA-	Aa3
Macquarie Bank Limited	1,229	А	А	A2
Merrill Lynch Capital Services	128	BBB+	А	Baa1
Merrill Lynch International	596	BBB+	А	Baa1
Morgan Stanley and Co. International PLC	98	BBB+	А	A3
Royal Bank Of Scotland PLC	8,463	BBB+	BBB+	A3
Societe Generale	769	А	А	A2
Standard Chartered Bank	57	А	A+	A1
State Street Bank And Trust Company	79	AA-	AA	Aa3
UBS AG	156	A+	A+	A1
UBS AG London	13,735	A+	A+	A1
Westpac Banking Corporation	10,764	AA-	AA-	Aa3
Total	\$77,039			

## **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Interest Rate Swaps are an example of an

**Interest Rate Risk Analysis** 

As of June 30, 2017 (Dollars in Thousands)

investment that has a fair value that is highly sensitive to interest rate changes. These investments are disclosed in the following table:

			Investments Maturities (in Years)				
Investment Type	Notional Value	Fair Value	Less Than 1	1-5	6 - 10	More than 10	No Maturity
Credit Default Swaps Bought	\$80,357	\$(1,916)	\$—	\$(1,916)	\$—	\$—	\$—
Credit Default Swaps Written	76,486	1,900	31	1,844	30	(5)	_
Fixed Income Futures Long	762,545	_	_	_	_	_	_
Fixed Income Futures Short	(534,113)	_	_	_	_	_	_
Fixed Income Options Bought	103,625	1,490	585	905	_	_	_
Fixed Income Options Written	(491,241)	(1,088)	(382)	(690)	_	(16)	_
Pay Fixed Interest Rate Swaps	849,472	2,512	_	1,656	3,953	(3,097)	_
Receive Fixed Interest Rate Swaps				(240)	(101)	(0.4)	
Total Return Swaps Bond	52,951 42,935	(550) (216)	(25) (216)	(340)	(101)	(84)	_
Total Return Swaps Equity	(416,628)	6,992	7,065	(150)	_	_	- 0
Total	\$526,389	\$9,124	\$ <b>7,058</b>	\$ <b>1,309</b>	\$3,882	\$(3,202)	\$ <b>0</b>

## **NOTE J** — Special Purpose Entities

LACERA uses several different types of Special Purpose Entities (SPEs) in its investment portfolio.

As of June 30, 2017, the LACERA real estate portfolio utilized various SPEs including 86 Title Holding Corporations (THCs) and 53 Limited Liability Companies (LLCs). As of June 30, 2016, the portfolio included 90 THCs and 40 LLCs.

The following is a summary of the THCs' and LLCs' financial positions.

## **Title Holding Corporations and Limited Liability Companies Financial Position**

As of June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Assets	\$7,289,187	\$7,103,448
Less: Liabilities	(2,497,737)	(2,261,697)
Net Assets	\$4,791,450	\$4,841,751
Net Income	\$259,927	\$132,905

In March 2011, the LACERA Board of Investments approved allocating \$200 million to each of two managers for investment in commercial real estate debt. The managers were Cornerstone Real Estate Advisors (now known as Barings Real Estate Advisors, the real estate investment unit of Barings LLC) and Quadrant Real Estate Advisors LLC. In July 2012 and June 2013, additional allocations of \$200 million and \$100 million were provided to the Barings Account, bringing the total investable equity commitment to \$500 million. Furthermore, in July 2012, an additional allocation of \$100 million was made to the Quadrant Account, bringing the total investable equity commitment to \$300 million. In September 2014, a \$250 million commitment was added to the Barings Account for the purpose of backstopping a subscription facility, though this equity is not considered investable.

The following is a summary of the Debt Program's financial position.

#### **Debt Program Financial Position**

As of June 30, 2017 and 2016 (Dollars in Thousands)

2017	2016
\$833,734	\$835,086
(434,476)	(464,291)
\$399,258	\$370,795
\$34,852	\$25,013
	\$833,734 (434,476) \$399,258

# NOTE K — Related Party Transactions

### **Office Lease**

In 1991, LACERA, as the sole shareholder, formed a Title Holding Corporation (THC) to acquire Gateway Plaza. At that time, LACERA entered into its original lease agreement with the THC to occupy approximately 85,000 square feet of office space. Under the terms of the agreement, LACERA's base rent is abated via a base rent credit. However, LACERA is required to pay its proportionate share of the building's taxes and operating costs as defined in the lease agreement.

Several lease agreement amendments were executed which adjusted the rentable square footage and lease expiration dates. The latest is the Thirteenth Amendment to the Office Lease, dated August 1, 2016, which increased the total rentable space from 112,756 square feet to 121,286 square feet and maintained the lease's existing expiration date of December 31, 2020. Total operating expenses charged to LACERA were approximately \$2.1 million and \$1.9 million for the years ended June 30, 2017 and June 30, 2016, respectively.

## Notes Receivable

LACERA had a notes receivable balance of approximately \$22.5 million from one of its THCs for each of the years ended June 30, 2017 and 2016. This amount is reflected in the Statement of Fiduciary Net Position as part of the Accounts Receivable-Other balance for both years.

## NOTE L — Administrative Expenses

The Board of Retirement and Board of Investments annually adopt the operating budget for the administration of LACERA. The administrative expenses are charged against the investment earnings of the retirement benefits plan.

Beginning in fiscal year 2012, LACERA implemented a provision of the CERL, which shifted the administrative budget limitation from an asset-based cap to a more stable liability-based cap. This CERL provision states that the annual budget for administrative expenses of a CERL retirement benefits plan may not exceed twentyone hundredths of one percent (0.21 percent) of the actuarial accrued liability of the plan. Expenses for computer software, hardware, and computer technology consulting services relating to those expenditures are not to be considered a cost of administration subject to the budget limit. The cost of legal representation is not to exceed one-hundredth of one percent (0.01 percent) of retirement benefits plan assets in any budget year, pursuant to the CERL. LACERA's appropriation for legal representation is included in the administrative expense allocation.

Under applicable sections of the CERL, both LACERA Boards approved the operating budgets for fiscal years ended June 30, 2017 and June 30, 2016, which were prepared based upon the twenty-one hundredths of one percent (0.21 percent) CERL limit. The following budget-to-actual analysis of administrative expenses schedule is based upon the budget, as approved by the LACERA governing boards, in comparison to actual administrative expenses.

# **Budget-to-Actual Analysis of Administrative Expenses**

As of June 30, 2017 and 2016 (Dollars in Thousands)

2017	2016		
\$56,819,215	\$54,942,453		
119.320	115,379		
119,320	115,379		
76 929	73,091		
(66,830)	(67,645)		
9,999	5,446		
66,830	67,645		
56,819,215	54,942,453		
0.12%	0.12%		
0.21%	0.21%		
	\$56,819,215 119,320 119,320 76,829 (66,830) 9,999 666,830 56,819,215 0.12%		

Administrative Expenses	66,830	67,645
Net Position Restricted for Benefits	\$52,743,651	\$47,846,694
Administrative Expenses as a Percentage of Net Position Restricted for Benefits	0.13%	0.14%

<sup>1</sup>2017 budget calculation based on Actuarial Accrued Liability as of June 30, 2015, and 2016 budget calculation based on Actuarial Accrued Liability as of June 30, 2014.

## **NOTE M** — Commitments and Contingencies

# Litigation

LACERA is a defendant in various lawsuits and other claims arising in the ordinary course of its operations. LACERA's management and legal counsel estimate the ultimate outcome of such litigation will not have a material effect on LACERA's financial statements.

# **Securities Litigation**

In 2001, the LACERA Board of Investments adopted a Securities Litigation Policy in response to incidents of corporate corruption and fraud. The policy requires LACERA's Legal Office to monitor securities fraud class actions and to actively pursue recovery of LACERA's losses in accordance with the policy.

In 2010, the U.S. Supreme Court held that certain fraud provisions of the U.S. securities laws could not be applied to securities purchased outside the U.S. Therefore, the LACERA Board of Investments adopted a global policy to ensure that LACERA continues to meet its fiduciary duty by identifying, monitoring, and evaluating securities actions in which the fund has an interest both foreign and domestic and pursuing such claims when and in a manner the LACERA Board of Investments determines is in the best interest of the fund.

Compliance with the Securities Litigation Policy is part of the efforts of the Board of Investments, with the assistance of the LACERA Legal Office, to protect the financial interests of LACERA and its members.

# Leases

LACERA leases equipment under lease agreements that expire over the next five years. The annual commitments and operating expenses for such equipment leases were approximately \$300,000 and \$232,000 in fiscal years 2017 and 2016, respectively. The building space lease agreement was originally entered in January 1991. Subsequent amendments were made with the latest one dated August 1, 2016. LACERA agreed to lease additional space, while maintaining the existing lease expiration date of December 31, 2020. As of fiscal year 2017, a total of 121,286 rentable square feet is leased by LACERA, which requires a proportionate share of taxes, parking facilities, and operating costs applicable to the premises be paid.

LACERA's leasing agreements are also discussed in Note K — Related Party Transactions. The total operating expenses for leasing the building premises are \$2.1 million and \$1.9 million in fiscal years 2017 and 2016, respectively.

# **Capital Commitments**

LACERA real estate, private equity, and activist investment managers identify and acquire investments on a discretionary basis. Investment activity is approved by the LACERA Board of Investments and controlled by investment management agreements which identify limitations on each investment manager's discretion. Such investment activities are further restricted by the amount of capital allocated or committed to each manager.

As of June 30, 2017, outstanding capital commitments to the various investment managers, as approved by the LACERA Board of Investments, totaled \$4.5 billion.

# NOTE N — Other Post-Employment Benefits (OPEB) Program

During the year ended June 30, 2017, LACERA adopted Governmental Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. As a result of adopting this standard, the financial statement disclosures related to the OPEB Program have been modified. Those disclosures are also found in Note Q and within the Required Supplementary Information.

# Governance

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

Management of the OPEB Program is vested with the LACERA Board of Retirement, which consists of eleven members — six elected by plan members; four appointed by the County Board of Supervisors; and the County Treasurer and Tax Collector, who serves as an ex-officio member.

# **Program Description**

In April 1982, the County adopted an ordinance pursuant to the County Employees Retirement Law of 1937 (CERL) that provided for a retiree health insurance program and death/burial benefits for retired employees and their eligible dependents. In 1982, the County and LACERA entered into an Agreement whereby LACERA would administer the program subject to the terms and conditions of the Agreement. In 1994, the County amended the Agreement to continue to support LACERA's retiree insurance benefits program, regardless of the status of the active member insurance. In June 2014, the LACERA Board of Retirement approved the County's request to modify the agreement to create a new retiree healthcare benefit program in order to lower its costs. Structurally, the County segregated all current retirees and current employees into LACERA-Administered Retiree Healthcare Benefits Program (Tier 1) and placed all employees hired after June 30, 2014 into Los Angeles County Tier 2 Retiree Healthcare Benefits Program (Tier 2).

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

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

# Membership

Employees are eligible for the OPEB Program if they are members of LACERA and retire from the County of Los Angeles, the Superior Court, or a participating Outside District. Healthcare benefits are also offered to qualifying survivors of deceased retired members and deceased active employees who were eligible to retire at the time of death. Receipt of a pension benefit is a prerequisite for retiree healthcare and death benefits; therefore, eligibility and qualifications applicable to retiree healthcare and death/burial benefits are substantially similar to pension benefits.

# LACERA Membership — OPEB Medical and Dental/Vision Benefits

As of June 30, 2017 and 2016 (Dollars in Millions)

(Dollars in Millions)	20	2017		2016		
	Medical	Dental/ Vision	Medical	Dental/ Vision		
Retired Participants						
Retired Members and Survivors	48,812	49,980	47,653	48,671		
Spouses and Dependents	24,539	27,850	23,683	26,607		
Total Retired	73,351	77,830	71,336	75,278		
Inactive Members - Vested	8,341	8,341	8,238	8,238		
Active Members - Vested <sup>1</sup>	72,037	72,037	72,563	72,563		
Total Membership	153,729	158,208	152,137	156,079		

# LACERA Membership — OPEB Death Benefits

As of June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Paid Death Benefits	1,638	1,670
Inactive with Eligibility for Death Benefits	54,498	53,193
Active Members - Vested <sup>1</sup>	72,037	72,563
Total Membership	128,173	127,426

<sup>1</sup>Active member counts exclude non-vested active members that are ineligible for OPEB benefits.

# **Benefit Provisions**

The OPEB Program offers members an extensive choice of medical plans as well as two dental/vision plans. The medical plans are either HMOs or indemnity plans, and some are designed to work with Medicare benefits, such as the Medicare Supplement or Medicare HMO plans. Coverage is available regardless of preexisting medical conditions. Under Tier 2, retirees who are eligible for Medicare are required to enroll in that program. Medicare-eligible retirees and their covered dependents must enroll in Medicare Parts A and B and in a Medicare HMO plan or Medicare Supplement plan.

**Medical and Dental/Vision** – Program benefits are provided through third party insurance carriers with the participant's cost for medical and dental/vision insurance varying according to the years of retirement service credit with LACERA, the plan selected, and the number of persons covered. The County contribution subsidizing the participant's cost starts at 10 years of service credit in the amount of 40 percent of the lesser of the benchmark plan rate or the premium of the plan in which the retiree is enrolled. For each year of retirement service credit beyond 10 years, the County contributes four percent per year, up to a maximum of 100 percent for a member with 25 years of service credit. The County contribution can never exceed the premium of the benchmark plan.

Under Tier 1, the County subsidy is based on the coverage elected by the retiree. The benchmark plans are Anthem Blue Cross Plans I and II for medical and Cigna Indemnity Dental/Vision for dental and vision. Under Tier 2, the County subsidy is based on retireeonly coverage. Tier 2 benchmark plans are Anthem Blue Cross Plans I and II for Medicare-ineligible members, Anthem Blue Cross Plan III for Medicareeligible members, and Cigna Indemnity Dental/Vision for dental and vision. **Medicare Part B** – The County reimburses the member's base rate premiums paid to Social Security for Part B coverage, subject to annual approval by the County Board of Supervisors. Eligible members and their dependents must be enrolled in both Medicare Part A and Medicare Part B and enrolled in a LACERAadministered Medicare HMO Plan or Medicare Supplement Plan. Under Tier 2, the County reimburses for Medicare Part B (at the standard rate) for eligible members or eligible survivors only.

**Disability** – If a member is granted a serviceconnected disability retirement and has less than 13 years of service, the County contributes the lesser of 50 percent of the benchmark plan rate or the premium of the plan in which the retiree is enrolled. Under Tier 2, the benchmark plan rate is based on retireeonly premiums. A member with 13 years of service credit receives a 52 percent subsidy. This percentage increases 4 percent for each additional completed year of service, up to a maximum of 100 percent.

**Death/Burial Benefit** — There is a one-time lump-sum \$5,000 death/burial benefit payable to the designated beneficiary upon the death of a retiree, reimbursed to LACERA by the County. Active and vested terminated (deferred) members are eligible for this benefit once they retire. Spouses and dependents are not eligible for this death benefit upon their death.

# **Healthcare Reform**

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

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

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

# Eligible Dependent Child Age Limit Increased to Age 26

The plan sponsor, the County of Los Angeles, approved an extension of the dependent children age limit to age 26 under the Retiree Healthcare Program, regardless of a dependent child's marital or student status. This is a result of Senate Bill (SB) 1088.

Until July 1, 2014, SB 1088 exempted retiree-only plans, such as LACERA's. It required health plan carriers to offer the coverage to dependents up to age 26 but does not obligate the plan sponsor, the County of Los Angeles, to pay for coverage up to age 26. However, in March 2015, the County determined that it will pay for dependent coverage up to age 26 under the contribution method described above.

# Summary of Significant Accounting Policies — OPEB Program

**Basis of Presentation** — OPEB activity is reported within two distinct funds at LACERA, in accordance with GASB Statement No. 74.

The OPEB Agency Fund accounts for assets held as an agent on behalf of others. The funds held within the OPEB Agency Fund do not meet the definition of a qualifying OPEB Trust under GASB Statement No. 74 and are not used to reduce the employers' Total OPEB Liability. However, the ownership of the OPEB Agency Fund belongs to the County, Court and the participating Outside District employers. This fund is custodial in nature and does not measure the results of operations. Assets and liabilities are recorded using the accrual basis of accounting. Receivables include contributions due as of the reporting date. Payables include premium payments and refunds due to members and accrued investment and administrative expenses.

The OPEB Trust accounts for assets held in qualifying OPEB trusts, as defined by GASB Statement No. 74.

As such, the OPEB Trust Fiduciary Net Position is used to reduce the Total OPEB Liability, resulting in a Net OPEB Liability to the participants within the OPEB Program. See further discussion of the OPEB Trust within Note Q.

See also Note B for additional disclosures of significant accounting policies pertaining to LACERA.

**Investment Valuation** – OPEB Trust investments are carried at fair value, which are derived from quoted market prices. For publicly traded securities and issues of the United States Government and its agencies, the most recent sales price as of fiscal year end is used.

Contributions Authority - Pursuant to the 1982, 1994, and 2014 Agreements between the County and LACERA, the parties agreed to the continuation of the health insurance benefits then in existence. The County agreed to subsidize a portion of the insurance premiums of certain retired members and their eligible dependents based on the member's length of service. The County further agreed to maintain the status quo of existing benefits provided to participants. As part of the 2014 Agreement, the County modified the existing healthcare benefit plan, which created a new benefit structure, Tier 2, for all employees hired after June 30, 2014. LACERA agreed not to lower retired members' contributions toward insurance premiums or modify medical benefit levels without the County's prior consent.

#### **Premium Payments**

During the fiscal years ended June 30, 2017 and June 30, 2016, respectively, premium payments of \$538.0 and \$515.2 million were made to insurance carriers. These premiums were funded by employer subsidy payments of \$493.5 million and participant payments of \$44.5 million for the fiscal year ended 2017. The employer subsidy payments for the fiscal year ended 2016 were \$472.7 million with participant payments of \$42.4 million.

In addition, the County paid \$56.2 million and \$7.4 million for Medicare Part B reimbursements and death/ burial benefits, respectively, for the fiscal year ended June 30, 2017 and \$50.0 million and \$7.6 million for these benefits, respectively, during the fiscal year ended June 30, 2016.

A Premium Holiday is a temporary period in which the monthly premium costs for both the Program Sponsor (County) and affected members are waived. Affected members are those retirees enrolled in certain medical benefit plans who also pay their share of the monthly premiums. The County did not grant a Premium Holiday during fiscal year 2017.

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

Milliman estimated the impact of the excise tax on the projection of benefits in the measurement of the County's OPEB Actuarial Accrued Liability for funding purposes as of July 1, 2016 to be approximately \$1.28 billion. For the OPEB Program, this increases the Unfunded Actuarial Accrued Liabilities from \$25.35 billion to \$26.63 billion and equates to a corresponding increase in the Annual Required Contribution as a percentage of payroll from 27.03 percent to 28.79 percent. LACERA and the County are evaluating a process of allocating such potential liabilities among the various OPEB Program stakeholders.

The actuarial valuation under GASB Statement No. 74 also incorporates the impact of this excise tax.

# Actuarial Methods and Significant Assumptions — GASB Statement No. 74

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of the occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future. Projections of benefits for financial reporting purposes are based on the OPEB Program and include the types of benefits provided at the time of each valuation.

Where applicable, the same actuarial methods and assumptions used for the LACERA retirement benefits plan (Pension Plan) are used for the LACERAadministered OPEB Program. The table to the right summarizes the primary GASB Statement No. 74 OPEBrelated assumptions. The retirement benefits-related demographic and economic assumptions are based on those developed for the June 30, 2016 valuation of the Pension Plan. Economic and demographic assumptions from the Retirement Benefit Investigation of Experience are integrated into the OPEB Investigation of Experience. The OPEB demographic assumptions are based on the results of the 2016 OPEB Investigation of Experience, dated July 21, 2017. OPEB-specific assumptions that have been updated since the 2016 OPEB Investigation of Experience include healthcare cost trend rates updated with information from the July 1, 2017 renewals, the long term expected rate of return, and carrier ACA Health Insurer Fee details and claim costs.

The Total OPEB Liability as of June 30, 2017, was determined by completing a roll-forward calculation based on an actuarial valuation conducted as of July 1, 2016, using the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB Statement No. 74. Key methods and assumptions used to calculate the Total OPEB Liability are presented on the following page.

# **Key Methods and Significant Assumptions**

	•					
Actuarial Cost Method	Individual Entry Age Normal,	Level Percent of Pa	ау			
Long Term Rate of Return	See Note Q – Other Post-Em	ployment Benefits	Trust.			
Discount Rate	4.69 percent as of June 30,	2017 and 4.34 per	rcent as of Ju	une 30, 2016.		
Mortality	tables and including projecti the MP-2014 Ultimate Projec the June 30, 2016 valuation Mortality Tables for Males ar	Various rates based on the RP-2014 Healthy and Disabled Annuitant mortality tables and including projection for expected future mortality improvement using the MP-2014 Ultimate Projection Scale. This assumption was adopted with the June 30, 2016 valuation report. Prior assumption was RP-2000 Combined Mortality Tables for Males and Females, projected to 2025 using Projection Scale AA, with various age set backs depending upon Plan type.				
Administrative Expenses	Pursuant to GASB Statemen currently based on \$8 Per C liabilities, service cost, or be	ontract Per Month,				
ACA Excise Tax	The OPEB liability figures inc requirements of the Affordal Appropriations Act of 2016.					
Basis of Contribution Requirements	The Actuarially Determined Contribution (ADC) is a combination of the normal cost and the amortization of the Unfunded Actuarial Accrued Liability (UAAL) under the Projected Unit Credit (PUC) actuarial cost method with Excise Tax as determined in the July 1, 2016 OPEB Valuation Report. The UAAL is the AAL net of assets. The UAAL is amortized over 30 years as a level percent of payroll.					
Inflation Rate	2.75 percent per annum. This rate was adopted begin	ning with the July 1	L, 2016 OPEI	B valuation.		
Healthcare Cost Trend Rates	LACERA Medical Under 65 LACERA Medical Over 65 Part B Premiums Dental/Vision Weighted Average Trend	FY 2017 to FY 2018 4.40% 4.60% 6.80% 2.00% 4.57%	FY 2018 to FY 2019 6.70% 6.60% 7.70% 3.30% 6.50%	<b>Ultimate</b> * 4.50% 4.50% 4.35% 3.70% 4.47%		
Probability of Initial Enrollment						
Upon Retirement	Years of Service <10 10-14 15-19 20-24 25+ Disabled	Medical and Par 8% 44% 61% 81% 95% 95%	rt B	Dental/Vision 11% 49% 64% 82% 95% 94%		

\*For the Healthcare Cost Trend Ultimate Rates, the grading period used ranges from June 30, 2017 to June 30, 2102, or 85 years.

# **Key Methods and Significant Assumptions continued**

	Non-Firefighter 1014*				Firefighter 1014
Madical Spauce /Dependent	<65 Male	<65 Female	65+ Male	65+ Female	All
Medical Spouse/Dependent Enrollment Probability	77.5%	50.0%	66.0%	32.0%	93.0%
		Male		Fe	male
Dental/Vision Spouse/Dependent Enrollment Probability		76%		2	45%

\*Members covered by the Firefighters Local 1014 medical plan while actively employed by Los Angeles County may continue this coverage after retirement. Retired Local 1014 non-Firefighter members are eligible for the Local 1014 Firefighters' retiree medical plan.

The actuarial assumptions used in the July 1, 2016 OPEB actuarial valuation were based on the results of the actuarial experience study for the period July 1, 2013 to June 30, 2016. LACERA's actuary performs an experience study every three years.

### **Net OPEB Liability**

GASB Statement No. 74 requires public pension plans to provide the calculation of a Net OPEB Liability. The Net OPEB Liability is measured as the Total OPEB Liability less the amount of the OPEB Trust's Fiduciary Net Position.

The Net OPEB Liability is an accounting measurement for financial statement reporting purposes. The OPEB Program funded status is calculated separately by the consulting actuary and the results of which are included in the actuarial valuation report. The components of the OPEB Program's Net OPEB Liability at June 30, 2017 and June 30, 2016, were as follows:

### **Schedule of Net OPEB Liability**

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Total OPEB Liability	\$27,212,073	\$27,216,178
Less: Fiduciary Net Position	(742,883)	(560,750)
Net OPEB Liability	\$26,469,190	\$26,655,428
Fiduciary Net Position as a Percentage of Total OPEB Liability	2.73%	2.06%

#### Sensitivity Analysis — Changes in Discount Rate

In accordance with GASB Statement No. 74, sensitivity of the Net OPEB Liability to changes in the discount rate must be reported. The following presents the Net OPEB Liability, calculated using the discount rate of 4.69 percent, as well as what the Net OPEB Liability would be if it were calculated using a discount rate that is 1 percentage point lower (3.69 percent) or 1 percentage point higher (5.69 percent) than the current rate (4.69 percent):

#### Sensitivity Analysis — Changes in Discount Rate

For the Year Ended June 30, 2017 (Dollars in Thousands)

		2017	
	1% Decrease [3.69%]	Current Discount Rate [4.69%]	1% Increase [5.69%]
Total OPEB Liability	\$32,674,042	\$27,212,073	\$22,933,384
Less: Fiduciary Net Position	(742,883)	(742,883)	(742,883)
Net OPEB Liability	\$31,931,159	\$26,469,190	\$22,190,501

#### Sensitivity Analysis — Changes in Healthcare Cost Trend Rates

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

### Sensitivity Analysis — Changes in Healthcare Cost Trend Rates

For the Year Ended June 30, 2017 (Dollars in Thousands)

		2017	
		Current Healthcare Cost	
	1% Decrease	Trend Rates <sup>1</sup>	1% Increase
Total OPEB Liability	\$22,163,942	\$27,212,073	\$33,972,173
Less: Fiduciary Net Position	(742,883)	(742,883)	(742,883)
Net OPEB Liability	\$21,421,059	\$26,469,190	\$33,229,290

<sup>1</sup> See July 1, 2016 OPEB Actuarial Valuation, Health Cost Trend Assumptions with Excise Tax table for current trend rates.

# **NOTE 0** — Hedge Fund Investments

The hedge fund category of investments is not a separate asset class but is comprised of strategies that may: 1) invest in securities within LACERA's existing asset classes or across multiple asset classes; 2) have an absolute return objective; and 3) include the ability to use specialized techniques, such as leverage and short-selling, and instruments such as derivatives.

LACERA employs two hedge fund of funds managers, Grosvenor Capital Management (GCM) and Goldman Sachs Asset Management (GSAM), with specialized knowledge and expertise to construct four hedge fund portfolios. The hedge fund of funds managers identify, select, implement, and monitor these investment strategies in the portfolios consistent with LACERA's stated objectives, constraints, and Investment Policy Statements.

In September 2011, LACERA began investing in hedge funds with a goal of reducing the volatility of the Pension Plan without materially decreasing Pension Plan returns. This initial investment consisted of a portfolio of hedge funds invested in a diversified strategy managed by GCM.

In December 2012, LACERA began investing in a second portfolio focused on opportunistic credit strategies, also managed by GCM.

In April 2015, LACERA began investing in a third portfolio, managed in a diversified strategy by GSAM. Within this portfolio, LACERA directly invests in underlying fund vehicles, while GSAM maintains discretion over fund selection and overall portfolio development.

