

Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 2016

2015 - 2016



Fresno County Employees' Retirement Association

A Pension Trust Fund for the County of Fresno
and Participating Employers

Fresno, California

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2016

ISSUED BY

DONALD C. KENDIG, CPA
RETIREMENT ADMINISTRATOR

and

DORIS RENTSCHLER
ASSISTANT RETIREMENT ADMINISTRATOR

FCERA

FRESNO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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FRESNO, CALIFORNIA 93721-2515
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A Pension Trust Fund for the County of Fresno
and Participating Employers

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INTRODUCTORY SECTION





Donald C. Kendig, CPA
Retirement Administrator

FRESNO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

Steven J. Jolly, Chair
Dr. Rod Coburn, III, Vice Chair
Laura P. Basua
Greg Baxter
Alan Cade, Jr.
Vicki Crow
Robert Dowell
Eulalio Gomez
Mary Ann Rogozinski, Alternate

December 9, 2016

Board of Retirement
Fresno County Employees' Retirement Association
1111 H Street
Fresno, CA 93721

Dear Board Members:

I am pleased to present this Comprehensive Annual Financial Report ("CAFR") for the Fresno County Employees' Retirement Association ("FCERA"), sometimes referred to as the Association, for the fiscal year ended June 30, 2016.

The CAFR provides policymakers, members, employers, regulatory agencies and other users with a comprehensive and accurate review of the fiscal year's operations, from July 1 to June 30.

In addition, the CAFR serves as a source of reliable information for making responsible management decisions, determining compliance with legal requirements and demonstrating the stewardship of the Board of Retirement of the Fresno County Employees' Retirement Association ("Board"), staff and key consultants who serve the members of FCERA. While good stewardship is clearly demonstrated by the data contained in the CAFR, it is important to note that the management of FCERA is responsible for both the accuracy of the data and the completeness and fairness of the presentation of the financial information, including all disclosures. The accumulation, analysis and presentation of the data rest upon the shoulders of management and the supporting staff, and I am thankful to all members of the FCERA team.

Generally Accepted Accounting Principles (GAAP) require that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal provides a broader

Letter of Transmittal continued

context as compared to the MD&A, and the two should be read in tandem. The MD&A can be found immediately following the Independent Auditor's Report in the Financial Section.

FCERA MISSION STATEMENT AND CORE VALUES

Our mission is to administer the retirement benefits for the members and beneficiaries in a prudent, accurate, timely and cost-effective manner, while administering fund assets in a manner that achieves investment and funding objectives within prudent levels of risk.

In carrying out this mission, we endeavor to:

- Honor our fiduciary duties set out in laws that govern fiduciaries
- Exhibit accuracy, honesty and integrity in all of our work
- Coordinate our efforts with professionals and advisors
- Render timely and responsive service to members and partner organizations
- Work as a team to solve members' problems and overcome challenges
- Exercise constant diligence in operations and prudent management of assets
- Provide regular, accessible and effective education to members and others

FCERA AND ITS SERVICES

FCERA is a cost-sharing multiple employer public retirement system established by the County of Fresno (the County) Board of Supervisors on January 1, 1945 to provide retirement, disability, death and survivor benefits for its members under the California State Government Code, Section 31450 *et. seq.*, (the County Employees Retirement Law of 1937, hereinafter "CERL") and Section 7522 *et. seq.*, (the Public Employees' Pension Reform Act of 2013, hereinafter "PEPRA"). The retirement plan is administered by a Board, which consists of nine voting members and a retiree alternate, who are presented on page 10 of the Introductory Section.

FCERA is governed by the California Constitution, the CERL, the PEPRA, and regulations, procedures, and policies adopted by the Board. The Fresno County Board of Supervisors may also adopt resolutions, as permitted by the CERL, which may affect benefits for FCERA members.

The Board is responsible for establishing policies governing the administration of the retirement plan, determining benefit allowances, and managing the investments of the Association's assets. The Board defines the duties and oversees the activities of the Retirement Administrator, who in turn, directs and oversees the staff and operations of the Administrative Office. Participating employer entities ("Sponsors") include:

- County of Fresno
- Superior Court of California, County of Fresno

Letter of Transmittal continued

- Clovis Veterans Memorial District
- Fresno-Madera Area Agency on Aging
- Fresno Mosquito & Vector Control District

FINANCIAL INFORMATION

As mentioned previously, management is responsible for the accuracy, completeness, fair presentation of information and all disclosures in this Report. In addition, management is also responsible for establishing and maintaining an internal control structure designed to provide reasonable assurance that FCERA's financial reporting is accurate and reliable. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived, and the valuation of the cost and benefits requires estimates and judgments by management.