In January 2016, LACERA began investing in a fourth portfolio, also focused on opportunistic credit strategies and managed by GCM.

The three hedge fund portfolios managed by GCM are each structured as a limited partnership in which LACERA is the sole limited partner, and each was created to hold the interests in the underlying hedge funds. GCM serves as General Partner and owns a 0.01 percent stake in each partnership.

Each underlying investment in the entire hedge fund program is in an entity legally structured to limit liability for each investor to the capital invested by that investor.

The investment performance for this strategy is measured separately from other asset classes. The fair values of assets invested in hedge funds as of June 30, 2017 and June 30, 2016, were \$1,438 million and \$1,276 million, respectively.

## NOTE P — Fair Value

For the fiscal year ended June 30, 2016, LACERA adopted GASB Statement No. 72 ("GASB 72"), Fair Value Measurement and Application. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements and disclosures. LACERA categorizes its fair value measurements within the fair value hierarchy established by Generally Accepted Accounting Principles in the United States of America (GAAP). The hierarchy is based on the valuation inputs used to measure the fair value of the securities and assets. Level 1 inputs are guoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Certain investments held by LACERA are valued at net asset value (NAV) per share when an investment does not have a readily determined fair value, provided that the NAV is calculated and used as a practical expedient to estimate fair value in accordance with the requirements of GAAP.

# **Equity and Fixed Income Securities**

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using prices determined by matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 are securities whose stated market price is unobservable by the marketplace; many of these securities are priced by the issuers or industry groups for these securities. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by LACERA's custodian bank.

# Hedge Fund, Private Equity, and Real Estate Funds

Investments in Hedge Fund, Private Equity, and Real Estate funds are valued at estimated fair value, as determined in good faith by the General Partner ("GP") in accordance with fair value principles in accordance with GAAP. These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results, and other factors deemed relevant by the GP. These assets are reported as a practical expedient by LACERA.

# **Real Estate Investments**

Investments in Real Estate are valued at estimated fair value, as determined in good faith by the Investment Manager. These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results, and other factors deemed relevant by the Investment Manager. Properties are subject to independent third-party appraisals every three years. LACERA has the following recurring fair value measurements as of June 30, 2017:

## Investments and Derivatives Measured at Fair Value — Pension Plan

As of June 30, 2017 (Dollars in Thousands)

Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Fixed Income Securities				
Asset-Backed Securities	\$387,503	\$—	\$387,503	\$—
Commercial Mortgage-Backed Securities	373,618	_	373,618	_
Corporate and Other Credit	4,100,816	19	4,095,607	5,190
Municipal / Revenue Bonds	71,155	_	71,155	_
Non-U.S. Fixed Income	97,603	_	97,603	_
Pooled Investments	37	37	_	_
Private Placement Fixed Income	1,995,362	924	1,989,137	5,301
U.S. Government Agency	2,315,433	_	2,315,076	357
U.S. Treasury	2,229,347	_	2,229,347	_
Whole Loan Mortgages	36,167	_	_	36,167
Total Fixed Income Securities	11,607,041	980	11,559,046	47,015
Equity Securities				
Non-U.S. Equity	1,844,424	1,844,009	_	415
Pooled Investments	261,997	261,997	_	_
U.S. Equity	3,266,281	3,261,231	3,827	1,223
Total Equity Securities	5,372,702	5,367,237	3,827	1,638
Real Estate	5,296,802	_	_	5,296,802
Collateral from Securities Lending	922,584	_	922,584	_
Total Investments by Fair Value Level	\$23,199,129	\$5,368,217	\$12,485,457	\$5,345,455
Investments Measured at Net Asset Value (NAV)				
Fixed Income	\$2,513,380			
Equity	20,098,859			
Hedge Funds	1,437,925			
Hedge Funds Private Equity	1,437,925 5,050,442			
-				
Private Equity	5,050,442			
Private Equity Real Estate	5,050,442 843,030			
Private Equity Real Estate Total Investments Measured at NAV Total Investments	5,050,442 843,030 <b>29,943,636</b>			
Private Equity Real Estate Total Investments Measured at NAV Total Investments Derivatives	5,050,442 843,030 <b>29,943,636</b> \$53,142,765	\$	\$(88,164)	\$
Private Equity Real Estate Total Investments Measured at NAV Total Investments Derivatives Foreign Exchange Contracts	5,050,442 843,030 <b>29,943,636</b> <b>\$53,142,765</b> \$(88,164)	\$	\$(88,164) 255	\$
Private Equity Real Estate Total Investments Measured at NAV Total Investments Derivatives Foreign Exchange Contracts Foreign Fixed Income Derivatives	5,050,442 843,030 <b>29,943,636</b> <b>\$53,142,765</b> \$(88,164) 255	_	255	\$ 
Private Equity Real Estate Total Investments Measured at NAV Total Investments Derivatives Foreign Exchange Contracts	5,050,442 843,030 <b>29,943,636</b> <b>\$53,142,765</b> \$(88,164)	\$ (308) 1,358		\$_ _ _ _

#### **Investments Measured at Net Asset Value**

#### As of June 30, 2017

(Dollars in Thousands)

	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Fixed Income Funds <sup>1</sup>	\$2,513,380	\$—	Daily, Monthly or Not Eligible	1-30 days or N/A
Commingled Equity Funds <sup>2</sup> Hedge Funds	20,098,859	28,809	Daily, Monthly or Not Eligible	1-60 days or N/A
Commodities <sup>3</sup>	16,056	_	Monthly	30 days
Credit <sup>4</sup>	584,766	_	Monthly, Quarterly, Semi- Annual, Annual; Self-Liquidating	45-180 days
Equity Long / Short <sup>5</sup>	243,054	_	Monthly, Quarterly, Annual	20-90 days
Event Driven <sup>6</sup>	71,690	_	Quarterly, Annual	45-90 days
Macro and Tactical Trading <sup>7</sup>	231,003	_	Monthly, Quarterly	5-93 days
Multi-Strategy <sup>8</sup>	51,636	_	Quarterly, Semi-Annual; Self-Liquidating	60-90 days
Relative Value <sup>9</sup>	172,034	_	Monthly, Quarterly	15-90 days
Other <sup>10</sup>	67,686	_	Daily or Not Eligible	N/A
Private Equity <sup>11</sup>	5,050,442	3,861,117	Not Eligible	N/A
Real Estate 11	843,030	213,663	Not Eligible	N/A
<b>Total Investments Measured</b>				
at NAV	\$29,943,636			

<sup>1</sup>Commingled Fixed Income Funds: 14 fixed income funds are considered commingled in nature. They are valued at the net asset value (NAV) of units held at the end of the period based upon the fair value of the underlying investments. Most of the funds are highly liquid within one month; two of the funds representing 7% of Commingled Fixed Income assets have liquidity available at the end of the fund terms which range from 3 to 7 years.

<sup>2</sup>Commingled Equity Funds: 15 equity funds are considered commingled in nature. They are valued at the NAV of units held at the end of the period based upon the fair value of the underlying investments. Most of the funds are highly liquid within one month; three of the funds representing 3% of Commingled Equity assets have liquidity available subject to lock up periods that limit or prohibit redemptions for the next three to four years.

<sup>3</sup>Commodities Hedge Funds: Consisting of 2 funds, this strategy invests across the global commodity markets based on an analysis of factors, including supply and demand, legislative and environmental polices, trends in growth rates and resource consumption, global monetary and trade policy, geopolitical events and technical factors. These investments are valued at NAV per share. When considering liquidity terms, 100% of assets in this strategy category are available within 12 months.

<sup>4</sup>**Credit Hedge Funds:** Consisting of 32 funds, this strategy includes long-biased credit, long/short credit, structured credit, and mortgage credit. These investments are valued at NAV per share. When considering liquidity terms, approximately 49% of assets in this strategy category are available within 12 months. Twelve funds in this category are self-liquidating funds that have an agreed upon investment duration. By the end of each fund's stated timeframe, distributions are expected to be made to investors.

<sup>5</sup>Equity Long / Short Hedge Funds: Consisting of 18 funds, this strategy purchases and/or sells equities based on fundamental and/or quantitative analysis and other factors. These investments are valued at NAV per share. When considering liquidity terms, 100% of assets in this strategy category are available within 12 months.

<sup>6</sup>Event Driven Hedge Funds: Consisting of 5 funds, this strategy seeks to gain an advantage from pricing inefficiencies that may occur in the onset or aftermath of a corporate action or related event. These investments are valued at NAV per share. When considering liquidity terms, approximately 93% of assets in this strategy category are available within 12 months. One fund in this category is self-liquidating and not all of its capital is expected to be received within the next 12 months. <sup>7</sup>Macro and Tactical Trading Hedge Funds: Consisting of 16 funds, this strategy makes investments based on analyses and forecasts of macroeconomic trends, including governmental and central bank policies, fiscal trends, trade imbalances, interest rate trends, inter-country relations, and economic and technical analysis. These investments are valued at NAV per share. When considering liquidity terms, 100% of assets in this strategy category are available within 12 months.

<sup>8</sup>**Multi-Strategy Hedge Funds:** The 3 funds that make up this group aim to pursue varying strategies in order to diversify risks and reduce volatility. These investments are valued at NAV per share. When considering liquidity terms, approximately 52% of assets in this strategy category are available within 12 months. One fund in this category is self-liquidating.

<sup>9</sup>Relative Value Hedge Funds: Consisting of 11 funds, this strategy's main focus is to benefit from valuation discrepancies that may be present in related financial instruments by simultaneously purchasing and/or selling these instruments. These investments are valued at NAV per share. When considering liquidity terms, approximately 98% of assets in this strategy category are available within 12 months.
<sup>10</sup>Other: This category contains 3 funds where all liquid capital has been redeemed and remainder balances represent designated or illiquid investments that

<sup>10</sup>**Other:** This category contains 3 funds where all liquid capital has been redeemed and remainder balances represent designated or illiquid investments that will be distributed over time. In addition to these funds, cash held by the fund of funds managers and accrued expenses in the fund of funds vehicles were also included and consisted of approximately 99% of the total.

<sup>11</sup>**Private Equity and Real Estate Funds:** LACERA's Private Equity portfolio consists of 245 funds, investing primarily in Buyout Funds, with some exposure to Venture Capital, Special Situations, and Non-U.S. Funds. The Real Estate portfolio, comprised of 22 funds, invests in both U.S. and Non-U.S. commercial real estate. The fair values of these funds have been determined using net assets valued one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years.

# Investments and Derivatives Measured at Fair Value — Pension Plan

As of June 30, 2016 (Dollars in Thousands)

Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Fixed Income Securities				
Asset-Backed Securities	\$347,688	\$—	\$344,455	\$3,233
Commercial Mortgage-Backed Securities	431,451	_	431,451	_
Corporate and Other Credit	3,929,560	11,275	3,915,391	2,894
Municipal / Revenue Bonds	86,747	_	86,747	_
Non-U.S. Fixed Income	120,393	_	120,393	_
Pooled Investments	1,144,136	43,904	1,100,232	_
Private Placement Fixed Income	1,943,966	_	1,937,282	6,684
U.S. Government Agency	2,458,312	_	2,457,849	463
U.S. Treasury	2,287,986	_	2,287,986	_
Whole Loan Mortgages	49,534	_	_	49,534
Total Fixed Income Securities	12,799,773	55,179	12,681,786	62,808
Equity Securities				
Non-U.S. Equity	1,603,467	1,603,222	_	245
Pooled Investments	133,749	133,749	_	_
U.S. Equity	2,840,424	2,839,734	_	690
Total Equity Securities	4,577,640	4,576,705		935
Real Estate	5,340,802	_	_	5,340,802
Collateral from Securities Lending	872,139	_	872,139	_
Total Investments by Fair Value Level	\$23,590,354	\$4,631,884	\$13,553,925	\$5,404,545
Investments Measured at Net Asset Value (NAV)				
Fixed Income	\$933,403			
Equity Income	17,886,980			
Hedge Funds	1,275,576			
Private Equity	4,410,209			
Real Estate	721,978			
Total Investments Measured at NAV	25,228,146			
Total Investments	\$48,818,500			
Derivatives				
Foreign Exchange Contracts	\$4,748	\$—	\$4,748	\$—
Foreign Fixed Income Derivatives	(166)		(166)	
U.S. Equity Derivatives	206	218	· · · ·	(12)
U.S. Fixed Income Derivatives	(47,734)	44	(47,778)	_
Total Derivatives	\$(42,946)			

#### **Investments Measured at Net Asset Value**

#### As of June 30, 2016

(Dollars in Thousands)

	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Fixed Income Funds <sup>1</sup>	\$933,403	\$11,199	Daily, Monthly or Not Eligible	1-30 days or N/A
Commingled Equity Funds <sup>2</sup>	17,886,980	_	Daily, Monthly or Not Eligible	1-60 days or N/A
Hedge Funds Commodities <sup>3</sup>	20,465	_	Monthly	30 days
Credit <sup>4</sup>	487,267	142,000	Monthly, Quarterly, Semi-Annual; Self-Liquidating	45-180 days
Equity Long / Short $^5$	233,799	_	Monthly, Quarterly	20-90 days
Event Driven <sup>6</sup>	111,161	_	Monthly Quarterly, Self Liquidating	20-90 days
Macro and Tactical Trading <sup>7</sup>	216,356	_	Monthly, Quarterly	5-90 days
Multi-Strategy <sup>8</sup>	35,757	_	Quarterly, Semi-Annual; Self- Liquidating	60-90 days
Relative Value <sup>9</sup>	158,988	_	Monthly, Quarterly	15-90 days
Other <sup>10</sup>	11,783	_	Daily or Not Eligible	N/A
Private Equity <sup>11</sup>	4,410,209	3,969,408	Not Eligible	N/A
Real Estate <sup>11</sup>	721,978	139,047	Not Eligible	N/A
<b>Total Investments Measured</b>				

# at NAV \$25,228,146

<sup>1</sup>Commingled Fixed Income Funds: 11 fixed income funds are considered commingled in nature. They are valued at the net asset value (NAV) of units held at the end of the period based upon the fair value of the underlying investments. Most of the funds are highly liquid within one month; one of the funds representing 18% of Commingled Fixed Income Fund assets has liquidity available at the end of the fund term in 4 years.

<sup>2</sup>Commingled Equity Funds: 12 equity funds are considered commingled in nature. They are valued at the NAV of units held at the end of the period based upon the fair value of the underlying investments. Most of the funds are highly liquid within one month.

<sup>3</sup>**Commodities Hedge Funds:** Consisting of two funds, this strategy invests across the global commodity markets based on an analysis of factors, including supply and demand, legislative and environmental polices, trends in growth rates and resource consumption, global monetary and trade policy, geopolitical events and technical factors. These investments are valued at NAV per share. When considering liquidity terms, 100% of assets in this strategy category are available within 12 months.

<sup>4</sup>**Credit Hedge Funds:** Consisting of twenty funds, this strategy includes long-biased credit, long/short credit, structured credit, and mortgage credit. These investments are valued at NAV per share. When considering liquidity terms, approximately 65% of assets in this strategy category are available within 12 months. Seven funds in this category are self-liquidating funds that have an agreed upon investment duration. By the end of each fund's stated timeframe, distributions are expected to be made to investors.

<sup>5</sup>Equity Long / Short Hedge Funds: Consisting of sixteen funds, this strategy purchases and/or sells equities based on fundamental and/or quantitative analysis and other factors. These investments are valued at NAV per share. When considering liquidity terms, 100% of assets in this strategy category are available within 12 months.

<sup>6</sup>Event Driven Hedge Funds: Consisting of nine funds, this strategy seeks to gain an advantage from pricing inefficiencies that may occur in the onset or aftermath of a corporate action or related event. These investments are valued at NAV per share. When considering liquidity terms, approximately 93% of assets in this strategy category are available within 12 months. One fund in this category is self-liquidating and not all of its capital is expected to be received within the next 12 months. <sup>7</sup>Macro and Tactical Trading Hedge Funds: Consisting of fifteen funds, this strategy makes investments based on analyses and forecasts of macroeconomic

trends, including governmental and central bank policies, fiscal trends, trade imbalances, interest rate trends, inter-country relations, and economic and technical analysis. These investments are valued at NAV per share. When considering liquidity terms, 100% of assets in this strategy category are available within 12 months.

<sup>8</sup>**Multi-Strategy Hedge Funds:** The three funds that make up this group aim to pursue varying strategies in order to diversify risks and reduce volatility. These investments are valued at NAV per share. When considering liquidity terms, approximately 40% of assets in this strategy category are available within 12 months. One fund in this category is self-liquidating.

<sup>9</sup>**Relative Value Hedge Funds:** Consisting of ten funds, this strategy's main focus is to benefit from valuation discrepancies that may be present in related financial instruments by simultaneously purchasing and/or selling these instruments. These investments are valued at NAV per share. When considering liquidity terms, approximately 99% of assets in this strategy category are available within 12 months. <sup>10</sup>**Other:** This category contains 3 funds where all liquid capital has been redeemed and remainder balances represent designated or illiquid investments that will be

<sup>10</sup>**Other:** This category contains 3 funds where all liquid capital has been redeemed and remainder balances represent designated or illiquid investments that will be distributed over time. In addition to these funds, cash held by managers and and accrued expenses were also included and consisted of approximately 98% of the total.

<sup>11</sup>**Private Equity and Real Estate Funds:** LACERA's Private Equity portfolio consists of 249 funds, investing primarily in Buyout Funds, with some exposure to Venture Capital, Special Situations, and Non-U.S. Funds. The Real Estate portfolio, comprised of 23 funds, invests in both U.S. and Non-U.S. commercial real estate. The fair values of these funds have been determined using net assets valued one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years.

# Investments Measured at Fair Value — OPEB Trust

As of June 30, 2017 (Dollars in Thousands)

Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Fixed Income Securities				
Asset-Backed Securities	\$5,755	\$—	\$5,755	\$—
Corporate and Other Credit	39,567	_	39,567	_
U.S. Treasury	9,001	_	9,001	_
Total Fixed Income Securities	54,323	—	54,323	—
Equity Securities				
Pooled Investments	607,593	607,593	_	_
Total Equity Securities	607,593	607,593		—
Total Investments by Fair Value Level	\$661,916	\$607,593	\$54,323	\$—

# Investments Measured at Fair Value — OPEB Trust

As of June 30, 2016 (Dollars in Thousands)

Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Fixed Income Securities				
Asset-Backed Securities	\$6,609	\$—	\$6,609	\$—
Corporate and Other Credit	30,384	_	30,384	_
U.S. Government Agency	1,002	_	1,002	_
U.S. Treasury	12,056	_	12,056	_
Total Fixed Income Securities	50,051	_	50,051	_
Equity Securities				
Pooled Investments	452,333	452,333	_	_
Total Equity Securities	452,333	452,333	—	_
Total Investments by Fair Value Level	\$502,384	\$452,333	\$50,051	\$—

# Investments Measured at Fair Value — OPEB Agency Fund

As of June 30, 2017 (Dollars in Thousands)

		Quoted Prices in Active Markets for Identical	Significant Other Observable	Significant Unobservable
Investments by Fair Value Level	Total	Assets Level 1	Inputs Level 2	Inputs Level 3
Fixed Income Securities				
Asset-Backed Securities	\$6,561	\$—	\$6,561	\$—
Corporate and Other Credit	28,478	_	28,478	_
U.S. Treasury	41,586	_	41,586	_
Total Fixed Income Securities	76,625		76,625	_
Total Investments by Fair Value Level	\$76,625	\$—	\$76,625	\$—

# Investments Measured at Fair Value — OPEB Agency Fund

As of June 30, 2016 (Dollars in Thousands)

		Quoted Prices in Active Markets for Identical	Significant Other Observable	Significant Unobservable
Investments by Fair Value Level	Total	Assets Level 1	Inputs Level 2	Inputs Level 3
Fixed Income Securities				
Asset-Backed Securities	\$4,001	\$—	\$4,001	\$—
Corporate and Other Credit	27,726	_	27,726	_
U.S. Treasury	52,900	_	52,900	_
<b>Total Fixed Income Securities</b>	84,627		84,627	—
Total Investments by Fair Value Level	\$84,627	\$—	\$84,627	\$—

# NOTE Q — Other Post-Employment Benefits (OPEB) Trust

# Establishment of Los Angeles County (County) OPEB Trust

Pursuant to the California Government Code, the County established an irrevocable, tax exempt OPEB Trust for the purpose of holding and investing assets to pre-fund the Retiree Healthcare Program, which LACERA administers. In May 2012, the County Board of Supervisors approved entering into a Trust and Investment Services Agreement with the LACERA Board of Investments as trustee and investment manager.

The County OPEB Trust was the County's first step to reduce its OPEB unfunded liability. It provides a framework where the County contributes to the Trust and transitions, over time, from a pay-as-you-go model to a prefunding model. The County OPEB Trust does not modify the participating employers' benefit programs.

The County OPEB Trust serves as a funding tool for the participating employers to hold and invest assets for paying expenses associated with OPEB benefits in the future, such as the Retiree Healthcare Benefits Program and retiree death/burial benefit. The participating employers will be responsible for and have full discretion over the timing of the use of those assets to pay OPEB benefits. Initially, there were only two participating employers in the County OPEB Trust: Los Angeles County and LACERA.

# Establishment of Superior Court (Court) OPEB Trust

Similar to the OPEB Trust established by the County, the Court followed the County's lead and established a separate OPEB Trust Fund, the Court OPEB Trust, to begin prefunding its own OPEB unfunded liability.

Pursuant to the California Government Code, the Court established an irrevocable OPEB Trust for the purpose of holding and investing assets to prefund the Retiree Healthcare Program, which LACERA administers. In April 2016, the Judicial Council of California approved the Court's request to establish a qualified irrevocable Trust with LACERA, as well as use LACERA's Board of Investments as trustee and investment services provider for the prefunding of the Court's OPEB liabilities. In May 2016, to conform the language of the County OPEB Trust agreement to the language of the Court's OPEB Trust agreement, the Board of Supervisors approved the First Amendment to the *Trust and Investment Services Agreement for the County of Los Angeles OPEB Program* between the County and LACERA. This amendment permits the pooling of County and Court OPEB Trust assets solely for investment purposes and updates the fiduciary duty provisions due to the addition of the Court's OPEB Trust agreement.

In June 2016, the Court entered into a Trust and Investment Services Agreement with the LACERA Board of Investments.

# **Master OPEB Trust**

In July 2016, LACERA's Board of Investments adopted the Master OPEB Trust Declaration and Unitization of OPEB Trust investments. As trustee of the separate OPEB Trusts established by the County and the Court, the Board of Investments will have sole and exclusive authority, control over, and responsibility for directing the investment and management of the Master Trust assets.

A unitized fund structure may allow for synergy from the shared economy and leveraged investment opportunities for greater diversification of assets. Unitization also provides participants the ability to pool assets and resources while retaining individual fund values and reporting for each participant. This approach can offer administrative efficiency, potential cost savings, and permit flexibility in asset allocation.

# **Funding Policy**

In June 2015, the Board of Supervisors approved the county-wide budget with a dedicated funding promise for the OPEB liability using a multi-year approach to enhance the County's OPEB Trust funding in a consistent manner.

Under the County OPEB Trust, LACERA is defined as a "Contributing Employer." Separate accounts are maintained for the contributions and expense obligations of the County and LACERA. Since inception, LACERA participated in lock step funding with the County. LACERA's budget includes provisions for its pro rata share of OPEB Trust contributions. In December 2015, the LACERA Boards adopted the LACERA OPEB Funding Policy allowing LACERA to prefund its portion of retiree healthcare benefits in sync with the County, while also allowing LACERA to prefund its portion of the liability separately. LACERA is not legally obligated, under the Trust or otherwise, to match the County's funding practices, but such a course of action, which has been followed in the past, reduces LACERA's share of the unfunded liability.

The Court continues to pay its OPEB liability on a pay-as-you-go basis. Although the Court has not adopted a formal OPEB funding policy, when surplus funds are available at fiscal year end, the Court may earmark such surplus as OPEB Trust contributions.

# **Investment Policies**

**Investment Policy.** The LACERA Board of Investments is responsible for setting the investment policy and investing any contributions made to the OPEB Trust from the participating employers: County, LACERA, and Court. The Board of Investments adopted separate Investment Policy Statements for the participating employers. The OPEB Trust has a long-term investment horizon, and utilizes an asset allocation which encompasses a strategic, long-run perspective of capital markets. The current target asset allocation is invested in high quality, short-term fixed income instruments and any remaining assets invested in a passive global equity portfolio. This policy provides for diversification of assets in an effort to maximize the total return of the OPEB Trust consistent with market conditions and risk control.

## Schedule of Target Allocation and Long-Term Expected Rate of Return

As of June 30, 2017 (Dollars in Thousands)

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

**Target Allocation**. The Board of Investments approved an OPEB Trust-specific Investment Policy Statement to which the target allocations are based upon.

**Expected Long-Term Real Rate of Return**. The long-term expected rate of return on OPEB Trust investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return as of June 30, 2017 for each major asset class included in the target asset allocation are summarized in the table above.

The investment rate of return assumption for the year ended June 30, 2017 was 6.66 percent. This represented a change from the investment rate of return used for the year ended June 30, 2016 which was 6.72 percent.

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

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

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

**Investment Concentrations**. At June 30, 2017, the OPEB Trust held approximately 81.5 percent of its investment portfolio in MSCI All Country World Investible Market Index Fund B.

**Money-Weighted Rate of Return**. For the year ended June 30, 2017, the annual money-weighted rate of return on OPEB Trust investments, net of OPEB Trust investment expense, was 16.0 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. Historical returns will be presented as they become available, and are presented in the Schedule of Investment Returns – OPEB Trust in the Required Supplementary Information section of this report.

# Contributions

The participating employers historically discharged their premium subsidy obligations on a pay-as-you-go basis. LACERA bills the healthcare premiums to the participating employers and members on a monthly basis. The County, Superior Court and LACERA have now begun to pre-fund these obligations, depositing monies into the irrevocable OPEB Trust. Plan members are required to pay the difference between the employer-paid subsidy and the actual premium cost.

During fiscal year ended June 30, 2017 and June 30, 2016, the County, Superior Court, and LACERA made total pre-funding contributions to the OPEB Trust of \$88.0 million and \$80.7 million respectively, in excess of the pay-as-you-go amounts, both of which are recorded as revenue within the OPEB Trust.

### **Contributions — OPEB Trust**

For the Fiscal Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Los Angeles County	\$61,145	\$72,489
LACERA	243	289
Superior Court	26,612	7,900
Total Contributions	\$88,000	\$80,678

# **Administration**

The OPEB Trust administration costs include payments for investment management fees, custodial fees, and overhead charged by LACERA for administering the OPEB Trust Fund. Expenses totaled \$0.7 million and \$0.4 million for fiscal years ended June 30, 2017 and June 30, 2016, respectively. For purposes of the GASB 74 actuarial valuation, the actuary reclassified approximately \$8.7 million of costs from benefit payments to administrative expenses. These costs are paid with premiums, but represent a flat administrative charge of \$8 per contract per month. Through this reclassification, the projected benefit payments and the actuarial determined total OPEB liability under GASB 74 properly excludes these administrative costs.