Brown Armstrong Accountancy Corporation (the "Auditor") provides financial statement independent audit services to FCERA. The Auditor attests that these financial statements are presented in accordance with GAAP and that the financial statements are free of any material misstatement. Management is responsible for assuring that internal accounting controls are sufficient to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Controls have inherent limitations and do rely on human diligence. Because of these inherent limitations, the internal controls are not exact in their nature, which may lead to the risk that errors or misstatements may occur and may not be identified immediately. FCERA's current management believes it has prudent controls in place to mitigate the inherent risk within its financial reporting and accounting systems.

The accompanying financial statements and transactions are prepared on an accrual basis of accounting. Revenues are recognized when earned, regardless of the date of collection and expenses are recognized when incurred, regardless of when a corresponding cash outlay is made.

GENERAL OPERATIONS

Administering the retirement benefits *for the members and beneficiaries in a prudent, accurate, timely and cost-effective manner* begins with ongoing direct services to active and retired members, efficient management of the office and business operations, and facilitating the work of the Board, advisors, and professional service providers. Several noteworthy events and major ongoing projects required particular attention and effort during the year.

Board Oversight

Steven J. Jolly continues as Chair to the Board with Dr. Rod Coburn, III as Vice Chair. The Board had a single transition during the fiscal year, Mr. Paul Dictos, CPA did not re-run for the general member position 2 on the Board of Retirement. Alan Cade, Jr. was elected to the Board after

Letter of Transmittal continued

winning the general member position 2 on November 20, 2015. Mr. Cade's new term will expire on December 31, 2018. The Board continues to hold a vacancy for the Board of Supervisors member appointment.

Administration

The communications position added as part of budget deliberations for fiscal year (FY) 2015-16, was filled during FY2015-16, along with the filling of several other vacancies during the year, bringing the agency to nearly full staff.

Staffing, Operations, and Benefit Delivery

During the last fiscal year, substantial turnover and recruiting challenges resulted in the decision to close the office to the public between the hours of 8:00-9:00 a.m. and 4:00-5:00 p.m., in addition to the noon hour closure already in effect. Those restricted office hours remained in effect through fiscal year 2016. Six critical vacancies in the Retirement Specialist and Account Clerk series were filled during the fiscal year, allowing staff to begin addressing backlogs created during the staffing shortage. The restricted office hours provided staff dedicated time to perform retirement benefit calculations and service purchase requests to address the backlogs. Retirement workshops and retirement seminars were reintroduced towards fiscal year end upon attaining full staffing of the Retirement Specialist positions. Now that staffing shortages have been mitigated, we look forward to resuming walk-in member meetings and normal office hours. FCERA and its management continue to seek innovative ways to fairly compensate, recruit, and retain good people.

Systems

The association began implementation a new pension administration system in November 2014. During FY15-16, significant work was done to document workflows, process, and procedures. The launch of the member self-service web portal marked the beginning of a new service era for FCERA. Ways to improve upon Arrivos will be an ongoing effort in the organization's focus on continuous improvement.

ASSET MANAGEMENT AND INVESTING

The Investment Policy adopted by the Board defines the framework within which the administration, general consultant and third party investment managers endeavor to meet our mission to *...achieve investment and funding objectives within prudent levels of risk.*

The overall strategic asset allocation has a greater impact on investment performance than portfolio manager selection or the timing of allocations. The asset allocation process determines a fund's optimal target allocations, which are expected to achieve objectives related to expected return, liquidity and risk (defined as volatility). This is reflected through the choice of investments at the asset class level.

Letter of Transmittal continued

Under this policy the Board operates under a standard of fiduciary care in California commonly known as the "prudent person rule" which requires that the Board discharge its duties with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims. When the Board contracts with professional investment advisors, their discretion is defined by our Investment Policy and the discretion provided by contract and guidelines prescribed by the Board. In exercising discretion when managing assets, such service providers become co-fiduciaries to the members.

The prudent person rule requires the Board to diversify the investments of the fund, unless it is clearly prudent not to do so under the circumstances. The Board therefore makes basic policy decisions with respect to the fund, including, but not limited to, the strategic allocation of assets to various investment classes. As of June 30, 2016, the categorical targets are as follows, and remain unchanged from June 30, 2015:

	<u>2016</u>
• Equities.....	36 %
• Fixed Income	31 %
• Real Assets	11 %
• Private Credit and Private Equity.....	14 %
• Hedge Strategies	8 %

During the 2013-14 fiscal year, the Board made significant changes to the strategic asset allocation reducing Equities 17%, from 53%, increasing Fixed Income 5%, from 26%, increasing Real Assets 1% from 10%, doubling Private Credit and Private Equity from 7%, and doubling Hedge Strategies from 4%. These changes are the results from the endeavor of the Board and Verus (formerly Wurts & Associates) to design an asset and strategy mix that anticipates a low-return market environment for the next 5 to 10 years, and reduces our vulnerability to any general market downturn similar to those witnessed in 2000 and 2008. While the shift took place during the 2013-14 fiscal year, it is taking time to substantially fund the Private Equity, Real Assets, and Hedge Strategies, primarily due to the illiquidity and cyclical nature of the fund offerings.

Just after the close of this fiscal year, the Board retained Grosvenor Capital Management as its non-discretionary specialty consultant for its hedge strategies to help the Board with its 8% allocation, up from 4%. The Board sees this as reducing fees overall for the allocation and gaining direct access to the best ideas in the space.

The Board is currently conducting a search for a fund of one private credit and private equity asset manager/advisor to help with its 14% allocation to the private markets.

ACTUARIAL FUNDING STATUS

The CERL prescribes that the Board should engage a qualified, independent actuarial firm to perform regular valuations of the retirement plan. Further, a detailed study of the retirement plan's economic and non-economic assumptions (forecast parameters) is undertaken every three years, wherein the fund actuary makes recommendations to the Board regarding the assumptions to be used to measure the liabilities and assets of the fund. The primary purpose for these studies is to help determine the actuarially required (and stable) level of contributions needed to meet costs associated with annually accruing benefit commitments (normal cost) and eliminate any past unfunded liabilities (Unfunded Actuarial Accrued Liability or "UAAL") within an accepted amortization period.

The actuarial valuation as of June 30, 2015, completed by Segal Consulting, determined that the ratio of plan assets to plan liabilities was 80.7%, based on a valuation value of assets, which represented an increase over the same ratio on June 30, 2014, of 78.4%. Our funding policy employs a five-year "smoothing" methodology, whereby 20% of a fiscal year's market loss, or gain, in a given fiscal year, is recognized over each of five succeeding years to dampen the "noise" of short-term investment market volatility, creating a lesser "actuarial" loss, or gain. This results in five year "layers" of actuarial losses and gains, resulting in one net actuarial loss or gain that goes into the valuation and determination of employer contributions. In addition, the policy imposes an absolute "corridor" of +/- 30% to the actuarial valuation value of assets (VVA) relative to the market value of assets (MVA). This constrains the variance between the VVA and MVA and prevents the employer contribution requirements from not being sufficient on one side of the corridor, or from being too high on the other. These techniques are used to produce reliable, stable and serially manageable changes to required contributions for participating employers.

As part of FCERA's June 30, 2015 actuarial valuation, the Board adopted an assumed rate of return of 7.25%, gross of administration and net of investment expenses, remained unchanged for FY2016. Administrative expenses were separately allocated to the sponsors and active employees as a percentage of total contributions before the explicit administrative expense load.

The assumed rate of return has a direct effect on employer contributions relative to market performance (fair value). This means that any return of less than 7.25% is considered an actuarial loss, and actuarial gains are not realized until after 7.25% has been exceeded.

BUDGET

The first part of our mission is to *administer the retirement benefits for the members and beneficiaries in a prudent, accurate, timely and cost-effective manner...*

Letter of Transmittal continued

Government Code Section 31580.2(a) requires the Board to annually adopt a budget covering the entire expense of administration of the retirement system. The total administrative expenses, which are funded as a component of the member and employer contribution rate, may not exceed the greater of twenty-one hundredths of one percent of the accrued actuarial liability of the system, or two million dollars (\$2,000,000), as adjusted annually by the amount of the annual cost of living adjustment, which is the legislative cap (CAP) on spending.