## Expenses — OPEB Trust

For the Fiscal Years Ended June 30, 2017 and 2016

		2017					
	Management Fees	Custodial Fees	Consultant Fees	Administrative Expenses	Total		
Los Angeles County	\$229,448	\$69,475	\$76,088	\$138,734	\$513,745		
LACERA	877	266	292	33,381	34,816		
Superior Court	6,314	2,088	995	201,608	211,005		
Total Expenses	\$236,639	\$71,829	\$77,375	\$373,723	\$759,566		

	2016				
	Management Fees	Custodial Fees	Administrative Expenses	Total	
Los Angeles County	\$190,623	\$39,044	\$191,004	\$420,671	
LACERA	729	149	731	1,609	
Superior Court	_	_	_	_	
Total Expenses	\$191,352	\$39,193	\$191,735	\$422,280	

# **Fund Values**

OPEB Trust Fund additions include contributions from participating employers and investment income. Deductions include investment and administrative expenses.

The combined OPEB Trust fund values were as follows:

### Fund Values — OPEB Trust

As of June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Los Angeles County	\$633,697	\$521,063
LACERA	2,407	2,005
Superior Court	34,384	7,900
Total Balance at Book Value	670,488	530,968
Unrealized Investment Portfolio Appreciation	72,395	29,782
Total Balance at Fair Value	\$742,883	\$560,750

## NOTE R — SUBSEQUENT EVENTS

Subsequent events have been evaluated by management through October 12, 2017, which is the date the financial statements were issued. No subsequent events with a material effect on the financial statements or note disclosures took place after June 30, 2017.

## **Schedule of Net Pension Liability**

For the Years Ended June 30, 2017, 2016, 2015, and 2014 (Dollars in Thousands)

2017	2016	2015	<b>2014</b> <sup>1</sup>
\$64,031,677	\$58,528,457	\$56,570,520	\$54,977,021
(52,743,651)	(47,846,694)	(48,818,350)	(47,722,277)
\$11,288,026	\$10,681,763	\$7,752,170	\$7,254,744
82.37%	81.75%	86.30%	86.80%
\$7,637,032	\$7,279,777	\$6,949,420	\$6,672,886
147.81%	146.73%	111.55%	108.72%
	\$64,031,677 (52,743,651) \$11,288,026 82.37% \$7,637,032	\$64,031,677 (52,743,651)         \$58,528,457 (47,846,694)           \$11,288,026         \$10,681,763           82.37%         81.75%           \$7,637,032         \$7,279,777	\$64,031,677 (52,743,651)         \$58,528,457 (47,846,694)         \$56,570,520 (48,818,350)           \$11,288,026         \$10,681,763         \$7,752,170           82.37%         81.75%         86.30%           \$7,637,032         \$7,279,777         \$6,949,420

#### **Total Pension Liability**

The Total Pension Liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial methods and assumptions noted below, and was then projected forward to the measurement date taking into account any significant changes between the valuation date and the fiscal year-end as prescribed by GASB Statement No. 67.

#### **Discount Rate**

Discount Rate	7.38%	7.63%	7.63%	7.63%
Long-Term Expected Rate of Return, Net of Expenses	7.25%	7.50%	7.50%	7.50%
Municipal Bond Rate	N/A	N/A	N/A	N/A

The long-term expected rate of return was determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. Milliman's December 2016 Investigation of Experience analysis was used to develop the 7.38 percent assumption used for the current reporting date. This is equal to the 7.25 percent long-term investment return assumption adopted by the Board of Investments (net of investment and administrative expenses), plus 0.13 percent assumed administrative expenses.

The plan's projected fiduciary net position, after reflecting employee and employer made contributions, was expected to be sufficient to make all future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return, gross of administrative expenses.

#### **Other Key Actuarial Assumptions**

Other key actuarial assumptions used to calculate the Total Pension Liability as of the June 30, 2017 measurement date are the same as used to determine the June 30, 2016 actuarial funding valuation. For the determination of the Total Pension Liability as of the June 30, 2016 measurement date, other key actuarial assumptions were the same as used in the June 30, 2015 actuarial funding valuation.

Valuation Date	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Measurement Date	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014

For Other Actuarial Methods and Assumptions – See Notes to the Required Supplementary Information.

<sup>1</sup>Trend Information: Schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively. <sup>2</sup>In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based.

## Schedule of Net OPEB Liability

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

2017	<b>2016</b> <sup>1</sup>
\$27,212,073	\$27,216,178
(742,883)	(560,750)
\$26,469,190	\$26,655,428
2.73%	2.06%
\$7,637,032	\$7,279,777
346.59%	366.16%
	\$27,212,073 (742,883) \$26,469,190 2.73% \$7,637,032

#### **Total OPEB Liability**

The Total OPEB Liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial methods and assumptions noted below, and was then projected forward to the measurement date. Any significant changes during this period have been reflected as prescribed by GASB Statement No. 74.

Discount Rate		
Discount Rate	4.69%	4.34%
Long-Term Expected Rate of Return, Net of Investment Expenses	6.66%	6.72%
Municipal Bond Rate	3.58%	2.85%

The plan's Fiduciary Net Position was not projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the Total OPEB Liability is equal to the single equivalent rate that results in the same actuarial present value as the long-term expected rate of return applied to benefit payments, to the extent that the plan's Fiduciary Net Position is projected to be sufficient to make projected benefit payments, and the municipal bond rate applied to benefit payments, to the extent that the plan's Fiduciary Net Position is not projected to be sufficient.

#### **Other Key Actuarial Assumptions**

The actuarial assumptions that determined the Total OPEB Liability as of June 30, 2017 were based on the results of an actuarial experience study for the July 1, 2016.

Valuation Date	July 1, 2016	July 1, 2016
Measurement Date	June 30, 2017	June 30, 2016

For Other Actuarial Methods and Assumptions – See Notes to the Required Supplementary Information.

<sup>1</sup>Trend Information: Schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively. <sup>2</sup>In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based.

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

For the Years Ended June 30, 2017, 2016, 2015 and 2014 (Dollars in Thousands)

	2017	2016	2015	<b>2014</b> <sup>1</sup>
Total Pension Liability				
Service Cost	\$1,106,755	\$1,069,328	\$1,024,288	\$1,009,834
Interest on Total Pension Liability	4,393,712	4,214,834	4,073,299	3,957,030
Effect of Plan Changes	_	_	_	_
Effect of Assumption Changes or Inputs	3,079,892	-	_	—
Effect of Economic/Demographic (Gains) or Losses	(47,506)	(437,039)	(736,010)	_
CalPERS Transfer	—	-	332	_
Benefit Payments and Refund of Contributions	(3,029,633)	(2,889,186)	(2,768,410)	(2,662,401)
Net Changes in Total Pension Liability	\$5,503,220	\$1,957,937	\$1,593,499	\$2,304,463
Total Pension Liability — Beginning	58,528,457	56,570,520	54,977,021	52,672,558
Total Pension Liability — Ending (a)	\$64,031,677	\$58,528,457	\$56,570,520	\$54,977,021
Fiduciary Net Position				
Contributions – Employer <sup>2</sup>	\$1,331,357	\$1,403,709	\$1,455,718	\$1,281,795
Contributions —				
Metropolitan Transportation Authority	2	3	25	_
CalPERS Transfer	_	_	332	_
Contributions – Member <sup>2</sup>	526,579	498,083	480,158	477,648
Net Investment Income	6,129,300	80,588	1,989,358	6,910,439
Net Miscellaneous Income	6,182	2,792	1,483	—
Benefit Payments	(3,029,633)	(2,889,186)	(2,768,410)	(2,662,401)
Administrative Expenses	(66,830)	(67,645)	(62,591)	(58,723)
Net Change in Fiduciary Net Position	\$4,896,957	\$(971,656)	\$1,096,073	\$5,948,758
Fiduciary Net Position — Beginning	47,846,694	48,818,350	47,722,277	41,773,519
Fiduciary Net Position — Ending (b)	\$52,743,651	\$47,846,694	\$48,818,350	\$47,722,277
Net Pension Liability — Ending (a) — (b)	\$11,288,026	\$10,681,763	\$7,752,170	\$7,254,744
Fiduciary Net Position as a				
Percentage of Total Pension Liability	82.37%	81.75%	86.30%	86.80%
Covered Employee Payroll <sup>3</sup>	\$7,637,032	\$7,279,777	\$6,949,420	\$6,672,886
Net Pension Liability as a Percentage of Covered Payroll	147.81%	146.73%	111.55%	108.72%

<sup>1</sup>Trend Information: Schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively. <sup>2</sup>In accordance with GASB Statement No. 82, employer pick-up contributions are classified as Member Contributions.

<sup>3</sup>In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based.

#### **Changes in Pension Plan Assumptions**

In addition to the annual valuations, LACERA requires its actuary to review the reasonableness of the economic and demographic actuarial assumptions every three years. An experience study was performed by the consulting actuary for the three-year period ended June 30, 2016. This review, commonly referred to as the investigation of experience or experience study, is accomplished by comparing actual experience during the preceding three years to what was expected to happen according to the actuarial assumptions. On the basis of actual Pension Plan history, the actuary determines whether changing the assumptions or methodology will better project benefit liabilities and asset growth. At the December 2016 Board of Investments meeting, the Board adopted new valuation assumptions with the 2016 Investigation of Experience report.

#### **2016 Assumption Changes:**

The Board adopted a decrease in the investment return assumption to 7.38 percent, a decrease in the CPI assumption to 2.75 percent, and a corresponding decrease in the general wage growth assumption to 3.25 percent.

An increase in life expectancies was adopted. Various rates based on the RP-2014 Healthy and Disabled Annuitant mortality tables and including projection for expected future mortality improvement using 100 percent of the MP-2014 Ultimate Projection Scale.

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

For the Year Ended June 30, 2017 (Dollars in Thousands)

	20171
Total OPEB Liability <sup>2</sup>	
Service Cost	\$1,087,211
Interest on Total OPEB Liability	1,216,588
Effect of Plan Changes	—
Effect of Assumption Changes or Inputs	(1,759,274)
Effect of Economic/Demographic (Gains) or Losses	—
Benefit Payments	(548,630)
Net Change in Total OPEB Liability	\$(4,105)
Total OPEB Liability — Beginning	27,216,178
Total OPEB Liability — Ending (a)	\$27,212,073
Fiduciary Net Position	
Contributions — Employer	\$645,381
Net Investment Income	94,506
Benefit Payments	(548,630)
Administrative Expenses	(9,124)
Net Change in Fiduciary Net Position	\$182,133
Fiduciary Net Position — Beginning	560,750
Fiduciary Net Position — Ending (b)	\$742,883
Net OPEB Liability — Ending (a) — (b)	\$26,469,190
Fiduciary Net Position as a Percentage of Total OPEB Liability	2.73%
Covered Employee Payroll <sup>3</sup>	\$7,637,032
Net OPEB Liability as a Percentage of Covered Employee Payroll	346.59%

<sup>1</sup>Trend Information: Schedule will ultimately show information for ten years. Additional years will be displayed as they become available prospectively.

<sup>2</sup>For purposes of the GASB 74 actuarial valuation, the actuary reclassified approximately \$8.7 million of costs from benefit payments to administrative expenses. These costs are paid with premiums, but represent a flat administrative charge of \$8 per contract per month. Through this reclassification, the projected benefit payments and the actuarial determined total OPEB liability under GASB 74 properly excludes these administrative costs.

<sup>3</sup>In accordance with GASB Statement No. 82, Covered Employee Payroll is the payroll on which contributions are based.

# Schedule of Contributions History — Pension Plan

Last Ten Fiscal Years (Dollars in Thousands)					
2017 to 2013	<b>2017</b> *	2016	2015	2014	<b>2013</b> *
Actuarially Determined Contributions	\$1,392,812	\$1,403,712	\$1,494,975	\$1,320,442	\$1,172,014
Contributions in Relation to the Actuarially Determined Contribution	1,392,812	1,403,712	1,494,975	1,320,442	1,172,014
Contribution Deficiency/(Excess)	\$—	\$—	\$—	\$—	\$—
Covered Payroll	\$7,637,032	\$7,279,777	\$6,949,420	\$6,672,886	\$6,595,902
Contributions as a Percentage of Covered Employee Payroll	18.24%	19.28%	21.51%	19.79%	17.77%

# 2012 to 2008

	2012	2011	2010	2009	2008
Actuarially Determined Contributions	\$1,078,929	\$944,174	\$843,704	\$847,172	\$827,911
Contributions in Relation to the Actuarially Determined Contribution	1,078,929	944,174	843,704	847,172	828,630
Contribution Deficiency/(Excess)	\$—	\$—	\$—	\$—	\$(719)
Covered Payroll	\$6,619,816	\$6,650,674	\$6,695,439	\$6,547,616	\$6,123,888
Contributions as a Percentage of Covered Employee Payroll	16.30%	14.20%	12.60%	12.94%	13.53%

\*Portion of contributions fulfilled by transfers from County Contribution Credit Reserve (CCCR): \$448,819 (2013) and \$21,891 (2017).

See Notes to Required Supplementary Information for funding valuation assumptions.

# Schedule of Contributions History — OPEB Program

Last Ten Fiscal Years (Dollars in Thousands)

2017 to 2013	2017	2016	2015	2014	2013
Actuarially Determined Contributions*	\$2,092,300	\$2,152,300	\$2,152,300	\$2,126,100	\$2,126,100
Contributions in Relation to the Actuarially Determined Contributions	645,381	530,320	470,185	466,788	460,331
Contribution Deficiency/(Excess)	\$1,446,919	\$1,621,980	\$1,682,115	\$1,659,312	\$1,665,769
Covered Employee Payroll Contributions as a Percentage	\$7,637,032	\$7,279,777	\$6,949,420	\$6,672,886	\$6,595,902
of Covered Employee Payroll	8.45%	7.28%	6.77%	7.00%	6.98%

#### 2012 to 2008

	2012	2011	2010	2009	2008
Actuarially Determined Contributions	\$1,938,400	\$1,938,400	\$1,737,000	\$1,737,000	\$1,630,700
Contributions in					
Relation to the Actuarially					
Determined Contributions	442,099	423,032	400,686	381,612	366,751
Contribution Deficiency/ (Excess)	\$1,496,301	\$1,515,368	\$1,336,314	\$1,355,388	\$1,263,949
Covered Employee Payroll	\$6,619,816	\$6,650,674	\$6,695,439	\$6,547,616	\$6,123,888
Contributions as a Percentage					
of Covered Employee Payroll	6.68%	6.36%	5.98%	5.83%	5.99%
*Amounto prior to 2017 evoludo the impost of the	Affardable Care Act (A				

\*Amounts prior to 2017 exclude the impact of the Affordable Care Act (ACA) Excise Tax.

See Notes to Required Supplementary Information for funding valuation assumptions.

### Schedule of Investment Returns — Pension Plan

For the Years Ended June 30, 2017, 2016, 2015, and 2014

	2017	2016	2015	2014
Annual Money-Weighted Rate of Return	<b>12.7</b> %	0.7%	4.1%	17.2%
(Net of Investment Expenses)				

Money-Weighted Rate of Return is calculated as the internal rate of return on pension plan investments, net of investment expenses. Trend Information: Schedule will ultimately show information for 10 years. Additional years will be displayed as they become available prospectively.

### Schedule of Investment Returns — OPEB Program

For the Year Ended June 30, 2017

	2017
Annual Money-Weighted Rate of Return (Net of Investment Expenses)	<b>16.0</b> %

Money-Weighted Rate of Return is calculated as the internal rate of return on OPEB investments, net of investment expenses. Trend Information: Schedule will ultimately show information for 10 years. Additional years will be displayed as they become available prospectively.

## Notes to Required Supplementary Information — Pension Plan

## **Actuarial Methods and Significant Assumptions**

The actuarial assumptions used to determine the Plan liabilities, and employer and employee contributions, are based on the results of the 2016 triennial investigation of experience (experience study). The June 30, 2016 actuarial valuation prepared by the consulting actuary reflects all assumptions adopted by the LACERA Board of Investments in December 2016. The LACERA Board of Investments approved a three-year phase-in of the changes to employer contribution rates.

The following are key methods and assumptions used to determine contribution rates:

Key Methods and Significant Assumptions	
Valuation Timing	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.
Actuarial Cost Method	Entry Age Normal
Investment Rate of Return <sup>1</sup>	Future investment earnings are assumed to accrue at an annual rate of 7.25 percent, compounded annually, net of both investment and administrative expenses. This rate was adopted beginning with the June 30, 2016 valuation.
Consumer Price Index	Increase of 2.75 percent per annum. This rate was adopted beginning with the June 30, 2016 valuation.
General Wage Increases	3.25 percent. Rates of annual salary increases assumed for the purpose of the valuation range from 3.51 percent to 11.51 percent. In addition to increases in salary due to promotions and longevity, the increases include an assumed 3.25 percent per annum rate of increase in the general wage level of membership.
Asset Valuation Method	Assets are valued using a five-year smoothed method based on the difference between expected market value and actual market value. The recognition method is non-asymptotic, and there is no minimum or maximum corridor applied.
Amortization Method	The Unfunded Actuarial Accrued Liability (UAAL) is amortized as a level percentage of pay. The UAAL as of June 30, 2009 is amortized over a 30-year closed period. Each year thereafter, that year's UAAL is amortized over a new 30-year closed period. This is referred to as a "layered" amortization. The UAAL contribution rate calculated in the June 30, 2016 funding valuation includes eight (8) layers.

<sup>1</sup>Assumptions applied to funding valuation calculations vary with those applied to GASB 67 calculations.

Key methods and organicant Assumpti	
Retirement Age	A schedule of the probabilities of employment termination based on age due to a particular cause is used. For additional information, see the Retirement Probability of Occurrence tables in the Actuarial Section of this report.
Cost-of-Living Adjustments (COLA)	Post-retirement benefit increases of either 2.75 percent or 2.0 percent per year are assumed for the valuation in accordance with the benefits provided. This rate was adopted beginning with the June 30, 2016 valuation.
	As noted in the June 30, 2016 actuarial valuation report, with one modification: Supplemental Targeted Adjustment for Retirees (STAR) benefits are assumed to be substantively automatic at the 80 percent purchasing power level until the STAR Reserve is projected to be insufficient to pay further STAR Program benefits. <sup>2</sup>
Mortality	Various rates based on RP-2014 mortality tables and using MP-2014 Ultimate Projection Scale. See June 30, 2016 actuarial valuation for details.
<b>Recognition of Inflows/Outflows</b>	
Gains or Losses Investment Economic/Demographic Assumption Changes or Inputs	Straight-line amortization over five years. Straight-line amortization over expected working life. Straight-line amortization over expected working life.

# **Key Methods and Significant Assumptions**

<sup>2</sup>Differs from actuarial valuation due to inclusion of future liability for STAR Program benefits.

## Notes to Required Supplementary Information — OPEB Program

## **Actuarial Methods and Significant Assumptions**

Where applicable, the same actuarial methods and assumptions used for the LACERA retirement benefits plan (Pension Plan) are used for the LACERA-administered OPEB Program. The table below summarizes the primary OPEB-related assumptions that were approved and used to conduct the July 1, 2016 OPEB actuarial valuation. The retirement benefits-related demographic and economic assumptions are based on those developed for the June 30, 2016 valuation of the Pension Plan. Economic and demographic assumptions from the Retirement Benefit Investigation of Experience are integrated into the OPEB Investigation of Experience. The OPEB demographic assumptions are based on the results of the 2016 OPEB Investigation of Experience, dated July 21, 2017. OPEB-specific assumptions that have been updated since the 2016 OPEB Investigation of Experience include healthcare cost trend rates updated with information from the July 1, 2017 renewals and carrier ACA Health Insurer Fee details and claim costs.

The following are key methods and assumptions used to determine contribution requirements:

Key Methods and Significant Assumptions	i
Actuarial Cost Method <sup>1</sup>	Projected Unit Credit. The actuarial present value of the projected benefits of each individual included in the valuation is allocated pro rata to each year of service between entry age and assumed exit. For members who transferred between plans, entry age is based on original entry into LACERA Retirement Benefits Plan. This assumption was adopted for GASB 43 and 45 reporting beginning with the July 1, 2006 OPEB valuation.
Amortization Method	Level percentage of projected salaries of the active members, both present and future, over a "rolling" 30-year amortization period. This assumption was adopted beginning with the July 1, 2006 OPEB valuation.
Asset Valuation Method	Market Value.
Inflation	2.75 percent per annum. This rate was adopted beginning with the July 1, 2016 OPEB valuation.

<sup>1</sup>Assumptions applied to funding valuation calculations vary with those applied to GASB 67 calculations.

Healthcare Cost Trend Rates (without Excise Tax) <sup>1</sup>		FY 2017 to FY 2018	FY 2018 to FY 2019	Ultimate <sup>2</sup>	
	LACERA Medical Under 65	4.40%	6.70%	4.40%	
	LACERA Medical Over 65	4.60%	6.60%	4.40%	
	Part B Premiums	6.80%	7.70%	4.35%	
	Dental/Vision	2.00%	3.30%	3.70%	
	Weighted Average Trend	4.57%	6.50%	4.38%	
Salary Increases Including Inflation	3.25 percent.				
	The general wage increase assumption is 3.25 percent per annum, which is used for projecting the total future payroll. The amortization the Unfunded Actuarial Accrued Liability (UAAL) is determined as a lev percentage of payroll. General wage increases and individual salary increases due to promotion and longevity do not affect the amount of Program's OPEB benefit. This rate was adopted June 30, 2016.				
Investment Rate of Return <sup>1</sup>	4.50 percent.				
	GASB Statement No. 45 requires the discount rate for OPEB Benefits be equal to the expected return on assets used to pay ongoing benefits. In the case of an unfunded program, this would be the expected return on the County's general funds. The County, the Court, and LACERA are currently partially prefunding OPEB liabilities. Therefore, for the July 1, 2016 OPEB valuation, the consulting actuary incorporated the OPEB Trust expected investment return in the development of the discount rate. Based on the expected return on the County's general funds, the expected contributions to the OPEB Trust, and the expected investment return from the OPEB Trust, a discount rate of 4.50% was selected based on the 2016 OPEB Investigation of Experience for use in the July 1, 2016 OPEB valuation.				
Retirement Age	A schedule of the p due to a particular Probability of Occur	cause is used. For	-	ion, see the	
Mortality	Various rates based mortality tables and improvement using 2016 OPEB actuari	d including project the MP-2014 Ultin	ion for expected fut mate Projection Sca	ure mortality	

<sup>1</sup>Assumptions applied to funding valuation calculations vary with those applied to GASB 74 calculations.

<sup>2</sup> For the Healthcare Cost Trend Ultimate Rates, the grading period used ranges from June 30, 2017 to June 30, 2102, or 85 years.

## Administrative Expenses — Pension Plan

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Personnel Services		
Salaries and Wages	\$32,719	\$31,251
Employee Benefits	18,304	17,809
Total Personnel Services	51,023	49,060
Consultant & Professional Services		
County Department Services	216	173
External Audit Fees	131	174
Legal Consultants	832	1,249
Professional Services	467	367
Temporary Personnel Services	1,783	1,402
Total Consultant & Professional Services	3,429	3,365
Operating & Equipment Expenses		
Administrative Support	219	225
General Expenses	995	936
Computer Software	1,409	2,527
Disability Medical Service Fees	1,728	1,704
Educational Expenses	848	886
Equipment	1,043	2,140
Facilities Operations	2,744	3,409
Insurance	550	442
Printing	606	634
Postage	902	884
Telecommunications	412	557
Transportation & Travel	922	876
Total Operating & Equipment Expenses	12,378	15,220
Total Administrative Expenses	\$66,830	\$67,645

#### **Schedule of Investment Expenses**

For the Fiscal Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	Pension 1	rust Fund	<b>OPEB</b> Trust Fund		<b>OPEB</b> Agency Fund	
	2017	2016	2017	2016	2017	2016
Investment Management						
Fees						
Cash and Short-						
Term	\$771	\$715	\$53	\$50	\$15	\$14
Commodity	3,517	2,962	_	_	_	_
Equity						
U.S. Equity	17,094	16,466	184	142	_	_
Non-U.S.	·					
Equity	28,274	21,361	_	_	_	_
Fixed Income	31,270	26,648	_	_	52	66
Hedge Funds	27,670	21,076	_	_	_	_
Private Equity	75,910	52,604	—	—	—	—
Real Estate	49,059	41,929	—	—	—	—
Total						
Investment						
Management						
Fees <sup>1</sup>	233,565	183,761	237	192	67	80
Other Investment						
Expenses						
Consultants	3,010	2,846	77	—	—	—
Custodian	3,095	2,694	72	39	27	27
Legal Counsel	416	270	—	—	—	—
Other	25,228	3,970	—	—	—	_
Total Other						
Investment						
Expenses	31,749	9,780	149	39	27	27
Total Fees & Other						<b>i</b>
Investment Expenses	\$265,314	\$193,541	\$386	\$231	\$94	\$107

<sup>1</sup> Difference in management fee expense from the Statement of Changes in Fiduciary Net Position are due to the inclusion of incentive fees and carry allocations in the schedule above. These incentive fees and carry allocations are netted against investment income in the Statement of Changes in Fiduciary Net Position.

## Schedule of Payments to Consultants — Pension Plan

For the Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	2017	2016
Actuarial		
Valuation and Consulting Services	\$303	\$243
Audit		
External Audit Services	131	174
Legal		
Investment Legal Counsel	416	270
Legislative Consulting	136	160
Other Legal Services	695	1,089
Total Legal	1,247	1,519
Management		
Management and Human Resources	100	102
Information Technology Consulting	51	33
Total Management	151	135
Total Payments to Consultants	\$1,832	\$2,071
Information Technology Consulting Total Management	51 151	33 135

NOTE: For fees paid to investment professionals, refer to Schedule of Investment Management Fees in the Investment Section.

## Statement of Changes in Assets and Liabilities — OPEB Agency Fund

For the Year Ended June 30, 2017 (Dollars in Thousands)

	Balance			Balance June 30,
	July 1, 2016	Additions	Deductions	2017
Assets				
Cash and Short-Term Investments	\$68,887	\$643,824	\$627,482	\$85,229
Accounts Receivable-Sale of Investments	3,933	10,437	14,370	_
Accrued Interest and Dividends	364	834	835	363
Accounts Receivable-Other	46,206	605,697	603,318	48,585
Fixed Income	84,627	268,032	276,035	76,625
Total Assets	\$204,017	\$1,528,824	\$1,522,040	\$210,802
Liabilities				
Accounts Payable-Purchase of Investments	\$3,612	\$12,685	\$16,276	\$21
Retiree Payroll and Other Payables	133	44,734	44,717	150
Accrued Expenses	313	257	313	257
Accounts Payable-Other	110,999	37,078,050	37,073,912	115,137
Due to Employers	88,960	273,286	267,009	95,237
Total Liabilities	\$204,017	\$37,409,012	\$37,402,227	\$210,802



## **Investment Section**

Employees experience growth during their career journey. Growth can come in the form of knowledge, promotions, or moving to a new place of employment. While people serve the County and grow in their careers, they gain stability for their future. Meanwhile, LACERA's assets grow as a result of prudent investments, ensuring that LACERA can provide retired members with their promised benefits.



#### **Consultant's Annual Review**

September 20, 2017

Board of Investments Los Angeles County Employees Retirement Association Gateway Plaza 300 North Lake Avenue, Suite 850 Pasadena, CA 91101



Dear Board Members:

Meketa Investment Group ("Meketa") is pleased to review the Association's investment performance over the past fiscal year ended June 30, 2017.

#### Fiscal 2017 Recap

The 2017 fiscal year started off strong for most risk assets as global equity markets rebounded and investment losses incurred in the wake of Brexit were quickly recovered. The British Pound, however, continued its slide to new historic lows. Emerging Markets and High Yield Bonds outperformed, in response to the continued quantitative easing from the foreign central banks (the level of the central bank asset purchases surpassed the level directly following the Global Financial Crisis) and record low interest rates. For the quarter ended September 30, 2016, domestic equity markets gained 4.4 percent, international developed equity markets gained 6.4 percent, and emerging markets posted a solid gain of 9.0 percent. Most fixed income asset classes also experienced positive performance, with the Barclays Aggregate Bond Index gaining 0.5 percent, the Barclays High Yield Index gaining 5.6 percent, and the Barclays TIPS Index up a modest 1.0 percent.

The fourth quarter of 2016 was more eventful than the third. In a surprise upset, Donald Trump won the United States presidential election and the markets responded. Mr. Trump's pro-growth polices, including lower taxes, higher infrastructure spending, and less regulation led to a stronger U.S. dollar and higher inflation expectations (10-year U.S. Treasury jumped from 1.8 percent to 2.4 percent). This environment generally benefited U.S. equities, while hurting U.S. bonds and foreign assets. For the quarter, domestic equity markets gained 4.2 percent, international developed equity markets lost 0.7 percent, and emerging markets equities declined 4.2 percent. Most fixed income asset classes experienced negative performance. The Barclays Aggregate Bond Index lost 3.0 percent, and the Barclays TIPS Index decreased 2.4 percent. As 2016 came to an end, it was clear that monetary policy was moving in different directions globally. In the U.S., the Federal Reserve (Fed) had started tightening, electing in December to make their only rate increase in 2016 (from 0.50 percent to 0.75 percent). In Europe, the European Central Bank (ECB) had pledged to extend its bond-buying program until the end of 2018, while lowering monthly purchases starting in April 2017 from 80 billion euros to 60 billion euros. They continued to keep interest rates at record lows with the deposit rate at -0.4 percent and its key interest rate close to 0 percent. In Japan, the Bank of Japan (BOJ) made no changes at the year-end meeting. They would maintain the scale of their asset purchase program, keep bank deposit rates negative (-0.1 percent), and continue to target a 0 percent yield on the 10-year Japanese government bond.

The first quarter of 2017 was stronger than the fourth quarter of 2016, with nearly all major asset classes producing positive returns. For the quarter, domestic equity markets gained 5.7 percent, international developed equity markets gained 7.2 percent, and emerging markets equities gained 11.4 percent. All major fixed income asset classes experienced positive performance. The Barclays Aggregate Bond Index gained 0.8 percent, the Barclays High Yield

Index was up 2.8 percent, and the Barclays TIPS Index increased 1.3 percent. It seemed that global growth was finally moving in the right direction as the International Monetary Fund (IMF) increased their outlook, citing improvements in manufacturing, trade, and investment. This was the first increase in their forecast in six years. In the U.S., the Fed continued to tighten, electing to make their third 0.25 percent rate increase in March (from 0.75 percent to 1.00 percent), while the ECB and BOJ maintained the status quo. Near the end of the quarter, the United Kingdom triggered Article 50 of the Lisbon Treaty, officially starting the clock on the U.K.'s formal exit from the European Union. The U.K. will have up to two years to complete the process.

For the final three months of the fiscal year, domestic equity markets gained 3.0 percent, international developed equity markets gained 6.1 percent, and emerging markets gained 6.3 percent. Most fixed income asset classes were slightly positive, with the exception of TIPS. The Barclays Aggregate Bond Index was up 1.4 percent, Barclays High Yield Index was up 2.2 percent, and the Barclays TIPS Index decreased 0.4 percent. The IMF once again increased the global growth forecast, although their growth drivers had changed. In the U.S., despite softening data, the Fed raised rates by another 0.25 percent (from 1.00 percent to 1.25 percent). The ECB and BOJ elected not to make any changes to interest rates. However, improving economic conditions and recent statements by Mario Draghi have led to some speculation that the ECB could begin reducing its bond-purchasing program next year. They have committed to continuing purchases through the end of calendar year 2017 and beyond, if needed, and to keeping interest rates low until their bond buying is done. Inflation levels remain below the ECB's target though, and are projected to stay there, which could lead to continual support.

#### Fiscal 2017 Market Returns

Equity markets were very strong throughout the fiscal year with most major equity indexes posting returns in the high teens to low twenties. The Russell 3000 index returned 18.5 percent, while the MSCI ACWI (ex. U.S.) and MSCI Emerging Markets returned 20.5 percent and 23.7 percent, respectively. Fixed income was mixed by credit quality as investment grade credits were slightly negative but lower-grade credits were positive. For the full fiscal year, the Barclays Aggregate returned -0.3 percent, Barclays U.S. TIPS returned -0.6 percent, Credit Suisse Leveraged Loans returned +7.5 percent, Barclays High Yield returned +12.7 percent, and JPM GBI-EM Global Diversified (unhedged emerging market bonds) returned +6.7 percent.

Alternative asset classes were also mixed for the fiscal year. NAREIT Equity returned -1.7 percent, Bloomberg Commodity Index returned -6.5 percent, Dow Jones Brookfield Global Infrastructure returned 8.0 percent, and S&P Global Natural Resources returned 15.3 percent. Private real estate and private equity continued to provide strong returns, as the National Council of Real Estate Fiduciaries ("NCREIF") Property Index returned 7.0 percent, and the Cambridge Associates Private Equity Composite returned 12.0 percent for the fiscal year<sup>1</sup>.

#### Fiscal 2018 Outlook

Looking forward, Meketa Investment Group believes that four key issues are of primary concern:

1) The potential for simultaneous monetary tightening globally:

After the Global Financial Crisis, major central banks injected massive amounts of liquidity into the market by purchasing bonds from banks (i.e., quantitative easing). They also reduced short term interest rates to record lows. Already the U.S. central bank has ended its bond-buying program, started to increase interest rates, and started to discuss reducing its balance sheet. Although other central banks, like Japan (BOJ) and Europe (ECB), continue to stimulate their respective economies, discussions have started about reducing stimulus in the near term.

<sup>&</sup>lt;sup>1</sup>Returns for real estate and private equity benchmarks are lagged one quarter due to the availability of data.

If major central banks start to tighten their policies at the same time, it could lead to higher rates, less liquidity, and lower overall economic activity.

2) Uncertainty related to the U.S. economy and policies:

Post U.S. presidential election, hopes have been high for new policies lowering taxes, increasing infrastructure spending, and reducing regulations. Investors anticipated such policies would come to fruition, creating the potential for disappointment. The recent failed attempt to pass revised healthcare legislation illustrates that there could be some bumps with moving forward with the new administration's agenda.

3) Declining growth in China, along with uncertain fiscal and monetary policies:

The process of transitioning from a growth model based on fixed asset investment by the government, to a model of consumption-based growth will be difficult. Similar policies as China's decision to unexpectedly devalue their currency or to support stock prices could prove disruptive and decrease confidence in China's government. Capital outflows remain a key issue in China. The government has made some efforts to tighten regulations to stem outflows, but higher rates and growth in the U.S., and elsewhere, could add to outflow pressures. China's abandonment of its support of the yuan, and a resulting major devaluation of the currency, could prove particularly disruptive to global markets and trade. The hot property market and the growing mountain of debt in the corporate sector remain other key risks.

4) Risks related to the U.K.'s exit from the European Union:

The European imbalances are rooted in structural issues in the Eurozone related to the combination of a single currency combined with 17 fiscal authorities. In the broader European Union, tensions exist, as highlighted in the U.K. referendum ("Brexit") last year, related to policies on immigration, laws, and budgetary contributions. Additional countries leaving either group, particularly the Eurozone, could set a dangerous precedent, especially if they ultimately experience growth. The massive influx of refugees into Europe from the Middle East and North Africa exacerbates economic stress. Furthermore, the votes last year in the U.S. presidential election and Brexit highlight a growing populist/antitrade sentiment. Stagnant wages, growing inequality, and the perception of jobs being lost abroad are key contributors. Reducing trade and imposing tariffs would likely lead to inflation, reduced efficiencies, and heightened tensions between countries.

#### **LACERA** Investment Results

Los Angeles County Employees Retirement Association ("LACERA") provides defined retirement plan benefits and other post-employment benefits for employees of the County of Los Angeles (County), the Los Angeles Superior Court (Court), and various outside districts. LACERA is responsible for the administration and investment of two separate funds (Funds): the LACERA defined benefit retirement plan (Pension Plan or Plan), whose assets provide retirement benefits for employees of the County and outside districts, and the LACERA Other Post-Employment Benefit Trust Fund (OPEB Trust), whose assets provide other post-employment benefits such as retiree healthcare for employees of the County, LACERA, and the Court.

At the end of June 2017, LACERA's Pension Plan had approximately \$52.5 billion in assets. For the fiscal year, LACERA returned 13.0 percent, gross of fees, outperforming the 11.2 percent return for the Policy Benchmark, as well as its assumed actuarial rate of return of 7.25 percent. The positive relative result is largely attributable to outperformance across all asset classes (except for Private Equity, which lagged its benchmark by 20 basis points). Overall, outperformance within fixed income (+340 basis points) and non-U.S. equities (+130 basis points) explain more than half of the excess returns of the Plan versus its policy benchmark. The OPEB Trust stood at \$737.7 million at the end of June 2017, buoyed by gains in the equity markets, which comprise roughly 80 percent of its assets. Longer-term performance is ahead of, or in-line with, LACERA's benchmark over three-, five-, and ten-year periods.

#### Summary

Performance for LACERA over the 2017 fiscal year exceeded the assumed actuarial rate of return as well as its policy benchmark. We believe that the Pension Plan's portfolio is well diversified. Our key priority for the current year is to conduct an asset allocation study for the Pension Plan and the OPEB Trust to ensure LACERA has a high probability of achieving the actuarial rate over the long term. We look forward to continuing our work with the Board and Staff to help LACERA meet its mission of producing, protecting, and providing the promised benefits.

Sincerely,

ontino

Leandro Festino, CFA, CAIA Managing Principal

Stehn Weld

Stephen P. McCourt, CFA Managing Principal

MEKETA INVESTMENT GROUP 5796 Armada Drive, Suite 110, Carlsbad, CA 92008 TEL 760.795.3450 FAX 760.795.3445 www.meketagroup.com



Jonathan Grabel Chief Investment Officer

#### **Dear LACERA members:**

It is a privilege as the incoming Chief Investment Officer to review the Investment Section of the fiscal year 2017 Comprehensive Annual Financial Report for the benefit of the membership of the Los Angeles County Employees Retirement Association (LACERA). LACERA recognizes the importance of its mandate and, with this in mind, this letter provides an overview of the investment portfolio, its performance for the fiscal year ended June 30, 2017, and a summary of new and ongoing strategic initiatives.

#### **Investment Policy**

LACERA's objective is to provide defined retirement plan benefits and other post-employment benefits for employees of the County of Los Angeles (County), the Los Angeles Superior Court (Court), and various Outside Districts. To this end, LACERA is responsible for the administration and investment of two separate funds (Funds): the LACERA defined benefit retirement plan (Pension Plan or Plan), whose assets provide retirement benefits for employees of the County, LACERA, the Court, and Outside Districts, and the LACERA Other Post-Employment Benefit Trust Fund (OPEB Trust), whose assets provide other post-employment benefits such as retiree healthcare for employees of the County, LACERA, and the Court. Unless otherwise specified, discussion in this letter refers to the Pension Plan.

LACERA's Board of Investments (BOI or Board), which exercises authority and control over the investment management of the Plan and the OPEB Trust, is comprised of nine members: four elected by active and retired Plan members, four appointed by the Los Angeles County Board of Supervisors, and the County Treasurer and Tax Collector who serves in an ex-officio capacity. In its role as a fiduciary, the BOI is responsible for establishing both Funds' investment policies and objectives. The Board has adopted Investment Policy Statements (IPS) in accordance with applicable federal, state, and local laws that provide frameworks for the management of both the Plan and OPEB Trust assets. Each IPS establishes an asset allocation mix suitable for the specific objectives of each entity and defines the principal duties of the Board, Investments staff, and principal external service providers including, but not limited to, the master custodian, consultants, and investment managers.

LACERA's Plan assets are managed on a total return basis, which allows the Plan to meet its ongoing responsibility of paying current benefits as well as to attain its longer-term objective of achieving and maintaining fully funded status. Accordingly, LACERA utilizes established investment approaches, such as Modern Portfolio Theory, to construct a diversified portfolio. Investments in broad asset classes, such as equities, fixed income, and real estate, are evaluated not only on their own merits but also for the collective impact they are expected to have on the total Plan. Given the Plan's need to both maintain liquidity and generate long term returns, LACERA's Board has determined that some risk is warranted and it should be taken prudently. These broad principles ensure that investment activities are conducted in a manner intended to best serve the interests of LACERA's members.

## **Portfolio Structure**

Strategic asset allocation, which apportions funds between broad asset classes, is expected to have the greatest impact on the Plan's investment performance over an extended period. Accordingly, LACERA utilizes an Asset Allocation Policy (Policy), which embraces a strategic, long term perspective of capital markets and which provides for the diversification of assets. This policy is intended to maximize the Plan's total return while remaining cognizant of its objectives, current market conditions, liquidity, and risk control. LACERA's BOI reviews the Plan's policy portfolio every three to five years, adjusting target weight ranges for each asset class to reflect changes in a variety of factors such as projected actuarial assets, liabilities, benefit payments, and contributions; expected long term capital market risk and return targets; and expected future economic conditions. LACERA's Policy is implemented by partnering with external managers who invest assets on the Plan's behalf subject to predetermined guidelines. LACERA's Investments division assists with this mission by aligning the Plan's portfolio with its strategic targets using approved investment strategies, rebalancing

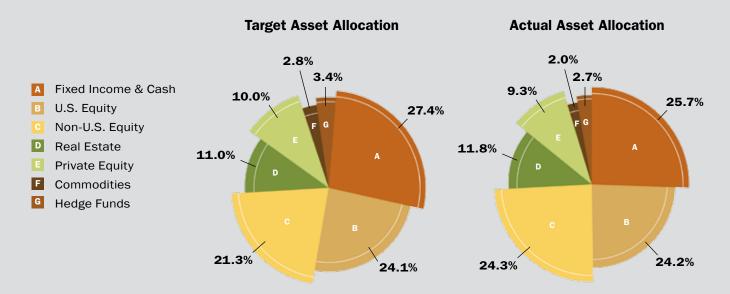
the portfolio back to target weights, monitoring the activities of external managers, and managing the Plan's liquidity needs. The coordination of these activities is intended to maximize the return potential of individual investment strategies while minimizing risk across the total portfolio.

The Plan is currently within its Policy's long term target ranges approved in August 2015. Additionally, the Board is embarking on a scheduled asset allocation review that will conclude in 2018. The chart below reflects the Plan's asset allocation mix as of June 30, 2017.

LACERA's BOI utilizes a separate IPS to govern the investment of the OPEB Trust. Given different liquidity needs and long-term funding status, the OPEB Trust's policy portfolio calls for the Trust to maintain \$100 million in cash with the remainder invested in global equities. This Policy has resulted in an approximate 83 percent allocation to global equities and a 17 percent allocation to cash as of June 30, 2017. The cash portion of the OPEB Trust's assets consists of high quality, short-term debt instruments while the equity portion is invested in the MSCI All Country World Investable Market Index (IMI), a comprehensive index fund that is broadly representative of the world's equity markets. The OPEB Trust will also undergo an asset allocation study in the 2018 fiscal year.

# **Asset Allocations**

As of June 30, 2017



\*Asset allocation based on Investment Manager classifications.

#### **Economic and Market Review**

The fiscal year ended June 30, 2017 was characterized by strong gains across most asset classes with the exception of commodities. Riskier, more volatile asset categories, such as public and private equities and high yield bonds, outperformed long-term return expectations and the returns of their more defensive counterparts such as investment grade bonds. In the U.S., expectations for an acceleration in near-term economic growth intensified late in 2016 on the prospect of regulatory and tax reform combined with the hope for new infrastructure initiatives. Although the outlook for large-scale policy moves has tempered in recent months, subdued core inflation coupled with sufficiently positive economic data have supported incremental tightening of monetary policy by the Federal Reserve. Against this backdrop of moderate, sustained growth, solid corporate earnings propelled equity markets to new highs. Internationally, continued accommodation by central banks spurred economic growth in emerging and developed markets alike. The rejection of isolationist policies in important Eurozone elections, improved corporate earnings, and a generally weaker U.S. dollar all contributed to strong appreciation in international equity markets during the fiscal year.

The moderate increase in global growth accompanied by low interest rates resulted in a strong rotation into riskier areas of financial markets, with high yield bonds outperforming sovereign debt and emerging market equities outpacing their developed market counterparts. The broad-based U.S. Russell 3000 Index advanced 18.5 percent, while the MSCI World ex-U.S. IMI Index, representative of equity market performance in developed market countries, and the MSCI Emerging Markets IMI Index, representative of equity market performance in developing countries, returned 19.7 percent and 22.8 percent, respectively, for the period, representing the best performance for each index for several years.

As noted above, fixed income returns were generally weaker than those of riskier asset categories as yields on Treasury and investment grade corporate bonds rose in response to the increase in short-term rates. This phenomenon was particularly pronounced in the U.S. as expectations for continued tightening in monetary policy led investors to seek out riskier credit in order to realize higher returns. Consequently, the Bloomberg Barclays U.S. Aggregate Index, a broad-based benchmark that measures the performance of U.S. investment grade securities, declined 0.3 percent for the period, while its more aggressive counterpart, the Bloomberg Barclays U.S. Corporate High Yield Index, returned 12.7 percent. Real estate, as represented by the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index, returned 7.0 percent, a slight deceleration from stronger performance in previous years.

While moderate global economic growth may persist, financial market returns witnessed in fiscal 2017 are unlikely to continue at the current trajectory without periodic corrections. Central banks remain vigilant in their assessment of risk and are poised to curtail money supply in the event of an acceleration in inflation. Geopolitical instability, partisan gridlock in the U.S., and structural changes that could result in lower growth in developed economies, such as unfavorable productivity and demographic trends, represent additional impediments in repeating last year's investment performance.

#### **Performance Overview**

The LACERA Pension Plan's investment portfolio realized a 12.7 percent return, net of investment management fees, for the fiscal year versus 11.2 percent for its policy benchmark, outperforming the index by 1.5 percent or 150 basis points (all returns presented are net-of-fees unless otherwise noted). The best performing sectors of the portfolio were the non-U.S. equity, U.S. equity, and private equity asset classes, which gained 22.7 percent, 18.6 percent, and 12.5 percent, respectively. Excluding cash, five of the portfolio's seven asset classes exceeded their respective policy benchmarks led by fixed income which surpassed its benchmark by 300 basis points, commodities which outperformed by 250 basis points, and hedge funds which exceeded its policy benchmark by 150 basis points.

The Plan's meaningful outperformance over its policy benchmark during fiscal 2017 follows slight underperformance in the prior fiscal year. As detailed in the table Investment Results Based on Fair Value — Pension Plan, the Plan's investment portfolio has slightly underperformed its policy benchmark on an annualized basis over the preceding

10 years. LACERA's goal is to meet or slightly exceed its policy benchmark over a full market cycle and achieve the Plan's actuarial expected return of 7.25 percent over the long term.

#### **Performance by Asset Class**

LACERA's public equity portfolio, comprising 48.5 percent, or \$25.5 billion, of total Plan assets as of June 30, 2017, is segmented into two sub-categories: U.S. and non-U.S. equities. Given LACERA's belief that public equity markets are largely efficient, both the U.S. and non-U.S. equity portfolios are heavily weighted towards passive investment strategies (74 percent and 63 percent for the U.S. and non-U.S. portfolios, respectively) with differentiated, actively managed portfolios employed to provide incremental risk-adjusted returns.

LACERA'S U.S. equity portfolio returned 18.6 percent for the year versus 18.5 percent for the Russell 3000 Index, a broad measure of the U.S. stock market. The non-U.S. equity portfolio returned 22.7 percent for the year, surpassing its customized MSCI All Country World ex-U.S. IMI hedged benchmark by 100 basis points. In order to reduce risk from currency exposure, LACERA employs a passive currency hedge on 50 percent of the portfolio's developed market equities.

LACERA's fixed income portfolio comprises 23.5 percent, or \$12.3 billion, of the Plan's total assets as of June 30, 2017. Currently, this category is heavily weighted towards investment grade corporate and government debt; however, it also includes an allocation to opportunistic investments in an effort to generate incremental risk-adjusted returns. In the aggregate, LACERA's bond portfolio returned 3.9 percent for the year versus 0.9 percent for the Bloomberg Barclays U.S. Universal Bond Index, outperforming the benchmark by 300 basis points. Non-government debt outperformed Treasuries, as returns for lower rated bonds surpassed those of their higher-rated counterparts in a period of moderate growth and increased demand for high-yielding securities. The portfolio's outperformance relative to the index is attributable to the portfolio's overweight to corporate bonds and loans, and an underweight to U.S. Treasury securities.

LACERA's private market asset classes, private equity and real estate, focus on longer-term, less liquid investments in which the Plan makes investments that can span a decade or more. Accordingly, while the group generated positive performance for the fiscal year based on observable market trends and interim valuation measures, final returns for these investments will be known with certainty only as assets are sold. LACERA's private equity portfolio, comprising 9.3 percent, or \$4.9 billion, of total Plan assets as of June 30, 2017, is segmented into three sub-categories: buyout, venture capital, and special situations. In the aggregate, the private equity portfolio returned 12.5 percent, or 20 basis points less than its target return, for the one-year period ended March 31, 2017 (private market returns are reported with a one-quarter lag). LACERA's \$6.2 billion real estate portfolio, comprising 11.8 percent of total Plan assets as of June 30, 2017, is primarily invested in relatively low-risk core assets, all of which are privately held and 95 percent of which are located within the United States. For the one-year period ended March 31, 2017, the real estate portfolio gained 7.6 percent, 20 basis points below its target return.

LACERA's hedge fund portfolio represented \$1.5 billion, or 2.7 percent, of total Plan assets as of June 30, 2017. The hedge fund program reduces the portfolio's risk exposure to equity markets by targeting returns from alternative sources. For the one-year period ended May 31, 2017 (the hedge fund portfolio's return is reported with a one-month lag), the hedge fund portfolio returned 6.9 percent net of all fees and expenses versus 5.4 percent for its policy benchmark.

For diversification purposes, LACERA invests a portion of the Plan's portfolio in commodities, including the agricultural, energy, and metals complexes. This commodities portfolio represented 2.0 percent, or \$1.1 billion, of total Plan assets as of June 30, 2017. While generating the lowest absolute return among the Plan's major asset classes, LACERA's commodities portfolio returned -4.0 percent for the year versus -6.5 percent for the Bloomberg Commodity Index, outperforming its benchmark by 250 basis points. Active strategies managed by external investment managers were able to mitigate some of the category's losses.

#### **Strategic Initiatives**

The principal function of the Investments division is to implement the Board's strategic investment directives. This core duty encompasses determining the optimal structure of each asset class within policy portfolio constraints; due diligence, monitoring, and compliance activities as they relate to LACERA's external investment managers; effective portfolio rebalancing; and liquidity management.

To strengthen these efforts, an initiative is underway to better understand the risks inherent in the Funds' portfolios. Accordingly, LACERA is in the process of deploying a comprehensive risk management system through its custody bank. When fully operational, the system will improve the investment management function by providing a clearer view of risk at both the Plan and asset class levels. This initiative also incorporates a broader effort to identify the manner and extent to which corporate governance and other, similar factors may affect the portfolios' performance.

The key strategic initiative in the coming fiscal year is the completion of a new asset allocation study for both the Plan and the OPEB Trust. Given LACERA's view that asset allocation is the principal driver of portfolio returns, periodically determining the appropriate mix of investment strategies is of primary importance. As such, the Board and the Investments division will work closely with LACERA's general consultant, Meketa Investment Group, as well as its asset category consultants, StepStone (private equity) and The Townsend Group (real estate), to optimize existing asset class categories, identify potential overlaps and gaps, and add new categories should the Board decide that additional strategies increase the prospects for improved risk-adjusted returns.

Finally, it is LACERA's belief that a thorough comprehension of investment fees and expenses is essential in providing a complete picture of portfolio returns and should result in more informed investment decisions. In order to improve the level of transparency needed to achieve such an understanding, a number of initiatives are currently underway such as the implementation of processes to collect and disclose expenses incurred by the Plan's illiquid investments in response to legislation passed in California in late 2016 (Assembly Bill No. 2833).

#### Conclusion

During the most recent fiscal year, the solid investment performance achieved by LACERA's Pension Plan and OPEB Trust portfolios has had a positive impact on the Funds' financial positions. The continued, measured evolution of LACERA's strategic asset allocation policy coupled with the benefits of a comprehensive risk management system should position the Funds to better perform across market cycles. Recognizing the importance of its role in providing retirement benefits today and into the future, LACERA's Investments division will continue to strive for further improvement in the investment process and work diligently on behalf of all LACERA members.

Respectfully submitted,

Jonathan Grabel

Jonathan Grabel Chief Investment Officer

#### Investment Summary — Pension Plan\*

For the Year Ended June 30, 2017 (Dollars in Thousands)

	Fair	Percent of Total	
Type of Investment	Value	Fair Value	
Cash and Cash Equivalents	\$1,132,291	2.2%	
Fixed Income	12,341,568	23.5%	
Subtotal Fixed Income and Cash	13,473,859	25.7%	
U.S. Equity	12,687,183	24.2%	
Non-U.S. Equity	12,788,470	24.3%	
Subtotal Equities	25,475,653	48.5%	
Commodities	1,067,986	2.0%	
Private Equity	4,865,235	9.3%	
Real Estate	6,222,851	11.8%	
Hedge Funds	1,428,832	2.7%	
Total Investments — Pension Plan	\$52,534,416	100.0%	

## Investment Summary — OPEB Trust\*

For the Year Ended June 30, 2017 (Dollars in Thousands)

	Fair	Percent of Total
Type of Investment	Value	Fair Value
Cash and Cash Equivalents	\$130,109	17.6%
Equity	607,547	82.4%
Total Investments — OPEB Trust	\$737,655	100.0%

## Investment Summary — OPEB Agency Fund\*

For the Year Ended June 30, 2017 (Dollars in Thousands)

	Fair	Percent of Total	
Type of Investment	Value	Fair Value	
Cash and Cash Equivalents	\$8,350	8.8%	
Fixed Income	86,903	91.2%	
Total Investments — OPEB Agency Fund	\$95,253	100.0%	

\*Differences between fair values in the Statement of Fiduciary Net Position and this schedule are due to the utilization of investment manager asset classifications and their fair values.

#### Investment Results Based on Fair Value — Pension Plan<sup>1</sup>

As of June 30, 2017

	Annualized			
	<b>Current Year</b>	Three-year	Five-year	Ten-year
U.S. Equity	18.6%	8.9%	14.6%	7.1%
Benchmark: Russell 3000 Index	18.5%	9.1%	14.6%	7.3%
Non-U.S. Equity, 50% Developed Markets Hedge Benchmark: Non-U.S. Equity Custom	22.7%	4.1%	9.7%	2.3%
Hedged Index <sup>2</sup>	21.7%	3.6%	9.2%	2.1%
Fixed Income <sup>3</sup>	3.9%	3.2%	3.7%	5.6%
Benchmark: BBG Barclays U.S. Universal Index <sup>4</sup>	0.9%	2.8%	2.7%	4.8%
Real Estate <sup>5</sup>	7.6%	10.5%	9.5%	3.4%
Benchmark: Real Estate Target Return <sup>6</sup>	7.8%	11.2%	11.2%	6.8%
Private Equity <sup>5</sup>	12.5%	10.7%	13.2%	11.6%
Benchmark: Private Equity Target Return <sup>7</sup>	12.7%	13.2%	13.2%	10.5%
Commodities Benchmark: Bloomberg Commodity Index	(4.0)%	(13.8)%	(7.9)%	(5.1)%
Total Return	(6.5)%	(14.8)%	(9.2)%	(6.5)%
Hedge Funds <sup>8</sup>	6.9%	1.8%	5.3%	_
Benchmark: Hedge Fund Custom Index <sup>9</sup>	5.4%	5.2%	5.1%	_
Cash	1.0%	0.6%	0.5%	1.0%
Benchmark: Citigroup 6-Month T-Bill Index	0.5%	0.3%	0.2%	0.7%
Total Fund (Net of Fees) <sup>10</sup>	12.7%	5.8%	9.0%	5.2%
Total Fund Policy Benchmark	<b>11.2</b> %	5.9%	8.8%	5.4%

<sup>1</sup> Asset class returns are calculated based on time-weighted rates of return, net of manager fees. Total Fund performance is calculated based on the weighted average returns of the asset classes, net of manager fees. Prior year returns are restated to enhance comparability to the current year.

<sup>2</sup> The Non-U.S. Equity benchmark is MSCI ACWI X U.S. IMI (Net) with 50 percent hedged Developed Markets. From 8/31/08 to 7/31/10, the benchmark was MSCI ACWI Ex U.S. IMI (Net), and for the period prior to 8/31/08 was MSCI ACWI Ex-U.S. (Net).

<sup>3</sup> The performance of two opportunistic portfolios are reported with a one-month lag.

<sup>4</sup> The benchmark is the Bloomberg Barclays U.S. Universal Index. For the period in this table prior to 3/31/09 the benchmark was a custom benchmark weighted 93 percent Bloomberg Barclays U.S. Aggregate Bond Index and 7 percent Bloomberg Barclays U.S. High Yield Ba/B Index.

<sup>5</sup> One quarter in arrears. Preliminary returns.

<sup>6</sup> The benchmark is the Open End Diversified Core Equity (ODCE) Index plus 40 basis points. For the period in this table prior to 6/30/13, the benchmark was NCREIF Property Index (NPI) minus 25 basis points.

<sup>7</sup> Rolling 10-year return of the Russell 3000 Index plus 500 basis points.

<sup>8</sup> Portfolio and benchmark are one month in arrears. Performance included in Total Fund beginning 10/31/11.

<sup>9</sup> The Hedge Fund benchmark is the Citigroup 3-month T-Bill Index plus 500 basis points.

<sup>10</sup> Total Fund gross of fee returns for the one-year, three-year, five-year and ten-year periods are 13.0 percent, 6.0 percent, 9.3 percent and 5.4 percent, respectively.

#### **Total Investment Rates of Return — Pension Plan**

For the Last Ten Fiscal Years Ended June 30 (Dollars in Thousands)

Fiscal Year-End	Total Investment Portfolio Fair Value	Total Fund Time- Weighted Return (net of fees) <sup>1</sup>	Total Fund Money-Weighted Return (net of fees) <sup>2</sup>	Return on Smoothed Valuation Assets (net of fees) <sup>3</sup>	Actuarial Assumed Rate of Return <sup>4</sup>	Actuarial Funded Ratio⁵
2008	\$39,472,905	-1.6%	_	9.0%	7.75%	94.5%
2009	30,918,057	-18.3%	_	1.5%	7.75%	88.9%
2010	33,760,695	11.6%	_	0.5%	7.75%	83.3%
2011	39,770,032	20.2%	_	3.3%	7.70%	80.6%
2012	38,627,163	0.0%	_	1.8%	7.60%	76.8%
2013	42,285,906	11.9%	_	5.4%	7.50%	75.0%
2014	49,033,365	16.5%	17.5%	11.8%	7.50%	79.5%
2015	47,990,447	4.1%	4.1%	10.5%	7.50%	83.3%
2016	47,898,667	0.8%	0.7%	6.5%	7.25%	79.4%
<b>2017</b> <sup>6</sup>	52,225,457	12.7%	12.7%	_	_	_

#### NOTES:

<sup>1</sup>**Total Fund** — **Time-Weighted Rate of Return** is the aggregate increase or decrease in the value of the portfolio resulting from the net appreciation or depreciation of the principal of the fund, plus or minus the net income or loss experienced by the fund during the period. The returns are presented net of investment management fees.

<sup>2</sup>Total Fund — Money-Weighted Rate of Return is a measurement of investment performance, net of investment expenses, adjusted for the changing amounts actually invested. The money-weighted rate of return is presented net of investment management fees.
<sup>3</sup>Return on Smoothed Valuation Assets consists of annual investment income in excess or shortfall of the expected rate of return on a valuation (actuarial) basis smoothed over a specified period with a portion of the year's asset gains or losses being recognized each year beginning with the current year.

<sup>4</sup>Actuarial Assumed Rate of Return is the future investment earnings of the assets which are assumed to accrue at an annual rate, compounded annually, net of both investment and administrative expenses. The Actuarial Assumed Rate of Return is 7.25 percent as adopted by the Board of Investments based on the results of the Actuarial Investigation of Experience completed in December 2016. For Fiscal Year 2015-2016, interest crediting and operating tables applied the 7.50 percent Actuarial Assumed Rate of Return.
<sup>5</sup>Actuarial Funded Ratio is a measurement of the funded status of the fund calculated by dividing the valuation assets by the actuarial accrued liability.

<sup>6</sup>Actuarial Valuation report for June 30, 2017 not available at CAFR publication.

#### Largest Equity Holdings — Pension Plan

As of June 30, 2017

(Dollars in Thousands)

Shares	Description	Fair Value
355,275	Apple Inc	\$51,167
447,722	United Continental Holdings	33,691
485,592	Microsoft Corp	33,472
2,137,898	DBS Group Holdings Ltd	32,204
655,879	Rio Tinto Ltd	31,831
204,000	Murata Manufacturing Co Ltd	30,992
650,000	Jardine Strategic Holdings Ltd	27,099
261,100	Nidec Corp	26,747
170,500	Daito Trust Construct Co Ltd	26,548
128,263	Naspers Ltd N Shs	24,914

NOTE: A complete list of portfolio holdings is available upon request.

## Largest Fixed Income Holdings — Pension Plan

As of June 30, 2017 (Dollars in Thousands)

Par	Description	Fair Value
244,700,000	U.S. Treasury Note 2.500% 08/15/2023	\$252,844
110,030,000	Federal National Mortgage Association TBA 3.000% 08/14/2047	109,711
96,170,000	Federal National Mortgage Association TBA 3.500% 08/14/2047	98,607
67,773,000	U.S Treasury Note 2.250% 02/15/2027	67,458
65,000,000	Federal National Mortgage Association TBA 3.500% 09/13/2047	66,547
71,102,100	U.S. Treasury Note 2.500% 02/15/2046	66,180
66,296,000	U.S. Treasury Note 2.000% 11/15/2026	64,644
62,561,000	U.S. Treasury Note 2.375% 05/15/2027	62,957
62,313,000	U.S. Treasury Note 1.875% 01/31/2022	62,391
60,682,938	U.S. Treasury Inflation Indexed Bonds 0.125% 04/15/2018	60,462

NOTE: A complete list of portfolio holdings is available upon request.

#### **Schedule of Investment Management Fees**

For the Fiscal Years Ended June 30, 2017 and 2016 (Dollars in Thousands)

	Pensio	Pension Plan OPEB Trust OPEE		OPEB Trust		ency Fund
Investment Managers	2017	2016	2017	2016	2017	2016
Cash and Short-Term	\$771	\$715	\$53	\$50	\$15	\$14
Commodities	3,517	2,962	_	—	_	—
Equity						
U.S. Equity	17,094	16,466	184	142	-	—
Non-U.S. Equity	28,274	21,361	-	—	-	—
Fixed Income	31,270	26,648	-	—	52	66
Hedge Funds	27,670	21,076	-	—	-	—
Private Equity	75,910	52,604	-	—	-	—
Real Estate	49,059	41,929	_	_	_	_
<b>Total Investment</b>						
Management Fees <sup>1</sup>	\$233,565	\$183,761	\$237	\$192	\$67	\$80

<sup>1</sup>Difference in management fee expense from the Statement of Changes in Fiduciary Net Position are due to the inclusion of incentive fees and carry allocations in the schedule above. These incentive fees and carry allocations are netted against investment income in the Statement of Changes in Fiduciary Net Position.

## **Cash & Short-Term**

J.P. Morgan Asset Management

## Equities — U.S.

BlackRock Institutional Trust Company NA Cramer Rosenthal & McGlynn LLC Eagle Asset Management Inc FIS Group Inc Frontier Capital Management Company LLC INTECH Investment Management LLC JANA Partners LLC Northern Trust Global Advisors Inc Relational Investors LLC Twin Capital Management Inc Westwood Management Corporation

## Equities — Non-U.S.

Acadian Asset Management LLC AQR Capital Management LLC BlackRock Institutional Trust Company NA Capital Group Cevian Capital GAM International Management Ltd Genesis Investment Management LLP Lazard Asset Management LLC Putnam Advisory Company LLC Symphony Financial Partners

## **Fixed Income**

Aberdeen Asset Management Inc Ashmore Investment Management Limited Bain Capital Credit LP **Beach Point Capital** BlackRock Financial Management Inc Brigade Capital Management LP Crescent Capital Group LP Dodge & Cox Dolan McEniry Capital Management LLC **DoubleLine Capital LP** LM Capital Group LLC Loomis, Sayles & Company LP Oaktree Capital Management LP Pacific Investment Management Company (PIMCO) PENN Capital Management Company Inc Principal Global Investors LLC **Pugh Capital Management Inc** TCW Asset Management Company **Tennenbaum Capital Partners LLC** Wells Capital Management Western Asset Management Company

## **Hedge Funds**

Goldman Sachs Hedge Fund Strategies LLC Grosvenor Capital Management LP

## **Private Equity**

J.P. Morgan Investment Management Inc Morgan Stanley Alternative Investments LLC Pathway Capital Management LP

## **Real Estate**

Barings Real Estate Advisers LLC Capri Capital Advisors LLC **CBRE Global Investors CityView Clarion Partners** Deutsche Asset & Wealth Management **Europa Capital** Heitman Capital Management LLC Hunt Investment Management Invesco Institutional (N.A.) Inc LaSalle Investment Management Inc Phoenix Realty Group LLC ProLogis Quadrant Real Estate Advisors LLC Realty Associates Advisors LLC (TA) Starwood Capital Group Stockbridge Capital Group The Carlyle Group TriPacific Enterprises Residential Advisors (LOWE) **UrbanAmerica Advisors** Van Barton Group

## Mortgage Loan Servicer

Ocwen Loan Servicing LLC

## Commodities

Credit Suisse Asset Management LLC Gresham Investment Management LLC Neuberger Berman Alternative Fund Management LLC Pacific Investment Management Company (PIMCO)

## Passive Manager (Index Fund)

BlackRock Institutional Trust Company NA

## **Securities Lending Program**

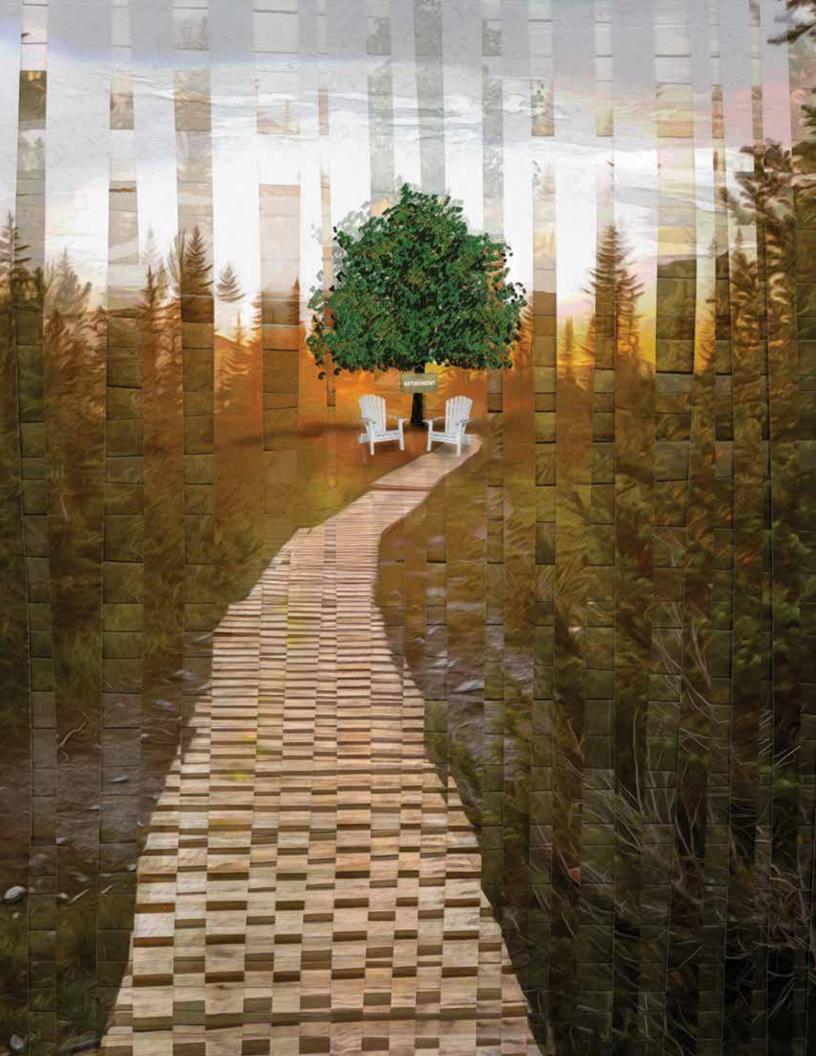
Goldman Sachs Agency Lending (GSAL) State Street Corporation State Street Bank & Trust Company of California NA

## **Retiree Healthcare Reserve**

Standish Mellon Asset Management Company LLC Western Asset Management Company

## **Other Post-Employment Benefits Trust**

BlackRock Institutional Trust Company NA J.P. Morgan Asset Management



## **Actuarial Section**

Our members deserve quality service from LACERA. What that means depends on where they are in their journey. For instance, early career hires might want to speak with a Retirement Benefits Specialist to better understand their plan's provisions. In the unfortunate circumstance where a member becomes permanently disabled, a Disability Retirement Specialist can provide direction. Regardless of the type of service needed, when members make inquiries, they receive professional, accurate answers to guide them toward their retirement destination.



#### Introduction

The actuarial process at the Los Angeles County Employees Retirement Association (LACERA) is governed by provisions in the County Employees Retirement Law of 1937 (CERL). This statute requires LACERA to obtain an actuarial valuation of the Pension Plan at least once every three years. It further requires the LACERA Board of Investments to transmit its recommendations related to contribution rates to the County Board of Supervisors. The County Board of Supervisors adopts and adjusts contribution rates in accordance with LACERA's recommendations.

#### **Changes in Pension Benefit Terms**

The California Public Employees' Pension Reform Act of 2013 (PEPRA) changed benefits for new members of LACERA who entered on or after January 1, 2013. These members joined either General Plan G or Safety Plan C. The provisions of PEPRA apply for the current actuarial valuation. Due to the limited membership in these plans as of the June 30, 2013 valuation, a hypothetical five-year population was used to determine the normal cost rate for this group. This methodology was adopted by the Board of Investments at its February 2014 meeting and will apply through the June 30, 2017 valuation, after which the actual plan populations are expected to reflect five years of membership.

## **Changes in Pension Plan Assumptions**

In addition to the annual valuations, LACERA requires its actuary to review the reasonableness of the economic and demographic actuarial assumptions every three years. This review, commonly referred to as the investigation of experience or experience study, is accomplished by comparing actual experience during the preceding three years to what was expected to happen according to the actuarial assumptions. On the basis of actual Pension Plan history, the actuary determines whether changing the assumptions or methodology will better project benefit liabilities and asset growth.

## **Valuation Policy**

In December 2009, the Board of Investments adopted a new Retirement Benefit Funding Policy (Funding Policy). The Funding Policy was amended in February 2013 to conform to the new standards mandated in the California Public Employees' Pension Reform Act of 2013. In addition, the Board of Investments approved inclusion of the STAR Reserve as part of valuation assets and on an ongoing basis for future valuations. The liability for STAR benefits that may be granted in the future is not included in the valuation.

The LACERA Board of Investments maintains the Retirement Benefit Funding Policy that requires annual adjustment of the employer contribution rates based on the annual valuation of LACERA's actuary. Milliman, the Pension Plan consulting actuary, performed the most recent actuarial valuation as of June 30, 2016, and recommended changes to the employer and employee contribution rates. At their March 2017 meeting, the LACERA Board of Investments adopted Milliman's June 30, 2016 actuarial valuation report.

In addition to the annual valuations, LACERA requires its actuary to review the reasonableness of the economic and demographic actuarial assumptions every three years. This review, commonly referred to as the investigation of experience or experience study, is accomplished by comparing actual experience during the preceding three years to what was expected to happen according to the actuarial assumptions. Based on this review, the actuary recommends changes in the assumptions or methodology that will better project benefit liabilities and asset growth. The LACERA Board of Investments adopts, possibly with modification, the recommended methods and assumptions to be used in future valuations. At their December 2016 meeting, the LACERA Board of Investments adopted Milliman's recommendations based on the 2016 Investigation of Experience for Retirement Benefit Assumptions with a modification to the mortality improvement scale recommendation. The LACERA Board of Investments also adopted a phase-in of the changes in employer contribution rates over a three-year period.

#### **Employee Contributions**

As part of the experience study, the Pension Plan actuary recommends adjustments to employee contribution rates, if necessary, due to changes in the underlying assumptions and methodologies used in calculating employee rates for age-based contributory Plans (General Plans A, B, C, and D, and Safety Plans A and B). Therefore, it is expected that the age-based employee rates will change no more frequently than every three years, when the actuary reviews the assumptions and methodologies.

For the Plans that use single-rate employee contribution rates (General Plan G and Safety Plan C), the Pension Plan actuary is required to recommend rates that are one-half the normal cost rate. If there is a change in these Plans' total normal cost rate, the actuary recommends new employee contribution rates.

## **Employer Contributions**

The members and employers are responsible for contributing to the cost of benefits to be earned each year. These contributions are known as normal cost contributions. The portion not funded by expected member contributions is the responsibility of the employers and is referred to as the employer normal cost. Employer contributions are reviewed and changes are recommended each year by the consulting actuary. The actuary recommended new employer normal cost contribution rates for all Plans based on the June 30, 2016 valuation.

The employers are also responsible for contributing funding shortfalls related to liabilities accrued in the past, including changes in the economic and non-economic assumptions impacting past service. This portion of the employer's contribution rate is known as the Unfunded Actuarial Accrued Liability (UAAL) contribution.

The latest actuarial valuation as of June 30, 2016, increased the employer normal cost rate from 9.28 percent to 9.97 percent. The change in the normal cost contribution rates from year to year is generally due to a few factors. This year, the normal cost rate was impacted by new assumptions adopted for the 2016 valuation, normal actuarial experience and a change in plan proportion as new members are hired into General Plan G and Safety Plan C. The employers' required contribution rate to finance the UAAL over a layered 30-year period increased from 8.49 percent to 11.24 percent. Member contribution rates increased for all contributing members effective with the 2016 actuarial valuation due to new assumptions adopted with the 2016 Investigation of Experience.

## **Actuarial Cost Method**

The entry age normal actuarial cost method is used for both funding requirements and financial reporting purposes. This method was approved by LACERA in 1999, as recommended by the consulting actuary. The entry age normal method allocates costs to each future year as a level percentage of payroll, which is ideal for employers to budget for future costs.

#### Audits

The valuation policy requires actuarial audits of retirement benefit valuations and experience studies at regular intervals in the same cycle as LACERA's triennial experience study and valuation. The triennial valuation and experience study was completed as of June 30, 2016. Thus, the Plan audit actuary, Segal Consulting (Segal), performed an audit of Milliman's 2016 experience study and valuation reports.

In regards to the audit of the experience study, Segal concluded, "Milliman has employed generally accepted actuarial practices and principles in studying Plan experience, selecting assumptions, computing employer contribution rates, and presenting the results of their work. We believe that the actuarial assumptions as recommended by Milliman, as well as those approved by the LACERA Board of Investments, are reasonable for use in LACERA's actuarial valuation." The audit of Milliman's valuation report, according to Segal, "confirms that the actuarial calculations as of June 30, 2016 are reasonable and based on generally accepted actuarial principles and practices."

#### **Other Actuarial Information**

Actuarially Determined Contributions: The Schedule of Contributions History – Pension Plan included in the Required Supplementary Information Section provides 10 years of actuarially determined contributions in relation to the actual contributions provided to the Pension Plan.

Actuarial Methods and Assumptions: A description of the actuarial methods and assumptions for the Pension Plan valuation used by the Pension Plan actuary are included in this Actuarial Section. In addition, the Financial Section provides a summary of the actuarial methods and significant assumptions used to prepare the Pension Plan (Retirement Benefits) valuation report, which determines the Pension Plan's funding requirements. The Financial Section also discusses the actuarial methods and significant assumptions used for financial reporting and required

Governmental Accounting Standards Board (GASB) Statement No. 67 disclosures. Any differences between the assumptions used for financial reporting and those applied for funding purposes are noted.

The following additional information is included in this section:

- Actuary's Certification Letter Pension Plan
- Summary of Actuarial Methods and Assumptions Pension Plan
- Schedule of Funding Progress Pension Plan
- Active Member Valuation Data Pension Plan
- Retirants and Beneficiaries Added To and Removed From Retiree Payroll Pension Plan
- Actuary Solvency Test Pension Plan
- Actuarial Analysis of Financial Experience Pension Plan
- Probability of Occurrence

A Summary of Major Plan Provisions for the Pension Plan is available upon request from LACERA.

September 15, 2017

Board of Investments Los Angeles County Employees Retirement Association 300 North Lake Avenue, Suite 820 Pasadena, CA 91101-4199



1301 Fifth Avenue, Suite 3800 Seattle, WA 98101-2605 USA Tel +1 206 624 7940 Fax +1 206 623 3485 milliman.com

Dear Members of the Board:

The basic financial goal of LACERA is to establish contributions which fully fund the System's liabilities and which, as a percentage of payroll, remain level for each generation of active members.<sup>1</sup> Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

LACERA measures its funding status as the Funded Ratio, which is equal to the actuarial value of valuation assets over the actuarial accrued liabilities. The funding status based on the past three actuarial valuations is shown below:

Valuation Date: June 30, 2014Funded Ratio: 79.5%Valuation Date: June 30, 2015Funded Ratio: 83.3%Valuation Date: June 30, 2016Funded Ratio: 79.4%

It is our opinion that LACERA continues in sound financial condition as of June 30, 2016. Most of this year's decrease in the Funded Ratio is due to the assumption changes effective June 30, 2016. Recognition of a portion of asset losses from the current year also contributed to the decrease. Using the market value of assets on June 30, 2016, the Funded Ratio would be 76.1 percent. Currently, a net asset loss is being deferred.

LACERA's funding policy provides that the County's contributions are set equal to the normal cost rate, net of member contributions, plus the amortization payment of any Unfunded Actuarial Accrued Liability (UAAL) or minus the amortization of any Surplus Funding. A UAAL occurs if the Funded Ratio is less than 100 percent. Surplus Funding occurs when the Funded Ratio is greater than 100 percent. The amortization of the UAAL uses a layered 30-year approach. Under this approach, the UAAL, as of June 30, 2009, is amortized over a closed 30-year period. Each year thereafter, any increase or decrease in the UAAL is also amortized over a new 30-year closed period. If the Funded Ratio exceeds 100 percent, then any Surplus is amortized over an open 30-year period.

The current funding policy requires LACERA to consider all of the funds in the Contingency Reserve in excess of 1 percent of the market value of assets as part of the valuation assets. The STAR Reserve is also considered part of the valuation assets. The Board's policy does not include any corresponding liability for future STAR benefits in the valuation. Note that if all of the STAR Reserve funds were excluded from the valuation assets for funding purposes, the Funded Ratio on June 30, 2016 would decrease to 78.4 percent.

In preparing the June 30, 2016 valuation report, we relied, without audit on information (some oral and some in writing) supplied by LACERA. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data we have found them to be reasonably consistent and comparable with data used for other purposes, although we have not audited the data at the source. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The valuation is also based on our understanding of LACERA's current benefit provisions and the actuarial assumptions

<sup>&</sup>lt;sup>1</sup>A further goal is to minimize employer contributions, consistent with the requirements of Article XVI, §17 of the California Constitution and §31595 of the California Government Code.

which were reviewed and adopted by the Board of Investments. The funding assumptions were based on the triennial investigation of experience study report as of June 30, 2016 and adopted at the December 14, 2016 Board of Investments meeting. The assumptions and methods used for financial reporting under GASB 67 are the same as the funding assumptions and methods with the following exceptions:

- 1. The discount rate of 7.38% is gross of administrative expenses;
- 2. The STAR COLA is treated as substantively automatic and is valued to the extent it is projected to be paid in the future; and
- 3. The individual entry age normal cost method is used without modification.
- 4. The Fiduciary Net Position is equal to the market value of assets minus liabilities.

The actuarial computations presented in the valuation report are for purposes of determining the recommended funding amounts for LACERA consistent with our understanding of their funding requirements and goals. The liabilities are determined by using the entry age normal funding method. The actuarial assets are determined by using a five-year smoothed recognition method of asset gains and losses, determined as the difference of the actual market value to the expected market value. We believe the actuarial assumptions and methods are internally consistent and reasonable for their intended purpose.

Future actuarial measurements may differ significantly from the current measurements as presented in the valuation report and GASB 67 report due to such factors as the following: experience differing from that anticipated by the economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in the program provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Milliman's work is prepared exclusively for LACERA for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. It is a complex, technical analysis that assumes a high level of knowledge concerning LACERA's operations.

No third party recipient of Milliman's work product who desires professional guidance should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

Milliman prepared the following information for the actuarial section:

- 1. Retirees and Beneficiaries Added to and Removed from Benefits Pension
- 2. Actuarial Analysis of Financial Experience Pension
- 3. Actuary Solvency Test Pension
- 4. Schedule of Funding Progress Pension

In addition, for Note E of the financial section, Milliman prepared the Schedule of Net Pension Liability and the Sensitivity Analysis.

Except as noted above, LACERA staff prepared the information in Note E of the financial section and the Required Supplementary Information, based on information supplied in prior actuarial reports, our June 30, 2016 actuarial valuation, and our June 30, 2017 GASB 67 report. Milliman has reviewed the information in Note E for accuracy.

We certify that the June 30, 2016 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems.

Sincerely,

Mark C Olleman

Mark C. Olleman, FSA, EA, MAAA Principal and Consulting Actuary MCO/NJC/nlo

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Nick J. Collier, ASA, EA, MAAA Principal and Consulting Actuary

Actuarial Methods and Assumptions	Recommended by the consulting actuary and adopted by the Board of Investments. The actuarial assumptions used to determine the liabilities are based on the results of the 2016 triennial investigation of experience study (experience study). In December 2016, the Board of Investments adopted a decrease in the price inflation rate and other economic assumptions.
	In 2009, the Board of Investments adopted a new Retirement Benefit Funding Policy (Funding Policy). Under the Funding Policy, modifications to the asset valuation and amortization methods were adopted beginning with the June 30, 2009 actuarial valuation. The Funding Policy was amended in February 2013 to conform with the new standards mandated in the PEPRA and to specify that the Supplemental Targeted Adjustment for Retirees (STAR) Reserve should be included with the valuation assets on an ongoing basis.
Actuarial Cost Method	Entry Age Normal.
Actuarial Asset Valuation Method	The assets are valued using a five-year smoothed method based on the difference between expected and actual market value of assets as of the valuation date. The expected market value is the prior year's market value increased with the net cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption. The five-year smoothing valuation basis for all assets was adopted beginning with the June 30, 2009 valuation.
	For the June 30, 2016 valuation, the Board of Investments approved including the STAR Reserve as part of the 2016 valuation assets. The inclusion of the STAR Reserve in the valuation assets was formalized for the current and future actuarial valuations in the February 2013 amendment to LACERA's Funding Policy.
Amortization of Unfunded Actuarial Accrued Liability (UAAL) or Funding Surplus	In accordance with LACERA's Funding Policy, the employer contribution rates are set equal to the normal cost rate, net of expected member contributions for the next year, plus amortization of any UAAL or Surplus Funding. A UAAL occurs if the Funded Ratio is less than 100 percent. Surplus Funding occurs if the Funded Ratio is greater than 100 percent. The amortization of the UAAL beginning with the June 30, 2009 valuation is funded over a closed 30-year period. Any future unanticipated changes in the UAAL, such as assumption changes or actuarial gains and losses, are amortized over new closed 30-year periods beginning with the June 30, 2010 valuation. This approach is often referred to as a "layered amortization method." The employer contribution rate is not allowed to be less than the rate if LACERA amortized the total UAAL over a 30-year period. If the Funded Ratio is greater than 120 percent in future valuations, the amortization of any Surplus Funding is funded over an open or "rolling" 30-year period. If the Funded Ratio is between 100 and 120 percent, only the employer normal cost rate is contributed. For the June 30, 2016 valuation, eight amortization layers were used to calculate the total amortization payment beginning July 1, 2017.

Projected Salary Increases	Rates of annual salary increases assumed for the purpose of the valuation range from 3.51 percent to 11.51 percent. In addition to increases in salary due to promotions and longevity, the increases include an assumed 3.25 percent per annum rate of increase in the general wage level of membership. Increases are assumed to occur mid-year (i.e., January 1) and apply only to base salary, excluding Megaflex compensation. The mid-year timing reflects that salary increases occur throughout the year, or on average, mid-year. For plans with a one-year final average compensation period, actual average annual compensation is used. These rates were adopted beginning with the June 30, 2016 valuation.
Investment Rate of Return	Future investment earnings are assumed to accrue at an annual rate of 7.25 percent, compounded annually, net of both investment and administrative expenses. This rate was adopted beginning with the June 30, 2016 valuation.
Post-Retirement Benefit Increases	Post-retirement benefit increases of either 2.75 percent or 2.0 percent per year are assumed for the valuation in accordance with the benefits provided. These adjustments, which are based on the Consumer Price Index (CPI), are assumed payable each year in the future, as they are no greater than the expected increase in the CPI of 2.75 percent per year.
	Plan E members receive a prorated post-retirement benefit increase of 2.0 percent for service credit earned on and after June 4, 2002. The portion payable is based on a ratio of the member's years of service earned on and after June 4, 2002, to the member's total years of service. The portion of the full 2.0 percent increase not provided for may be purchased by the member. COLA adjustments for members with service credit earned prior to June 4, 2002, are based on a ratio of months of service earned on and after June 4, 2002, divided by the total months of service.
Consumer Price Index (CPI)	Increase of 2.75 percent per annum. This rate was adopted beginning with the June 30, 2016 valuation.
Rates of Separation From Employment	Various rates are dependent upon member's age, gender, and retirement plan. Each rate represents the probability that a member will separate from service at each age due to the particular cause. These rates of separation from active service were adopted beginning with the June 30, 2016 valuation. The Probability of Occurrence schedule included in this Section includes a summary of probability of retirement and withdrawal for sample ages.

Expectation of Life After Retirement	The same post-retirement mortality rates are used in the valuation for deferred inactive members, members retired from service, and beneficiaries. Beneficiaries are assumed to have the same mortality as a general member of the opposite sex.
	Males: General Members: RP-2014 Healthy Annuitant Mortality Table for Males multiplied by 105 percent, with MP-2014 Ultimate Projection Scale.
	<b>Safety Members:</b> RP-2014 Healthy Annuitant Mortality Table for Males multiplied by 95 percent, with MP-2014 Ultimate Projection Scale.
	Females: General Members: RP-2014 Healthy Annuitant Mortality Table for Females, with MP-2014 Ultimate Projection Scale.
	<b>Safety Members:</b> RP-2014 Healthy Annuitant Mortality Table for Females, with MP-2014 Ultimate Projection Scale.
	These rates were adopted effective June 30, 2016.
Expectation of Life After	Males:
Disability	<ul> <li>General Members: Average of RP-2014 Healthy Annuitant Mortality Table for Males multiplied by 105 percent and RP-2014 Disabled Annuitant Mortality Table for Males, both projected with MP-2014 Ultimate Projection Scale.</li> <li>Safety Members: RP-2014 Healthy Annuitant Mortality Table for Males, with MP-2014 Ultimate Projection Scale.</li> </ul>
Disability	multiplied by 105 percent and RP-2014 Disabled Annuitant Mortality Table for Males, both projected with MP-2014 Ultimate Projection Scale. <b>Safety Members:</b> RP-2014 Healthy Annuitant Mortality Table for Males, with MP-
Disability	<ul> <li>multiplied by 105 percent and RP-2014 Disabled Annuitant Mortality Table for Males, both projected with MP-2014 Ultimate Projection Scale.</li> <li>Safety Members: RP-2014 Healthy Annuitant Mortality Table for Males, with MP-2014 Ultimate Projection Scale.</li> <li>Females:</li> <li>General Members: Average of RP-2014 Healthy Annuitant Mortality Table for Females multiplied by 100 percent and RP-2014 Disabled Annuitant Mortality Table</li> </ul>

## Recent Changes and Their Financial Impact

An experience study was performed by the consulting actuary for the three-year period ended June 30, 2016. The Board of Investments adopted the demographic assumptions recommended in that report with a modification to the mortality improvement scale, and with a three-year phase-in of the impact of the change on employer contribution rates. In addition, the Board of Investments adopted reductions in the economic assumptions. Changes to those assumptions and other financial impacts are discussed below.

**STAR Reserve:** The STAR Reserve is included in the 2016 valuation assets. There is no corresponding liability for future potential STAR benefits included in the valuation. The inclusion of the STAR Reserve in the valuation assets was formalized for the current and future actuarial valuations in the February 2013 amendment to LACERA's Funding Policy.

**2016 Assumption Changes:** At the December 2016 Board of Investments meeting, the Board adopted new assumptions with the 2016 Investigation of Experience report. The adopted assumptions included a decrease in the investment return assumption to 7.25 percent, a decrease in the wage growth assumption to 3.25 percent, a decrease in the CPI assumption to 2.75 percent, and an increase in life expectancies. All assumption changes have been reflected in the June 30, 2016 actuarial valuation, although the impact on the employer contribution rate is being phased in over three years.

**Employer Contributions:** The total required employer contribution rate calculated in the 2016 valuation increased over the prior year by 1.93 percent of payroll (3.44 percent without the phase-in). The increase is primarily due to the assumption changes adopted by the LACERA Board of Investments effective June 30, 2016, which resulted in an increase of 1.36 percent of payroll (2.87 percent without the phase-in).

**Member Contributions:** New member contribution rates were implemented based on the new assumptions adopted with the 2016 Investigation of Experience. The average rate for all contributing members increased from 7.84 percent to 8.29 percent of payroll, effective July 1, 2017.

**Funding:** The Funded Ratio decreased from 83.3 percent to 79.4 percent primarily due to the assumption changes effective June 30, 2016, which caused a decrease of 3.9 percent in the Funded Ratio. Recognition of current and prior year asset losses caused a 0.8 percent decrease.

## Schedule of Funding Progress — Pension Plan

(Dollars in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) <sup>1</sup> (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll <sup>2</sup> (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
June 30, 2007	\$37,041,832	\$39,502,456	\$2,460,624	93.8%	\$5,615,736	43.8%
June 30, 2008	39,662,361	41,975,631	2,313,270	94.5%	6,123,888	37.8%
June 30, 2009	39,541,865	44,468,636	4,926,771	88.9%	6,547,616	75.2%
June 30, 2010	38,839,392	46,646,838	7,807,446	83.3%	6,695,439	116.6%
June 30, 2011	39,193,627	48,598,166	9,404,539	80.6%	6,650,674	141.4%
June 30, 2012	39,039,364	50,809,425	11,770,061	76.8%	6,619,816	177.8%
June 30, 2013	39,932,416	53,247,776	13,315,360	75.0%	6,595,902	201.9%
June 30, 2014	43,654,462	54,942,453	11,287,991	79.5%	6,672,228	169.2%
June 30, 2015	47,328,270	56,819,215	9,490,945	83.3%	6,948,738	136.6%
June 30, 2016	49,357,847	62,199,214	12,841,367	79.4%	7,279,091	176.4%

<sup>1</sup>Using the Entry Age Normal actuarial cost method. <sup>2</sup>Covered Payroll includes compensation paid to all active employees on which contributions are calculated.

#### **Active Member Valuation Data — Pension Plan**

				Average	Percentage Increase/ (Decrease)
Valuation	Plan	Member	Annual	Annual	in Average
Date	Туре	Count	Salary <sup>1</sup>	Salary	Salary
June 30, 2007	General	79,829	\$4,673,126,964	\$58,539	5.86%
	Safety	12,267	1,103,924,952	89,991	6.42%
	Total	92,096	\$5,777,051,916	\$62,729	6.17%
June 30, 2008	General	81,664	\$5,016,720,948	\$61,431	4.94%
	Safety	12,828	1,187,406,768	92,564	2.86%
	Total	94,492	\$6,204,127,716	\$65,658	4.67%
June 30, 2009	General	82,878	\$5,347,558,596	\$64,523	5.03%
	Safety	12,910	1,239,655,092	96,023	3.74%
	Total	95,788	\$6,587,213,688	\$68,769	4.74%
June 30, 2010	General	81,413	\$5,318,137,692	\$65,323	1.24%
	Safety	12,997	1,257,305,532	96,738	0.75%
	Total	94,410	\$6,575,443,224	\$69,648	1.28%
June 30, 2011	General	80,145	\$5,295,354,528	\$66,072	1.15%
	Safety	12,641	1,239,553,116	98,058	1.36%
	Total	92,786	\$6,534,907,644	\$70,430	1.12%
June 30, 2012	General	79,467	\$5,271,580,728	\$66,337	0.40%
	Safety	12,485	1,229,922,420	98,512	0.46%
	Total	91,952	\$6,501,503,148	\$70,705	0.39%
June 30, 2013	General	79,006	\$5,253,152,532	\$66,491	0.23%
	Safety	12,539	1,234,902,228	98,485	(0.03%)
	Total	91,545	\$6,488,054,760	\$70,873	0.24%
June 30, 2014	General	79,943	\$5,487,670,164	\$68,645	3.24%
	Safety	12,523	1,252,867,272	100,045	1.58%
	Total	92,466	\$6,740,537,436	\$72,897	2.86%
June 30, 2015	General	81,228	\$5,706,302,532	\$70,250	2.34%
	Safety	12,446	1,299,621,108	104,421	4.37%
	Total	93,674	\$7,005,923,640	\$74,790	2.60%
June 30, 2016	General	82,916	\$5,949,587,940	\$71,754	2.14%
	Safety	12,528	1,342,684,620	107,175	2.64%
	Total	95,444	\$7,292,272,560	\$76,404	2.16%

<sup>1</sup>Active Member Valuation Annual Salary is an annualized compensation of only those members who were active on the actuarial valuation date. Covered Payroll includes compensation paid to all active employees on which contributions are calculated.

## Retirants and Beneficiaries Added to and Removed from Retiree Payroll — Pension Plan

(Dollars in Thousands)

	Added	Added to Rolls		From Rolls	Rolls at End of Year			
Valuation Date	Member Count	Annual Allowance	Member Count	Annual Allowance	Member Count	Annual Allowance <sup>1</sup>	Percentage Increase in Retiree Allowance	Average Annual Allowance
June 30, 2007	2,015	\$79,955	(1,615)	\$(35,054)	51,392	\$1,858,225	5.06%	\$36
June 30, 2008	2,759	167,753 <sup>2</sup>	(1,801)	(47,103)	52,350	1,978,875	6.49%	\$38
June 30, 2009	2,505	157,469 <sup>2</sup>	(1,786)	(50,619)	53,069	2,085,725	5.40%	\$39
June 30, 2010	2,947	188,7242	(1,820)	(54,105)	54,196 <sup>3</sup>	2,220,344	6.45%	\$41
June 30, 2011	3,134	185,204 <sup>2</sup>	(1,959)	(62,923)	55,371	2,342,625	5.51%	\$42
June 30, 2012	3,194	193,865 <sup>2</sup>	(1,795)	(61,588)	56,770 <sup>3</sup>	2,474,902	5.65%	\$44
June 30, 2013	3,373	205,659 <sup>2</sup>	(2,057)	(69,494)	58,086 <sup>3</sup>	2,611,067	5.50%	\$45
June 30, 2014	3,128	172,743 <sup>2</sup>	(1,985)	(71,730)	59,229 <sup>3</sup>	2,712,080	3.87%	\$46
June 30, 2015	3,501	180,549 <sup>2</sup>	(2,124)	(80,028)	60,606 <sup>3</sup>	2,812,601	3.71%	\$46
June 30, 2016	3,479	<b>220,632</b> <sup>2</sup>	(2,171)	(80,881)	<b>61,914</b> <sup>3</sup>	2,952,352	4.97%	\$48

 $^{1}$ Annual allowance is the monthly benefit allowance annualized for those members counted as of June 30.

<sup>2</sup>Includes COLAs that occurred during the fiscal year and therefore were not included in the previous years' Annual Allowance totals.

<sup>3</sup>For the actuarial valuation year, Member Count includes retirees who, due to timing at year end, are not yet included in the total Retired Members count disclosed in Note A - Plan Description.

(Dollars in Millions)

	Actuarial A	Accrued Liabilit		Percentage of AAL Covered by Assets			
Valuation Date	(1) Active Member Contributions	(2) Retired/ Vested Member <sup>1</sup>	(3) Employer Financed Portion	Actuarial Value of Valuation Assets	(1) Active	(2) Retired	(3) Employer
June 30, 2007	\$4,852	\$22,398	\$12,253	\$37,042	100%	100%	80%
June 30, 2008	5,279	23,730	12,966	39,662	100%	100%	82%
June 30, 2009	5,795	24,692	13,982	39,542	100%	100%	65%
June 30, 2010	6,278	26,220	14,148	38,839	100%	100%	45%
June 30, 2011	6,529	27,559	14,511	39,194	100%	100%	35%
June 30, 2012	6,961	29,118	14,730	39,039	100%	100%	20%
June 30, 2013	7,837	30,980	14,430	39,932	100%	100%	8%
June 30, 2014	8,354	31,882	14,706	43,654	100%	100%	23%
June 30, 2015	8,805	32,734	15,280	47,328	100%	100%	38%
June 30, 2016	8,767	35,316	18,116	49,358	100%	100%	29%

<sup>1</sup>Includes vested former members.

## Actuarial Analysis of Financial Experience — Pension Plan

(Dollars in Millions)

	Valuation as of June 30					
	2007	2008	2009	2010	2011	
Unfunded Actuarial						
Accrued Liability	\$3,439	\$2,461	\$2,313	\$4,927	\$7,807	
Expected Increase/(Decrease) from						
Prior Valuation Salary Increases Greater/(Less)	(109)	(68)	(78)	333	565	
than Expected	673	298	380	(353)	(579)	
CPI Less than Expected	_	_	(4)	(29)	(215)	
Change in Assumptions	515	_	_	_	_	
Asset Return Less/(Greater) than Expected	(2,187)	(429)	2,465	2,879	1,761	
All Other Experience Recognition of Liabilities due to Court	130	36	(149)	50	66	
Cases	_	15	_	_	_	
Ending Unfunded Actuarial						
Accrued Liability	\$2,461	\$2,313	\$4,927	\$7,807	\$9,405	

	Valuation as of June 30					
	2012	2013	2014	2015	2016	
Unfunded Actuarial						
Accrued Liability	\$9,405	\$11,770	\$13,315	\$11,288	\$9,491	
Expected Increase/(Decrease) from						
Prior Valuation Salary Increases Greater/(Less)	772	1,380	338	(54)	2,820	
than Expected	(629)	(563)	(291)	79	162	
CPI Less than Expected	(181)	(190)	(427)	(570)	(191)	
Change in Assumptions	_	_	_	_	_	
Asset Return Less/(Greater) than Expected	2,337	893	(1,664)	(1,263)	496	
All Other Experience Recognition of Liabilities due to Court	66	25	17	11	63	
Cases	_	_	_	_	_	
Ending Unfunded Actuarial						
Accrued Liability	\$11,770	\$13,315	\$11,288	\$9,491	\$12,841	

#### Plans A, B, and C General Members

	Service	Service	Ordinary	Service	Ordinary	Other
Age	Retirement	Disability	Disability	Death	Death	Terminations
Male						
20	0.0000	0.0002	0.0001	N/A	0.0003	0.0050
30	0.0000	0.0002	0.0001	N/A	0.0004	0.0050
40	0.0300	0.0006	0.0002	N/A	0.0006	0.0050
50	0.0300	0.0011	0.0004	N/A	0.0014	0.0050
60	0.2600	0.0045	0.0010	N/A	0.0038	0.0050
70	0.2800	0.0045	0.0025	N/A	0.0113	0.0050
75	1.0000	0.0000	0.0000	N/A	0.0189	0.0000
Female						
20	0.0000	0.0002	0.0001	N/A	0.0002	0.0050
30	0.0000	0.0002	0.0001	N/A	0.0002	0.0050
40	0.0300	0.0005	0.0002	N/A	0.0004	0.0050
50	0.0300	0.0013	0.0004	N/A	0.0011	0.0050
60	0.2600	0.0025	0.0010	N/A	0.0024	0.0050
70	0.2800	0.0030	0.0025	N/A	0.0063	0.0050
75	1.0000	0.0000	0.0000	N/A	0.0108	0.0000

#### **Plans D and G General Members**

	Service	Service	Ordinary	Service	Ordinary	Years of	Other
Age	Retirement	Disability	Disability	Death	Death	Service	Terminations
Male							
20	0.0000	0.0002	0.0001	N/A	0.0003	5	0.0233
30	0.0000	0.0002	0.0001	N/A	0.0004	10	0.0170
40	0.0150	0.0006	0.0002	N/A	0.0006	15	0.0120
50	0.0150	0.0011	0.0004	N/A	0.0014	20	0.0076
60	0.0600	0.0045	0.0010	N/A	0.0038	25	0.0048
70	0.2000	0.0045	0.0025	N/A	0.0113	30 & up	0.0000
75	1.0000	0.0000	0.0000	N/A	0.0189		
Female							
20	0.0000	0.0002	0.0001	N/A	0.0002	5	0.0233
30	0.0000	0.0002	0.0001	N/A	0.0002	10	0.0170
40	0.0150	0.0005	0.0002	N/A	0.0004	15	0.0120
50	0.0150	0.0013	0.0004	N/A	0.0011	20	0.0076
60	0.0600	0.0025	0.0010	N/A	0.0024	25	0.0048
70	0.2000	0.0030	0.0025	N/A	0.0063	30 & up	0.0000
75	1.0000	0.0000	0.0000	N/A	0.0108		

#### **Plan E General Members**

	Service	Service	Ordinary	Service	Ordinary	Years of	Other
Age	Retirement	Disability	Disability	Death	Death	Service	Terminations
Male							
20	0.0000	N/A	N/A	N/A	0.0003	5	0.0310
30	0.0000	N/A	N/A	N/A	0.0004	10	0.0200
40	0.0000	N/A	N/A	N/A	0.0006	15	0.0144
50	0.0000	N/A	N/A	N/A	0.0014	20	0.0108
60	0.0400	N/A	N/A	N/A	0.0038	25	0.0100
70	0.2000	N/A	N/A	N/A	0.0113	30 & up	0.0100
75	1.0000	N/A	N/A	N/A	0.0189		
Female							
20	0.0000	N/A	N/A	N/A	0.0002	5	0.0310
30	0.0000	N/A	N/A	N/A	0.0002	10	0.0200
40	0.0000	N/A	N/A	N/A	0.0004	15	0.0144
50	0.0000	N/A	N/A	N/A	0.0011	20	0.0108
60	0.0400	N/A	N/A	N/A	0.0024	25	0.0100
70	0.2000	N/A	N/A	N/A	0.0063	30 & up	0.0100
75	1.0000	N/A	N/A	N/A	0.0108		

#### Plans A, B, and C Safety Members

	Service	Service	Ordinary	Service	Ordinary	Years of	Other
Age	Retirement	Disability	Disability	Death	Death	Service	Terminations
Male							
20	0.0000	0.0020	0.0000	0.0001	0.0002	5	0.0113
30	0.0000	0.0020	0.0000	0.0001	0.0005	10	0.0076
40	0.0100	0.0028	0.0000	0.0001	0.0005	15	0.0042
50	0.0100	0.0100	0.0000	0.0001	0.0009	20 & up	0.0000
60	0.3000	0.1000	0.0000	0.0001	0.0025		
Female							
20	0.0000	0.0030	0.0000	0.0001	0.0002	5	0.0113
30	0.0000	0.0042	0.0000	0.0001	0.0002	10	0.0076
40	0.0100	0.0092	0.0000	0.0001	0.0004	15	0.0042
50	0.0100	0.0180	0.0000	0.0001	0.0011	20 & up	0.0000
60	0.3000	0.0800	0.0000	0.0000	0.0024		

#### Introduction

The actuarial process at the Los Angeles County Employees Retirement Association (LACERA) is governed by provisions in the LACERA Other Post-Employment Benefits (OPEB) Actuarial Valuation and Audit Policy approved by the LACERA Board of Retirement. This policy requires LACERA to obtain an actuarial valuation of the OPEB Program at least once every two years.

#### **OPEB Benefit Changes**

In June 2014, the LACERA Board of Retirement approved the County's request to create a new retiree healthcare benefit program in order to lower its costs. The new program called Tier 2 applies to employees hired after June 30, 2014. Since the Tier 2 member subsidy applies to retiree-only coverage and the Tier 2 benchmark is different than Tier 1, assumptions for plan and tier selection were separately evaluated for Tier 2 members. The assumptions for initial enrollment and retirement of vested terminated members remain the same for both Tier 1 and Tier 2.

**Funding Policy and Contributions** — The County historically discharged its premium subsidy obligations on a pay-as-you-go basis. LACERA bills the healthcare premiums to the County and members on a monthly basis. An administrative fee to cover the costs of administering the OPEB Program is added to the monthly premium. Internal cost allocations among the participating Outside Districts, including the Superior Court, have historically been based on the number of active employees. In June 2015, the County Board of Supervisors approved the county-wide budget with a dedicated funding promise for the OPEB liability, using the multi-year approach to enhance the County's OPEB Trust in a consistent manner. This funding commitment provides pre-funding goals and indicates that the County has placed a priority on making OPEB contributions. The County, Superior Court, and LACERA have begun to pre-fund these obligations, depositing monies into an irrevocable OPEB Trust. Plan members are required to pay the difference between the employer-paid subsidy and the actual premium cost.

#### **Changes in OPEB Program Assumptions**

At the September 2017 Board of Retirement meeting, the Board adopted new valuation assumptions with the 2016 Investigation of Experience report. The approved valuation assumptions included 4.50 percent for the investment return, 3.25 percent for wage growth and 2.75 percent for inflation. The OPEB investment earnings assumption of 4.50 percent, used to calculate the Actuarial Accrued Liability (AAL), is based on a blend of the expected return from the general assets and the OPEB Trust assets. All assumption changes were reflected in the July 1, 2016 actuarial valuation.

#### **Valuation Policy**

In October 2017, the LACERA Board of Retirement will consider changing its policy from a biennial valuation cycle to an annual valuation cycle. The policy also increases the experience study cycle from every three years to every two years, for two cycles, and then the cycle reverts back to every three years. In addition to the valuations, LACERA requires its actuary to review the reasonableness of the economic and demographic actuarial assumptions. This review, commonly referred to as the investigation of experience or experience study, is accomplished by comparing actual experience during the preceding three years to what was expected to happen according to the actuarial assumptions. Based on this review, the actuary recommends changes in the assumptions or methodology that will better project benefit liabilities and asset growth. The LACERA Board of Retirement adopts, possibly with modification, the recommended assumptions and methods to be used in future valuations. At their September 2017 meeting, the LACERA Board of Retirement accepted Milliman's OPEB actuarial assumptions based on Milliman's 2016 Investigation of Experience for OPEB Assumptions.

The OPEB Program is funded on a "pay-as-you-go" basis whereby employers provide monthly contributions to pay current benefits. Milliman, the OPEB Program consulting actuary, performed the most recent actuarial valuation as of July 1, 2016. At their September 2017 meeting, the LACERA Board of Retirement adopted Milliman's most recent actuarial valuation report.

#### **Actuarial Cost Method**

The projected unit credit actuarial cost method is used for funding requirements and was adopted by LACERA beginning with the July 1, 2006 OPEB valuation. At that time, the County and LACERA worked together with a stakeholder group and selected projected unit credit as the cost method which best reflected the liabilities. Under the projected unit credit method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated pro-rata to each year of service between entry age and assumed exit. For members who transferred between plans, entry age is based on original entry into the LACERA retirement benefits plan.

The entry age normal level percent of payroll actuarial cost method is used for financial reporting purposes as required by GASB 74 and was implemented as of the fiscal year ended June 30, 2017. The entry age normal method allocates costs to each future year as a level percentage of payroll, which is ideal for employers to budget for future costs.

#### Audits

The OPEB Actuarial and Valuation Policy requires actuarial audits of OPEB valuations and OPEB experience and assumption studies every six years. The OPEB valuation and experience study was completed as of June 30, 2016. Thus, the OPEB Program audit actuary, Segal Consulting (Segal), performed an audit of Milliman's 2016 OPEB experience study and valuation reports.

In regards to the audit of the OPEB experience study, Segal concluded, "Milliman has employed generally accepted actuarial practices and principles in studying plan experience, selecting assumptions, and presenting the results of their work. We believe that the actuarial assumptions as recommended by Milliman are reasonable for use in the LACERA OPEB Program actuarial valuation." Segal's audit of Milliman's OPEB valuation report states "Our overall assessment of Milliman's actuarial work for LACERA is that after reflecting the changes recommended as part of the concurrent audit, all major actuarial functions are being appropriately addressed. Milliman has employed generally accepted actuarial practices and principles in computing actuarial liabilities and costs, and in presenting the results of their work."

#### **Other Actuarial Information**

The Schedule of Contributions History – OPEB Program included in the Required Supplementary Information Section will prospectively provide 10 years of actuarially determined contributions in relation to the actual contributions provided to the OPEB Program.

Actuarial Methods and Assumptions: A description of the actuarial methods and assumptions for the OPEB valuation used by the OPEB Program actuary are included in this Actuarial Section. In addition, the Financial Section provides a summary of the actuarial methods and significant assumptions used to prepare the OPEB valuation report, which determines the OPEB Program's funding requirements. The Financial Section also discusses the actuarial methods and significant assumptions used for financial reporting and required Governmental Accounting Standards Board (GASB) Statement No. 74 disclosures. Any differences between the assumptions used for financial reporting and those applied for funding purposes are noted.

The following additional information is included in this section:

- Actuary's Certification Letter OPEB Program
- Summary of Actuarial Methods and Assumptions OPEB Program
- Schedule of Funding Progress OPEB Program
- Retirants and Beneficiaries Added To and Removed From Rolls OPEB Program
- Actuary Solvency Test OPEB Program
- Actuarial Analysis of Financial Experience OPEB Program

A Summary of Major Program Provisions for the OPEB Program is available upon request from LACERA.

September 15, 2017

Board of Retirement Los Angeles County Employees Retirement Association 300 North Lake Avenue, Suite 820 Pasadena, CA 91101-4199



1301 Fifth Avenue, Suite 3800 Seattle, WA 98101-2605 USA Tel +1 206 624 7940 Fax +1 206 623 3485 milliman.com

Dear Members of the Board:

Los Angeles County provides Other Postemployment Benefits (OPEB): retiree medical, dental/vision, and death/burial insurance benefits to the retired Los Angeles County (County) workers who also participate in the Los Angeles County Employees Retirement Association (LACERA) retirement benefits program. These healthcare- related benefits are called the Los Angeles County OPEB Program, or the "Program." The Program provides these benefits on a "pay-as-you-go" basis. Biennial actuarial valuations provide the required financial disclosures for the Program.

Valuation Date	Actuarial Accrued Liability	Assets	Unfunded Actuarial Accrued Liability	ARC as a Percentage of Payroll
July 1, 2012	\$26.95	\$0.00	\$26.95	32.07%
July 1, 2014	\$28.55	\$0.48	\$28.07	31.82%
July 1, 2016	\$25.91	\$0.56	\$25.35	27.03%

A summary of the results of the past three actuarial valuations is shown below. All dollar amounts are in billions:

The County's Board of Supervisors affirmed their support for pre-funding its OPEB liabilities by providing specific initial appropriations to the OPEB Trust Fund. Since the July 1, 2012 Valuation, details of a long-term funding policy have been finalized. The July 1, 2014 and July 1, 2016 Valuations include assets invested in the Trust.

Biennial actuarial valuations were performed as of July 1, 2006; July 1, 2008; July 1, 2010; July 1, 2012; July 1, 2014; and July 1, 2016. The next valuation is expected as of July 1, 2018.

In preparing the July 1, 2016 OPEB valuation report, we relied, without audit, on information (some oral and some in writing) supplied by Los Angeles County, LACERA, and Aon Hewitt. This information includes, but is not limited to, benefit descriptions, membership data, and financial information. We found this information to be reasonably consistent and comparable with data used for other purposes. The valuation results depend on the integrity of this information. In some cases, where the data was incomplete, we made assumptions as noted in Table C-12 of our July 1, 2016 valuation report. If any of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.

The valuation is also based on our understanding of the Program's current benefit provisions and the actuarial assumptions which were reviewed and adopted by the Board of Retirement. The retirement benefit related demographic and economic assumptions were based on those developed for the June 30, 2016 valuation of the LACERA retirement benefit program, approved by LACERA's Board of Investments. Economic and relevant demographic assumptions from the retirement benefit investigation of experience, conducted by Milliman, are included in the

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July 1, 2016 OPEB valuation. Assumptions unique to OPEB were identified and evaluated in Milliman's 2016 OPEB investigation of experience study report as of June 30, 2016, approved by LACERA's Board of Retirement.

The actuarial computations presented in the July 1, 2016 OPEB valuation and the June 30, 2017 GASB 74 disclosure reports are for purposes of fulfilling financial accounting requirements for LACERA. The liabilities in the GASB 74 disclosure report are determined by using the entry age normal actuarial cost method. We consider the actuarial assumptions and methods to be internally consistent, to represent a long-term perspective, and to be reasonable. We believe they also meet the parameters of Governmental Accounting Standards Board Statement No. 74 for fulfilling financial accounting requirements. Nevertheless, the emerging costs will vary from those presented in our report to the extent that actual experience differs from that projected by the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in the valuation report and the GASB 74 disclosure report due to such factors as the following: OPEB program experience differing from that anticipated by the economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in OPEB program provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Milliman's work is prepared exclusively for LACERA for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. It is a complex, technical analysis that assumes a high level of knowledge concerning LACERA's operations, and uses LACERA's data, which Milliman has not audited.

No third party recipient of Milliman's work product who desires professional guidance should rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

The consultants who worked on this assignment are employee benefit actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

Milliman prepared the following information for the actuarial section:

- 1. Retirees and Beneficiaries Added to and Removed from Benefits OPEB Program
- 2. Actuarial Analysis of Financial Experience OPEB Program
- 3. Actuary Solvency Test OPEB Program
- 4. Schedule of Funding Progress OPEB Program

LACERA staff prepared the information in Note N of the financial section and the Required Supplementary Information, based on information supplied in prior actuarial reports, our July 1, 2016 actuarial valuation, and our June 30, 2017 GASB 74 report. Milliman has reviewed the information in Note N for accuracy.

We certify that the July 1, 2016 valuation was performed in accordance with the Actuarial Standards Board (ASB) standards of practice and by qualified actuaries. We are members of the American Academy of Actuaries and have experience in performing valuations for public OPEB programs.

Sincerely,

heil Strand

Robert L. Schmidt, FSA, EA, MAAA Principal and Consulting Actuary

RLS/bh

Janet Gennings

Janet O. Jennings, ASA, MAAA Associate Actuary

#### Actuarial Methods and Assumptions

The OPEB actuarial methods and assumptions are recommended by the consulting actuary and adopted by the Board of Retirement. The actuarial assumptions used to determine the liabilities are based on the results of the 2016 Pension Plan and OPEB Program separate triennial Investigation of Experience Studies. Where applicable, the same assumptions are used for the OPEB Program as for the Pension Plan. The assumptions that overlap with the Pension Plan assumptions were reviewed and changed June 30, 2016, as a result of the 2016 Pension Plan triennial Investigation of Experience Study, approved by the Board of Investments in December 2016. The general wage increase, investment earnings, and implied inflation assumptions were also evaluated.

The consulting actuary also recommended an OPEB-specific investment earnings assumption since investment earnings for the OPEB valuation are based on a blend of the expected return from the general assets and the expected return from the OPEB Trust. These are invested with a different asset allocation than the one used for the Pension Plan. The OPEB-specific assumptions other than premiums, claim costs, and aging were reviewed and changed as a result of the 2016 OPEB Investigation of Experience Study adopted in the September 2017 Board of Retirement meeting. The premiums, claim costs, aging, and health cost trend assumptions used for this valuation were updated as of July 1, 2016.

In 2012, the Los Angeles Board of Supervisors approved the establishment of the OPEB Trust. The investment policy was then adopted in 2012. In 2015, the Los Angeles County Board of Supervisors adopted a funding policy. LACERA's Board of Investments and Board of Retirement also approved a LACERA funding policy in 2015.

In April 2016, the Judicial Council of California approved the Superior Court's request to establish a qualified irrevocable Trust with LACERA for the prefunding of the Court's OPEB liabilities. The Court's investment policy was then adopted in June 2016. Although the Superior Court has not adopted a formal funding policy, the Court may earmark surplus funds available at year end as OPEB Trust contributions.

# Actuarial Cost Method The actuarial valuation is prepared under the Projected Unit Credit (PUC) actuarial cost method. Under the principles of the PUC method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated pro-rata to each year of service between entry age and assumed exit.

Actuarial Cost Method, Concluded	For members who transferred between plans, entry age is based on original entry into the LACERA retirement benefits plan. The portion of this actuarial present value allocated to a valuation year is called the Normal Cost. The portion of this actuarial present value not provided for at a valuation date by the sum of the actuarial value of the assets (if the benefits are funded), and the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL is amortized as a level percentage of the projected salaries of the active members, both present and future, covered by the LACERA retirement benefits plan over a 30-year period from the valuation date; this is commonly referred to as a "rolling 30-year amortization method." This method does not cover interest on the UAAL. GASB 74 and 75 reporting requires use of the Individual Entry Age Normal Level Percent of Pay actuarial cost method. Under this method, the normal cost is calculated as a percent of pay from each member's date of entry into the plan through their assumed age of exit. The sum of normal costs attributable to all years of service prior to the valuation date is the actuarial accrued liability.
Actuarial Asset Valuation Method	Market Value.
Projected Salary Increases	The general wage increase assumption is 3.25 percent per annum which is used for projecting the total future payroll. The amortization of the UAAL is determined as a level percentage of payroll. General wage increases and individual salary increases due to promotion and longevity do not affect the amount of the OPEB program's benefits. This rate was adopted June 30, 2016.
Investment Return	GASB 45 requires that the discount rate for OPEB benefits be equal to the expected return on assets used to pay ongoing benefits. In the case of an unfunded plan, this would be the expected return on the County's general funds. The County and LACERA are currently partially prefunding OPEB liabilities. For the July 1, 2016 valuation, the expected investment return of the OPEB Trust is incorporated within the development of the discount rate. Based on the expected return on the County's general funds, the expected contributions to the OPEB Trust, and the expected investment return from the OPEB Trust, a discount rate of 4.50 percent was selected based on the 2016 OPEB Investigation of Experience for use in the July 1, 2016 OPEB valuation.
Inflation Rate	2.75 percent per annum. This rate was adopted beginning with the July 1, 2016 OPEB valuation.
Amortization Method	Level percentage of projected salaries of the active members, both present and future, over a "rolling" 30-year amortization period. This assumption was adopted beginning with the July 1, 2006 OPEB valuation.

Expectation of Life After Retirement	The same postretirement mortality rates are used in the valuation for active members after termination, members retired for service, and beneficiaries. Beneficiaries are assumed to have the same mortality as a general member of the opposite sex.
	Males: General Members: RP-2014 Healthy Annuitant Mortality Table for Males multiplied by 105 percent, with MP-2014 Ultimate Projection Scale. Safety Members: RP-2014 Healthy Annuitant Mortality Table for Males multiplied by 95 percent, with MP-2014 Ultimate Projection Scale.
	Females: General Members: RP-2014 Healthy Annuitant Mortality Table for Females, with MP-2014 Ultimate Projection Scale.
	<b>Safety Members:</b> RP-2014 Healthy Annuitant Mortality Table for Females, with MP-2014 Ultimate Projection Scale.
	These rates were adopted June 30, 2016.
Expectation of Life After Disability	For disabled members, the mortality rates used in the valuation rates are illustrated in Table A-3 of the July 1, 2016 OPEB Valuation Report. These rates were adopted June 30, 2016.
	<ul> <li>Males:</li> <li>General Members: Average of RP-2014 Healthy Annuitant Mortality Table for Males multiplied by 105% and RP-2014 Disabled Annuitant Mortality Table for Males, both projected with MP-2014 Ultimate Projection Scale.</li> <li>Safety Members: RP-2014 Healthy Annuitant Mortality Table for Males, with MP-2014 Ultimate Projection Scale.</li> </ul>
	<b>Females:</b> <b>General Members:</b> Average of RP-2014 Healthy Annuitant Mortality Table for Females and RP-2014 Disabled Annuitant Mortality Table for Females, both projected with MP-2014 Ultimate Projection Scale.
	<b>Safety Members:</b> RP-2014 Healthy Annuitant Mortality Table for Females, with MP-2014 Ultimate Projection Scale.

#### Schedule of Funding Progress — OPEB Program

(Dollars in Thousands)

Los Angeles County and Participating Agencies UAAL as a Actuarial Unfunded Actuarial Accrued Actuarial **Percentage of** Actuarial Value of Liability Accrued Funded Covered Covered (AAL)<sup>1</sup> Valuation Assets Liability (UAAL) Ratio Payroll Payroll Date (a) (b) (a/b) [(b-a)/c] (b-a) (C) July 1, 2006 \$— \$21,215,800 \$21,215,800 0.0% \$5,205,804 407.5% July 1, 2008 21,863,600 21,863,600 0.0% 6,123,888 357.0% \_ July 1, 2010 24,031,000 24,031,000 0.0% 6,695,439 358.9% \_ July 1, 2012 26,952,700 26,952,700 0.0% 6,619,816 407.2% \_ July 1, 2014 483,800 28,546,600 28,062,800 1.7% 6,672,228 420.6% July 1, 2016 560,800 25,912,600 25,351,800 2.2% 7,279,091 348.3%

<sup>1</sup>Using the Projected Unit Credit actuarial cost method.

#### **Retirants and Beneficiaries Added To and Removed from Rolls — OPEB Program**

(Dollars in Thousands)

,	Added to Rolls		<b>Removed From Rolls</b>		Rolls at	Rolls at End of Year		
Valuation Date <sup>1</sup>	Member Count	Annual Allowance <sup>2</sup>	Member Count	Annual Allowance	Member Count	Annual Allowance	Percentage Increase in Retiree Allowance	Average Annual Allowance
July 1, 2010	_	\$—	_	\$—	43,936	\$391,979	0.00%	\$9
July 1, 2012	5,336	56,982	(3,070)	(25,497)	46,202	423,464	8.03%	9
July 1, 2014	5,335	89,205	(3,369)	(29,925)	48,168	482,744	14.00%	10
July 1, 2016	5,710	103,373	(3,514)	(30,745)	50,364	555,372	15.04%	11

<sup>1</sup>Schedule is intended to show information for six years.

<sup>2</sup>Includes changes for continuing retirees and beneficiaries.

#### Actuary Solvency Test — OPEB Program

(Dollars in Millions)

	Actuarial A	Accrued Liabilit	y (AAL)	Actuarial Value of Valuation Assets	Percentage of AAL Covered by Assets			
Valuation Date	(1) Active Member Contributions	(2) Retired/ Vested Member <sup>1</sup>	(3) Employer Financed Portion		(1) Active	(2) Retired	(3) Employer	
July 1, 2012	\$—	\$10,681	\$16,272	\$—	N/A	0%	0%	
July 1, 2014	_	11,791	16,756	484	N/A	4%	0%	
July 1, 2016	_	11,365	14,548	561	N/A	5%	0%	

<sup>1</sup>Includes vested former members.

#### Actuarial Analysis of Financial Experience — OPEB Program

(Dollars in Millions)

	Valuation as of July 1						
	2008	2010	2012	2014	2016		
Unfunded Actuarial							
Accrued Liability	\$21,216	\$21,864	\$24,031	\$26,953	\$28,063		
Expected Increase/(Decrease) from							
Prior Valuation	3,341	3,478	3,771	3,873	3,240		
Claim Costs Greater/(Less) than Expected <sup>1</sup>	(3,131)	(1,267)	(3,864)	(5,471)	(2,322)		
Change in Assumptions <sup>2</sup>	536	287	3,423	3,238	(3,385)		
Asset Return Less/(Greater) than Expected		N/A	N/A	(484)	78		
All Other Experience	(98)	(331)	(408)	(46)	(322)		
Ending Unfunded Actuarial							
Accrued Liability	\$21,864	\$24,031	\$26,953	\$28,063	\$25,352		

<sup>1</sup>Includes the trend assumption change. <sup>2</sup>In 2016, this amount includes the impact from Tier 2.



### **Statistical Section**

As the time for retirement draws closer, each member's path becomes more focused. The destination gradually comes into view, and there are only a few more uphill climbs and hurdles to clear. For members who are within five years of retiring, LACERA recommends attending a pre-retirement workshop. These workshops educate members so they can make informed decisions about their retirement. Additionally, by using the online Retirement Benefit Estimate calculator, members can plug in personal retirement data such as years of service and compensation amount to make the best possible choices for their individual situation.



#### **Statistical Information Overview**

The objective of the Statistical Section is to provide historical perspective, context, and detail to assist in utilizing the Basic Financial Statements, Notes to the Basic Financial Statements, and Required Supplementary Information to understand and assess the status of the Pension Plan and OPEB Program administered by LACERA as of the fiscal year end. Statistical data is maintained by LACERA's in-house member information technology system, commonly referred to as Member Workspace (Workspace). Workspace is a sophisticated data management system where LACERA actively maintains member-specific information, comprehensive plan membership records, and related member-specific documents. For the fiscal year-end, this section reports the most current membership status information for each member (i.e., active, retired, etc.).

The Statistical Information provided here is divided into two main categories: Financial Trends Information and Operating Information.

Financial Trends Information is intended to assist readers in understanding how LACERA's financial position has changed over time. *Changes in Fiduciary Net Position – Pension Plan* and *Changes in Fiduciary Net Position – OPEB Trust* present additions by source, deductions by type, and the total change in Fiduciary Net Position for each year. *Pension Benefit Expenses by Type* presents retirement benefits, lump-sum death benefits, and refund deductions by type of benefit, such as Service Retiree and Disability Retiree, as well as by General and Safety Pension benefits.

Operating Information provides contextual information about LACERA's operations and membership to assist readers in using financial statement information to comprehend and evaluate LACERA's fiscal condition. *Active Members* provides membership statistics for active vested and non-vested members as well as for deferred vested members. *Retired Members by Type of Pension Benefit* and the *Retired Members by Type of OPEB Benefit* present benefit information for the current year by benefit type and dollar levels. *Schedule of Average Pension Benefit Payments* presents the average monthly benefit, average final salary, and number of retired members, organized in five-year increments of credited service. *Active Members and Participating Pension Employers* presents the employers and their corresponding covered employees. *Retired Members of Participating OPEB Employers* presents the number of covered members by medical or dental/vision benefits. The *Employer Contribution Rates* are provided as additional information. Finally, the *Supplemental Targeted Adjustment for Retirees* (*STAR*) *Program Costs* schedule trends the Program's costs through June 30, 2017.

#### **Changes in Fiduciary Net Position — Pension Plan**

#### Last Ten Years

(Dollars in Thousands)

	2008	2009	2010	2011	2012
Additions					
Employer Contributions	\$788,029	\$831,671	\$843,704	\$944,174	\$1,078,929
Member Contributions	414,752	415,545	429,612	463,743	506,758
Net Investment Income/(Loss)	(1,426,117)	(7,407,790)	3,840,401	6,930,358	(291,009)
Miscellaneous	1,767	1,221	868	591	1,004
Total Additions/(Declines)	(221,569)	(6,159,353)	5,114,585	8,338,866	1,295,682
Deductions					
Total Benefit Expenses <sup>1</sup>	1,913,272	2,016,364	2,130,738	2,269,791	2,390,598
Administrative Expenses	48,223	49,730	48,892	50,605	50,218
Miscellaneous	371	243	48	347	121
Total Deductions	1,961,866	2,066,337	2,179,678	2,320,743	2,440,937
Net Increase/(Decrease) in					
Fiduciary Net Position	\$(2,183,435)	\$(8,225,690)	\$2,934,907	\$6,018,123	\$(1,145,255)

	2013	2014	2015	2016	2017
Additions					
Employer Contributions	\$723,195	\$1,320,442	\$1,494,975	\$1,403,712	\$1,331,359
Member Contributions	679,572	439,001	441,258	498,083	526,579
Net Investment Income/(Loss)	4,659,015	6,908,412	1,989,358	80,588	6,129,300
Miscellaneous	385	2,256	1,695	2,781	6,370
Total Additions/(Declines)	6,062,167	8,670,111	3,927,286	1,985,164	7,993,608
Deductions					
Total Benefit Expenses <sup>1</sup>	2,541,351	2,662,401	2,768,410	2,889,186	3,029,633
Administrative Expenses Miscellaneous	53,863 190	58,723 229	62,591 212	67,645 (11)	66,830 188
Total Deductions	2,595,404	2,721,353	2,831,213	2,956,820	3,096,651
Net Increase/(Decrease) in					
Fiduciary Net Position	\$3,466,763	\$5,948,758	\$1,096,073	\$(971,656)	\$4,896,957

<sup>1</sup>See Pension Benefit Expenses by Type in this Statistical Section.

#### **Changes in Fiduciary Net Position — OPEB Trust**

#### Last Five Years<sup>1</sup>

(Dollars in Thousands)

	2013	2014	2015	2016	2017
Additions					
Employer Contributions <sup>2</sup>	\$448,819	\$—	\$—	\$615,275	\$645,381
Net Investment Income/(Loss)	209	35,113	4,688	(8,095)	94,505
Miscellaneous	_	_	_	_	2
Total Additions	449,028	35,113	4,688	607,180	739,888
Deductions					
Administrative Expense	173	144	153	192	374
Benefit Payments <sup>2</sup>	_	_	_	534,597	557,381
Total Deductions	173	144	153	534,789	557,755
Net Increase in Fiduciary Net					
Position	\$448,855	\$34,969	\$4,535	\$72,391	\$182,133

<sup>1</sup>Trend Information: Schedule will ultimately show information for 10 years. Additional years will be displayed as they become available prospectively.

<sup>2</sup>Beginning in 2016, the Trust is now reflecting both pre-funding contributions actually made into the OPEB Trust as well as additions to plan net position including amounts for OPEB as the benefits come due that will not be reimbursed to the employers using OPEB plan assets. Correspondingly, deductions to plan net position, starting in 2016, now reflect all benefit payments whether made through the trust or by employers as OEPB comes due (paragraph 28a and 31 of GASB Statement 74).

#### Pension Benefit Expenses by Type

#### Last Ten Years

(Dollars in Thousands)

	2008	2009	2010	2011	2012
Service Retiree Payroll					
General	\$1,162,474	\$1,221,671	\$1,295,574	\$1,383,478	\$1,465,218
Safety	242,948	269,893	291,796	315,745	340,177
Total	1,405,422	1,491,564	1,587,370	1,699,223	1,805,395
Disability Retiree Payroll					
General	139,390	141,821	144,861	150,585	152,698
Safety	341,158	361,235	377,429	395,197	413,300
Total	480,548	503,056	522,290	545,782	565,998
Total Retiree Payroll					
General	1,301,864	1,363,492	1,440,435	1,534,063	1,617,916
Safety	584,106	631,128	669,225	710,942	753,477
Total	1,885,970	1,994,620	2,109,660	2,245,005	2,371,393
Refunds					
General	20,894	16,743	13,041	17,498	14,523
Safety	4,694	3,613	5,863	5,220	3,098
Total	25,588	20,356	18,904	22,718	17,621
Lump-Sum Death Benefits	1,714	1,388	2,174	2,068	1,584
Total Benefit Expenses	\$1,913,272	\$2,016,364	\$2,130,738	\$2,269,791	\$2,390,598

	0010	0014	004 5	0010	0047
	2013	2014	2015	2016	2017
Service Retiree Payroll					
General	\$1,556,814	\$1,631,285	\$1,692,558	\$1,762,274	\$1,845,791
Safety	367,471	384,248	397,962	419,092	445,473
Total	1,924,285	2,015,533	2,090,520	2,181,366	2,291,264
Disability Retiree Payroll					
General	157,406	162,338	165,543	169,821	173,550
Safety	432,405	459,311	484,907	507,824	538,116
Total	589,811	621,649	650,450	677,645	711,666
Total Retiree Payroll					
General	1,714,220	1,793,623	1,858,101	1,932,095	2,019,341
Safety	799,876	843,559	882,869	926,916	983,589
Total	2,514,096	2,637,182	2,740,970	2,859,011	3,002,930
Refunds					
General	19,406	18,994	22,050	23,470	21,970
Safety	5,606	4,534	3,361	3,622	2,482
Total	25,012	23,528	25,411	27,092	24,452
Lump-Sum Death Benefits	2,243	1,691	2,029	3,083	2,251
Total Benefit Expenses	\$2,541,351	\$2,662,401	\$2,768,410	\$2,889,186	\$3,029,633

#### **Active Members**

	2008	2009	2010	2011	2012
Active Vested					
General	53,884	54,729	56,162	59,055	61,433
Safety	9,876	9,761	9,916	10,054	10,663
Subtotal	63,760	64,490	66,078	69,109	72,096
Active Non-Vested					
General	27,780	28,149	25,251	21,090	18,034
Safety	2,952	3,149	3,081	2,587	1,822
Subtotal	30,732	31,298	28,332	23,677	19,856
Deferred Vested					
General	11,149	7,589	7,478	7,423	7,379
Safety	685	462	460	465	480
Total	11,834	8,051	7,938	7,888	7,859
Total Active Members					
General	92,813	90,467	88,891	87,568	86,846
Safety	13,513	13,372	13,457	13,106	12,965
Total	106,326	103,839	102,348	100,674	99,811

	2013	2014	2015	2016	2017
Active Vested					
General	62,803	63,301	62,532	61,820	61,608
Safety	11,177	11,188	11,024	10,743	10,429
Subtotal	73,980	74,489	73,556	72,563	72,037
Active Non-Vested					
General	16,203	16,642	18,696	21,096	22,915
Safety	1,362	1,335	1,422	1,785	2,269
Subtotal	17,565	17,977	20,118	22,881	25,184
Deferred Vested					
General	7,462	7,550	7,623	7,665	7,752
Safety	497	540	563	573	589
Total	7,959	8,090	8,186	8,238	8,341
Total Active Members					
General	86,468	87,493	88,851	90,581	92,275
Safety	13,036	13,063	13,009	13,101	13,287
Total	99,504	100,556	101,860	103,682	105,562

#### **Retired Members by Type of Pension Benefit**

As of June 30, 2017

Amount of Monthly			Number of	1	ype of Retireme	nt <sup>*</sup>
	Benefi	•	Retired Members	1	2	3
\$1	_	\$1,000	14,624	9,165	1,337	4,122
\$1,001	_	\$2,000	14,238	9,727	2,032	2,479
\$2,001	_	\$3,000	10,313	7,588	1,730	995
\$3,001	_	\$4,000	6,987	5,348	1,125	514
\$4,001	_	\$5,000	4,862	3,910	671	281
\$5,001	_	\$6,000	3,467	2,747	547	173
\$6,001	_	\$7,000	2,464	1,919	459	86
	>	\$7,000	6,340	4,605	1,588	147
	Total		63,295	45,009	9,489	8,797

	mount	.f	Retirement Option Selected**					
	thly Be		Unmodified	Unmodified+Plus	Option 1	Option 2	Option 3	Option 4
\$1	_	\$1,000	13,159	631	137	457	91	149
\$1,001	_	\$2,000	12,648	865	146	325	94	160
\$2,001	_	\$3,000	9,132	751	96	153	55	126
\$3,001	_	\$4,000	6,141	560	53	89	28	116
\$4,001	_	\$5,000	4,187	464	45	51	23	92
\$5,001	_	\$6,000	2,960	386	23	28	7	63
\$6,001	_	\$7,000	2,007	348	12	23	6	68
	>	\$7,000	4,685	1,363	27	25	26	214
	Total		54,919	5,368	539	1,151	330	988

#### NOTES:

\*Type of Retirement:

1 - Service Retiree

2 - Disability Retiree

3 - Beneficiary/Continuant/Survivor

\*\*Retirement Option Selected:

Unmodified - For Plans A, B, C, D, and G, beneficiary receives 65 percent of the member's allowance (60 percent if the member retired before June 4, 2002); for Plan E, beneficiary receives 55 percent of member's allowance (50 percent if the member retired before June 4, 2002).

#### The following options reduce the member's monthly benefit:

Unmodified+Plus - For all Plans (A-G), member's allowance is reduced to pay an increased continuing allowance to an eligible surviving spouse/partner.

Option 1 - Beneficiary receives lump sum of member's unused contributions.

Option 2 - Beneficiary receives 100 percent of member's reduced monthly benefit.

Option 3 - Beneficiary receives 50 percent of member's reduced monthly benefit.

Option 4 - Beneficiary(ies) receives percentage of member's reduced monthly benefit as designated by member.

#### **Retired Members by Type of OPEB Benefit**

As of June 30, 2017

		Medical Be	nefit/Prem	ium Amoun	ts	Total
	\$1-	\$501-	\$1,001-	\$1,501-		Membe
	\$500	\$1,000	\$1,500	\$2,000	> \$2,000	Count
Medical Plans by Plan Type						
Anthem Blue Cross I	4	_	906	314	53	1,277
Anthem Blue Cross II	2	_	2,244	1,879	601	4,726
Anthem Blue Cross III Anthem Blue Cross Prudent	6,438	3,750	1,070	121	_	11,379
Buyer Plan	1	707	36	488	_	1,232
Cigna-HealthSpring Preferred Rx	30	14	2	12	_	58
Cigna Network Model Plan	_	_	356	24	173	553
Kaiser - California	_	2,524	729	2,526	230	6,009
Kaiser - Senior Advantage	10,079	5,047	1,953	_	_	17,079
Kaiser - Colorado	32	12	5	_	3	52
Kaiser - Georgia	51	27	19	12	3	112
Kaiser - Hawaii	33	11	13	4	_	61
Kaiser - Oregon-Washington	82	41	19	_	2	144
Firefighters Local 1014	_	_	460	1,015	305	1,780
SCAN / SmartCare Health Plan	295	105	_	_	_	400
UnitedHealthcare UnitedHealthcare Medicare Advantage	-	-	431	360	292	1,083
(HMO)	1,563	890	339	75	_	2,867
Total Medical by Plan Type	18,610	13,128	8,582	6,830	1,662	48,812
Medical Plans by Retirement Type						
Service Retirees	13,553	10,724	5,960	4,639	1,073	35,949
Disability Retirees	1,475	1,855	1,257	2,045	558	7,190
Survivors	3,582	549	1,365	146	31	5,673
Total Medical by Retirement Type	18,610	13,128	8,582	6,830	1,662	48,812
					Dental, Benefit F Amo	Premium
					\$1 - \$	500
Dental/Vision Plans by Plan Type CIGNA Indemnity Dental/Vision					44,3	

CIGNA Indemnity Dental/Vision	44,379
CIGNA HMO Dental/Vision	5,511
Total Dental/Vision by Plan Type	49,890
Dental/Vision Plans by Retirement Type	
Service Retirees	36,559
Disability Retirees	7,532
Survivors	5,799
Total Dental/Vision by Retirement Type	49,890

#### Schedule of Average Pension Benefit Payments

	_		
Last	Ten	Years	

	Years of Credited Service						
Retirement Effective Dates	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
7/1/07 to 6/30/08							
Retirants							
General Members							
Average Monthly Benefit	\$1,247	\$894	\$1,681	\$2,198	\$2,575	\$4,603	
Average Final Salary	\$5,160	\$4,425	\$5,095	\$5,394	\$5,352	\$6,151	
Number of Active Retirants	109	206	256	195	264	778	
Safety Members							
Average Monthly Benefit	\$4,264	\$3,995	\$3,534	\$4,785	\$6,170	\$9,478	
Average Final Salary	\$7,234	\$7,344	\$8,061	\$8,923	\$9,252	\$11,067	
Number of Active Retirants	25	17	13	20	92	188	
Survivors							
General Members							
Average Monthly Benefit	\$1,026	\$738	\$906	\$1,101	\$1,690	\$2,506	
Average Final Salary	\$5,729	\$4,095	\$4,409	\$3,937	\$4,441	\$5,113	
Number of Active Survivors	18	37	28	29	37	56	
Safety Members							
Average Monthly Benefit	\$1,574	\$3,661	\$1,555	\$2,964	\$3,638	\$4,723	
Average Final Salary	\$5,295	\$4,838	\$4,379	\$5,534	\$6,619	\$7,088	
Number of Active Survivors	2	1	5	5	10	9	
7/1/08 to 6/30/09							
Retirants							
General Members							
Average Monthly Benefit	\$1,462	\$1,018	\$1,793	\$2,284	\$2,916	\$4,917	
Average Final Salary	\$5,224	\$4,233	\$5,054	\$5,478	\$5,711	\$6,387	
Number of Active Retirants	116	232	195	172	182	669	
Safety Members							
Average Monthly Benefit	\$4,959	\$4,185	\$4,593	\$4,719	\$7,000	\$10,042	
Average Final Salary	\$8,344	\$7,798	\$8,425	\$9,120	\$10,131	\$11,838	
Number of Active Retirants	22	13	17	22	76	127	
Survivors							
General Members							
Average Monthly Benefit	\$755	\$688	\$999	\$1,204	\$1,819	\$2,363	
Average Final Salary	\$4,243	\$3,810	\$4,450	\$3,939	\$4,563	\$4,987	
Number of Active Survivors	14	31	39	43	52	67	
Safety Members							
Average Monthly Benefit	\$3,045	\$3,267	\$2,136	\$2,535	\$3,272	\$4,931	
Average Final Salary	\$5,765	\$5,497	\$4,271	\$5,996	\$6,153	\$7,238	
Number of Active Survivors	4	2	2	5	14	22	

		Years of Credited Service					
<b>Retirement Effective Dates</b>	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
7/1/09 to 6/30/10							
Retirants							
General Members							
Average Monthly Benefit	\$1,242	\$1,204	\$1,782	\$2,559	\$3,418	\$5,319	
Average Final Salary	\$4,984	\$4,790	\$5,072	\$5,888	\$6,525	\$6,923	
Number of Active Retirants	116	242	251	210	258	888	
Safety Members							
Average Monthly Benefit	\$4,656	\$3,461	\$3,008	\$4,840	\$7,055	\$10,450	
Average Final Salary	\$8,092	\$7,848	\$8,377	\$8,519	\$10,104	\$12,206	
Number of Active Retirants	14	22	10	11	85	157	
Survivors							
General Members							
Average Monthly Benefit	\$737	\$825	\$1,077	\$1,201	\$1,336	\$2,528	
Average Final Salary	\$4,738	\$4,069	\$4,592	\$3,875	\$3,732	\$4,926	
Number of Active Survivors	19	31	33	40	59	89	
Safety Members							
Average Monthly Benefit	\$5,467	\$1,895	\$3,210	\$3,413	\$3,884	\$5,653	
Average Final Salary	\$8,746	\$7,268	\$8,850	\$7,809	\$7,374	\$7,554	
Number of Active Survivors	1	3	6	7	11	10	
7/1/10 to 6/30/11							
Retirants							
General Members							
Average Monthly Benefit	\$1,721	\$1,249	\$1,810	\$2,784	\$3,418	\$5,082	
Average Final Salary	\$5,702	\$5,064	\$5,296	\$6,286	\$6,576	\$6,820	
Number of Active Retirants	127	238	269	284	258	922	
Safety Members							
Average Monthly Benefit	\$2,336	\$4,135	\$5,198	\$5,308	\$7,347	\$9,667	
Average Final Salary	\$6,862	\$9,057	\$9,158	\$9,679	\$10,365	\$11,617	
Number of Active Retirants	10	28	21	30	91	152	
Survivors							
General Members							
Average Monthly Benefit	\$629	\$786	\$871	\$1,654	\$1,325	\$2,485	
Average Final Salary	\$3,677	\$3,698	\$3,359	\$5,351	\$3,678	\$5,238	
Number of Active Survivors	24	36	43	44	60	93	
Safety Members							
Average Monthly Benefit	\$3,187	\$1,715	\$2,386	\$3,499	\$3,788	\$5,461	
Average Final Salary	\$6,572	\$5,766	\$5,589	\$6,862	\$6,768	\$6,929	
Number of Active Survivors	3	2	8	4	10	25	
	Ũ	—	-		_0	_0	

Retirement Effective Dates         7/1/11 to 6/30/12         Retirants         General Members	<b>5 - 9</b> 31,793 35,624	10 - 14	15 - 19	20 - 24	25 - 29	30+
Retirants						
General Members						
Average Monthly Benefit \$	5 624	\$1,362	\$2,082	\$2,567	\$3,525	\$4,956
Average Final Salary \$	0,021	\$5,141	\$5,683	\$5,686	\$6,711	\$6,830
Number of Active Retirants	141	291	234	278	297	918
Safety Members						
Average Monthly Benefit \$	2,203	\$4,924	\$6,474	\$4,417	\$7,372	\$9,750
Average Final Salary \$	6,307	\$8,948	\$9,929	\$9,108	\$10,380	\$11,587
Number of Active Retirants	8	29	13	33	103	183
Survivors						
General Members						
Average Monthly Benefit \$	1,055	\$691	\$965	\$1,770	\$1,643	\$2,736
Average Final Salary \$	4,661	\$3,821	\$3,766	\$5,244	\$4,301	\$5,662
Number of Active Survivors	21	46	26	43	57	94
Safety Members						
-	52,786	\$2,352	\$2,789	\$3,271	\$3,221	\$5,580
	5,771	\$6,466	\$7,785	\$7,019	\$6,127	\$7,824
Number of Active Survivors	5	5	5	7	8	23
7/1/12 to 6/30/13						
Retirants						
General Members						
Average Monthly Benefit	\$1,825	\$1,562	\$2,116	\$2,663	\$3,570	\$5,043
Average Final Salary	\$6,046	\$5,405	\$6,042	\$6,009	\$6,758	\$6,888
Number of Active Retirants	112	324	233	271	338	897
Safety Members						
Average Monthly Benefit	\$2,233	\$5,909	\$6,416	\$5,507	\$7,360	\$10,046
Average Final Salary	\$7,299	\$9,266	\$9,611	\$9,843	\$10,481	\$11,921
Number of Active Retirants	12	29	20	33	118	191
Survivors						
General Members						
Average Monthly Benefit	\$861	\$804	\$1,097	\$1,403	\$1,889	\$2,496
Average Final Salary	\$4,743	\$4,020	\$3,961	\$4,451	\$4,930	\$5,611
Number of Active Survivors	22	54	39	70	60	103
Safety Members						
Average Monthly Benefit	\$989	\$1,523	\$2,523	\$3,378	\$4,137	\$5,460
<b>C F</b>	\$4,454	\$4,896	\$5,990	\$8,242	\$7,055	\$7,468
Number of Active Survivors	6	7	10	5	20	31

	Years of Credited Service					
Retirement Effective Dates	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
7/1/13 to 6/30/14						
Retirants						
General Members						
Average Monthly Benefit	\$1,913	\$1,624	\$2,024	\$2,722	\$3,553	\$4,788
Average Final Salary	\$6,415	\$5,241	\$5,657	\$5,930	\$6,724	\$6,733
Number of Active Retirants	109	307	240	305	358	726
Safety Members						
Average Monthly Benefit	\$1,542	\$4,454	\$6,018	\$5,225	\$7,467	\$9,719
Average Final Salary	\$6,452	\$8,381	\$10,140	\$9,414	\$10,753	\$11,823
Number of Active Retirants	8	31	18	20	83	212
Survivors						
General Members						
Average Monthly Benefit	\$1,017	\$837	\$936	\$1,726	\$1,888	\$2,550
Average Final Salary	\$4,475	\$4,679	\$3,794	\$4,913	\$4,732	\$6,064
Number of Active Survivors	29	51	37	41	63	119
Safety Members						
Average Monthly Benefit	\$1,031	\$1,709	\$2,056	\$3,132	\$3,827	\$5,358
Average Final Salary	\$6,377	\$6,249	\$5,830	\$6,874	\$6,772	\$7,309
Number of Active Survivors	2	8	6	6	15	22
7/1/14 to 6/30/15						
Retirants						
General Members						
Average Monthly Benefit	\$1,422	\$1,716	\$2,202	\$3,106	\$3,360	\$5,017
Average Final Salary	\$5,939	\$5,543	\$5,903	\$6,731	\$6,294	\$6,970
Number of Active Retirants	126	331	280	308	436	784
Safety Members						
Average Monthly Benefit	\$2,917	\$5,412	\$5,374	\$6,477	\$7,082	\$9,923
Average Final Salary	\$7,015	\$9,261	\$9,810	\$10,748	\$10,400	\$11,847
Number of Active Retirants	20	19	21	28	116	215
Survivors						
General Members						
Average Monthly Benefit	\$903	\$1,021	\$1,342	\$1,854	\$1,799	\$2,741
Average Final Salary	\$4,076	\$4,471	\$5,243	\$5,464	\$4,814	\$5,525
Number of Active Survivors	32	53	40	52	71	126
Safety Members						
Average Monthly Benefit	\$2,101	\$2,054	\$1,768	\$2,911	\$4,530	\$6,206
Average Final Salary	\$5,564	\$6,518	\$4,737	\$6,552	\$6,815	\$8,367
Number of Active Survivors	6	4	9	12	16	29
	·		-		_•	_•

	Years of Credited Service					
<b>Retirement Effective Dates</b>	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
7/1/15 to 6/30/16						
Retirants						
General Members						
Average Monthly Benefit	\$1,619	\$1,809	\$2,265	\$2,893	\$3,462	\$5,163
Average Final Salary	\$6,022	\$5,607	\$6,020	\$6,414	\$6,440	\$7,372
Number of Active Retirants	118	331	273	274	471	837
Safety Members						
Average Monthly Benefit	\$3,134	\$3,776	\$5,743	\$6,290	\$7,540	\$10,730
Average Final Salary	\$7,077	\$9,355	\$10,057	\$10,613	\$11,062	\$12,654
Number of Active Retirants	24	16	27	22	109	205
Survivors						
General Members						
Average Monthly Benefit	\$929	\$752	\$957	\$1,174	\$1,745	\$2,470
Average Final Salary	\$6,444	\$4,670	\$3,996	\$4,367	\$4,825	\$5,339
Number of Active Survivors	30	55	50	51	69	143
Safety Members						
Average Monthly Benefit	\$1,446	\$3,207	\$3,071	\$3,053	\$4,468	\$5,611
Average Final Salary	\$5,927	\$6,777	\$6,628	\$6,941	\$6,825	\$7,529
Number of Active Survivors	6	6	8	9	16	33
7/1/16 to 6/30/17						
Retirants						
General Members						
Average Monthly Benefit	\$1,416	\$1,858	\$2,364	\$3,425	\$3,730	\$5,149
Average Final Salary	\$5,917	\$5,860	\$6,367	\$7,202	\$6,791	\$7,441
Number of Active Retirants	142	338	328	209	507	856
Safety Members						
Average Monthly Benefit	\$2,987	\$3,087	\$6,412	\$6,885	\$7,888	\$11,358
Average Final Salary	\$7,651	\$8,870	\$10,320	\$11,308	\$11,362	\$13,288
Number of Active Retirants	24	25	50	36	153	248
Survivors						
General Members						
Average Monthly Benefit	\$833	\$786	\$1,392	\$1,577	\$1,898	\$2,942
Average Final Salary	\$5,469	\$4,190	\$4,959	\$5,059	\$5,175	\$6,105
Number of Active Survivors	29	52	63	41	72	136
Safety Members						
Average Monthly Benefit	\$3,522	\$4,150	\$2,131	\$3,715	\$4,316	\$6,581
Average Final Salary	\$6,792	\$7,451	\$7,234	\$6,906	\$7,400	\$8,411
Number of Active Survivors	3	5	9	7	16	36

## Active Members and Participating Pension Employers

#### Last Ten Years

		2008	2009		
County of	Covered	Percentage of Total	Covered	Percentage of Total	
Los Angeles	Members	<b>Covered Members</b>	Members	<b>Covered Members</b>	
General Members	81,650	86.409%	82,865	86.509%	
Safety Members	12,828	13.576%	12,910	13.478%	
Total	94,478	99.985%	95,775	99.987%	
Participating Agencies					
(General Membership)					
South Coast Air Quality					
Mgmt. District	2	0.002%	2	0.002%	
Los Angeles County					
Office of Education	3	0.003%	3	0.003%	
Little Lake Cemetery District	1	0.001%	1	0.001%	
Local Agency Formation					
Commission	8	0.009%	7	0.007%	
<b>Total Participating Agencies</b>	14	0.015%	13	0.013%	
Total Active Membership*					
General Members	81,664	86.424%	82,878	86.522%	
Safety Members	12,828	13.576%	12,910	13.478%	
Total	94,492	100.000%	95,788	100.000%	

		2010	2011		
County of	Covered	Percentage of Total	Covered	Percentage of Total	
Los Angeles	Members	<b>Covered Members</b>	Members	<b>Covered Members</b>	
General Members	81,400	86.220%	80,133	86.363%	
Safety Members	12,997	13.767%	12,641	13.624%	
Total	94,397	<b>99.987</b> %	92,774	99.987%	
Participating Agencies					
(General Membership)					
South Coast Air Quality					
Mgmt. District	2	0.002%	1	0.001%	
Los Angeles County					
Office of Education	3	0.003%	3	0.003%	
Little Lake Cemetery District	1	0.001%	1	0.001%	
Local Agency Formation					
Commission	7	0.007%	7	0.008%	
<b>Total Participating Agencies</b>	13	0.013%	12	0.013%	
Total Active Membership*					
General Members	81,413	86.233%	80,145	86.376%	
Safety Members	12,997	13.767%	12,641	13.624%	
Total	94,410	100.000%	92,786	100.000%	

 $^{\ast}$  Active Membership excludes terminated vested (deferred) members.

		2012	2013		
County of	Covered	Percentage of Total	Covered	Percentage of Total	
Los Angeles	Members	<b>Covered Members</b>	Members	<b>Covered Members</b>	
General Members	79,459	86.413%	78,997	86.293%	
Safety Members	12,485	13.578%	12,539	13.697%	
Total	91,944	99.991%	91,536	99.990%	
Participating Agencies					
(General Membership)					
South Coast Air Quality					
Mgmt. District	1	0.001%	1	0.001%	
Los Angeles County					
Office of Education	_	0.000%	_	0.000%	
Little Lake Cemetery District	1	0.001%	1	0.001%	
Local Agency Formation					
Commission	6	0.007%	7	0.008%	
<b>Total Participating Agencies</b>	8	0.009%	9	0.010%	
Total Active Membership*					
General Members	79,467	86.422%	79,006	86.303%	
Safety Members	12,485	13.578%	12,539	13.697%	
Total	91,952	100.000%	91,545	100.000%	

		2014	2015		
County of	Covered	Percentage of Total	Covered	Percentage of Total	
Los Angeles	Members	<b>Covered Members</b>	Members	<b>Covered Members</b>	
General Members	79,934	86.447%	81,219	86.704%	
Safety Members	12,523	13.543%	12,446	13.286%	
Total	92,457	99.990%	93,665	99.990%	
Participating Agencies					
(General Membership)					
South Coast Air Quality					
Mgmt. District	1	0.001%	1	0.001%	
Los Angeles County					
Office of Education	_	0.000%	_	0.000%	
Little Lake Cemetery District	1	0.001%	1	0.001%	
Local Agency Formation					
Commission	7	0.008%	7	0.008%	
<b>Total Participating Agencies</b>	9	0.010%	9	0.010%	
Total Active Membership*					
General Members	79,943	86.457%	81,228	86.714%	
Safety Members	12,523	13.543%	12,446	13.286%	
Total	92,466	100.000%	93,674	100.000%	

 $^{\ast}$  Active Membership excludes terminated vested (deferred) members.

		2016		2017
County of	Covered	Percentage of Total	Covered	Percentage of Total
Los Angeles	Members	<b>Covered Members</b>	Members	<b>Covered Members</b>
General Members	82,907	86.865%	84,515	86.931%
Safety Members	12,528	13.126%	12,698	13.061%
Total	95,435	99.991%	97,213	<b>99.992</b> %
Participating Agencies				
(General Membership)				
South Coast Air Quality				
Mgmt. District	1	0.001%	1	0.001%
Los Angeles County				
Office of Education	_	0.000%	_	0.000%
Little Lake Cemetery District	1	0.001%	1	0.001%
Local Agency Formation				
Commission	7	0.007%	6	0.006%
Total Participating				
Agencies	9	0.009%	8	0.008%
Total Active Membership*				
General Members	82,916	86.874%	84,523	86.939%
Safety Members	12,528	13.126%	12,698	13.061%
Total	95,444	100.000%	97,221	100.000%

\*Active Membership excludes terminated vested (deferred) members.

#### **Retired Members of Participating OPEB Employers**

Last Ten Years

2008 to 2012	2008	2009	2010	2011	2012
Los Angeles County					
and Participating Agencies					
Medical	40,444	40,868	41,676	42,627	43,746
Dental/Vision	40,628	41,175	42,045	43,114	44,344
2013 to 2017	2013	2014	2015	2016	2017
Los Angeles County					
and Participating Agencies					
Medical	44,753	45,576	46,567	47,653	48,812
Dental/Vision	45,485	46,383	47,486	48,671	49,890

#### **Employer Contribution Rates: County of Los Angeles**

**General Members Safety Members** Plan C\* Plan Plan Plan Plan Plan Plan Plan Plan **Effective Date** Α В С D Ε G\* A В 7/1/2007 to 6/30/2008 18.14% 11.44% 11.14% 11.29% 26.89% 11.33% 20.93% \_ 7/1/2008 to 6/30/2009 10.22% 10.79% 17.64% 10.79% 10.67% 28.16% 20.54% \_ 7/1/2009 to 9/30/2010 17.28% 10.62% 9.88% 10.48% 27.83% 10.45% 20.35% 10/1/2010 to 9/30/2011 19.40% 12.74% 12.23% 12.65% 12.67% 29.46% 22.69% \_ 10/1/2011 to 9/30/2012 21.59% 15.00% 14.51% 14.80% 15.30% 30.38% 24.10% 10/1/2012 to 9/30/2013 22.65% 15.55% 15.35% 16.00% 31.55% 25.37% 16.77% \_ \_ 1/1/2013 to 9/30/2013 15.61% 20.98% \_ \_ \_ \_ \_ \_ \_ 10/1/2013 to 9/30/2014 25.08% 17.95% 17.54% 18.24% 19.09% 17.81% 34.63% 27.92% 23.18% 19.49% 10/1/2014 to 6/30/2015 19.01% 19.74% 20.95% 19.53% 35.91% 29.26% 25.29% 26.99% 7/1/2015 to 6/30/2016 25.13% 17.45% 16.90% 17.70% 18.97% 17.66% 34.64% 27.50% 23.46% 7/1/2016 to 6/30/2017 24.11% 15.94% 15.32% 17.49% 16.07% 32.25% 25.94% 21.93% 16.19%

\*As a result of PEPRA implementation, effective January 1, 2013.

## **Employer Contribution Rates: Little Lake Cemetery District<sup>1</sup>, Local Agency Formation Commission<sup>2</sup>, and Los Angeles County Office of Education<sup>3</sup>** Last Ten Years

		General Members			
Effective	e Date	Plan A	Plan D	Plan E	Plan G <sup>⁴</sup>
7/1/2007 to	6/30/2008	18.14%	11.33%	11.29%	_
7/1/2008 to	6/30/2009	17.64%	10.79%	10.67%	_
7/1/2009 to	9/30/2010	17.28%	10.48%	10.45%	_
10/1/2010 to	9/30/2011	19.40%	12.65%	12.67%	_
10/1/2011 to	9/30/2012	21.59%	14.80%	15.30%	_
10/1/2012 to	9/30/2013	_	16.00%	16.77%	_
1/1/2013 to	9/30/2013	_	_	_	15.61%
10/1/2013 to	9/30/2014	_	18.24%	19.09%	17.81%
10/1/2014 to	6/30/2015	_	19.74%	20.95%	19.53%
7/1/2015 to	6/30/2016	_	17.70%	18.97%	17.66%
7/1/2016 to	6/30/2017	_	16.19%	<b>17.49</b> %	<b>16.07</b> %

NOTES:

<sup>1</sup>Rates applicable to Little Lake Cemetery District are limited to Plan D.

<sup>2</sup>Rates applicable to the Local Agency Formation Commission are limited to Plans D, E, and G.

<sup>3</sup>Rates applicable to the Los Angeles County Office of Education are limited to Plan A. Effective June 30, 2012, all participating

members retired, leaving no active members for this agency.

<sup>4</sup>As a result of PEPRA implementation, effective January 1, 2013.

#### **Employer Contribution Rates: South Coast Air Quality Management District (SCAQMD)**<sup>1</sup> Last Ten Years

		General Members			
Effective Date		Plan A <sup>2</sup>	Plan B	Plan C <sup>3</sup>	
7/1/2007 to 6/30/2	008	24.04%	17.31%	17.04%	
7/1/2008 to 6/30/2	009	22.38%	16.67%	_	
7/1/2009 to 9/30/2	010	22.02%	16.51%	_	
10/1/2010 to 9/30/20	011	24.14%	18.64%	_	
10/1/2011 to 9/30/2	012	_	20.90%	_	
10/1/2012 to 9/30/2	013	_	21.45%	_	
10/1/2013 to 9/30/2	014	_	23.87%	—	
10/1/2014 to 6/30/2	015	_	25.38%	—	
7/1/2015 to 6/30/2	016	_	21.24%	-	
7/1/2016 to 6/30/2	2017	_	17.62%	_	

NOTES:

<sup>1</sup>SCAQMD recalculates its employer contribution rates to pick up a portion of its employee rates, in accordance with its labor contract.

<sup>2</sup>Effective March 31, 2011, participating member in Plan A retired, leaving no active members in Plan A.

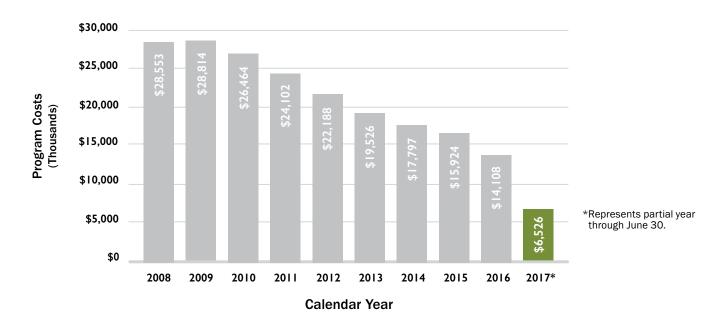
<sup>3</sup>Member changed from Plan C to Plan A effective November 2007, leaving no active members in Plan C.

#### Supplemental Targeted Adjustment for Retirees (STAR) Program Costs — Pension Plan

The STAR Program is administered on a calendar-year basis. The chart below represents the STAR Program costs for the last 10 years.

## **LACERA Star Program Costs**

As of June 2017







## Different Paths Same Destination

#### LACERA Los Angeles County Employees Retirement Association

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