Government Code Section 31580.2(b) provides an exclusion from the CAP for expenses for computer software, computer hardware, and computer technology consulting services in support of these computer products. These costs are identified as information technology costs herein. While these costs are excluded from the CAP, they are subject to the approval of the Board.

Government Code Section 31596.1 provides that the following types of expenses shall not be considered a cost of administration of the retirement system, but shall be considered as a reduction in earnings from those investments or a charge against the assets of the retirement system as determined by the Board:

- (a) The costs, as approved by the board, of actuarial valuations and services rendered pursuant to Section 31453.
- (b) The compensation of any bank or trust company performing custodial services.
- (c) When an investment is made in deeds of trust and mortgages, the fees stipulated in any agreement entered into with a bank or mortgage service company to service such deeds of trust and mortgages.
- (d) Any fees stipulated in an agreement entered into with investment counsel for consulting or management services in connection with the administration of the board's investment program, including the system's participation in any form of investment pool managed by a third party or parties.
- (e) The compensation to an attorney for services rendered pursuant to Section 31607 [investment related work] or legal representation rendered pursuant to Section 31529.1 [LACERA specific].

The cost of these items are controlled through contract negotiations and are not subject to the Administrative budget process, primarily due to the legally mandated aspects of the actuarial valuations, the fiduciary requirements of hiring investment consulting and investment related legal services, and the de facto fees required to obtain market exposure and to track the investments. These items are not included in the Fiscal Year 2016-17 Proposed Administrative Budget.

For fiscal year ended June 30, 2016, administrative expenses represented 0.09% of the accrued actuarial liability of the plan. Administrative expenses have historically been well below the statutory limit.

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to FCERA for its CAFR for the fiscal year ended June 30, 2015, on page 9 of the Introductory Section, which marks nineteen consecutive years that FCERA has achieved this prestigious award. FCERA also received the GFOA award for Outstanding Achievement in Popular Annual Financial Reporting (PAFR). The PAFR provides FCERA's membership with condensed and concise information in an easier to read format than is presented in the CAFR.

ACKNOWLEDGMENTS

The preparation of this CAFR reflects the combined efforts of the FCERA staff, Becky Van Wyk, Doris Rentschler, Conor Hinds and their supportive staff, and the consultants, Verus, Segal Consulting, and Brown Armstrong Accountancy Corporation, all who made significant contributions of time, effort, and expertise.

Lastly, FCERA is a large and complex organization with many contributors to its success. For their commitment to FCERA and for their diligent work to assure FCERA's continued successful operation, sincere thanks are owed to the Board of Retirement trustees, all FCERA staff, and all of our expert consultants and investment advisors.

Respectfully submitted,

A handwritten signature in black ink that reads "Donald C. Kendig". The signature is written in a cursive, flowing style.

Donald C. Kendig, CPA
Retirement Administrator

Certificate of Achievement



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

**Fresno County
Employees' Retirement Association
California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2015

Executive Director/CEO

**Board of Retirement
As of June 30, 2016**



**CHAIRMAN
STEVEN JOLLY**

Appointed by Board of Supervisors
Present term expires upon appointment



**VICE CHAIRPERSON
DR. ROD COBURN, III**

Appointed by Board of Supervisors
Present term expires December 31, 2017



**MEMBER
LAURA BASUA**

Elected by General Members
Present term expires December 31, 2017



**MEMBER
GREGORY BAXTER**

Appointed by Board of Supervisors
Present term expires December 31, 2017



**MEMBER
ALAN CADE, JR.**

Elected by General Members
Present term expires December 31, 2018



**MEMBER
VICKI CROW, CPA**

Auditor-Controller/Treasurer-Tax Collector
Ex-Officio Trustee



**MEMBER
ROBERT DOWELL**

Elected by Retirees
Present term expires December 31, 2016



**MEMBER
EULALIO GOMEZ**

Elected by Safety Members
Present term expires December 31, 2017



**MEMBER
VACANT**

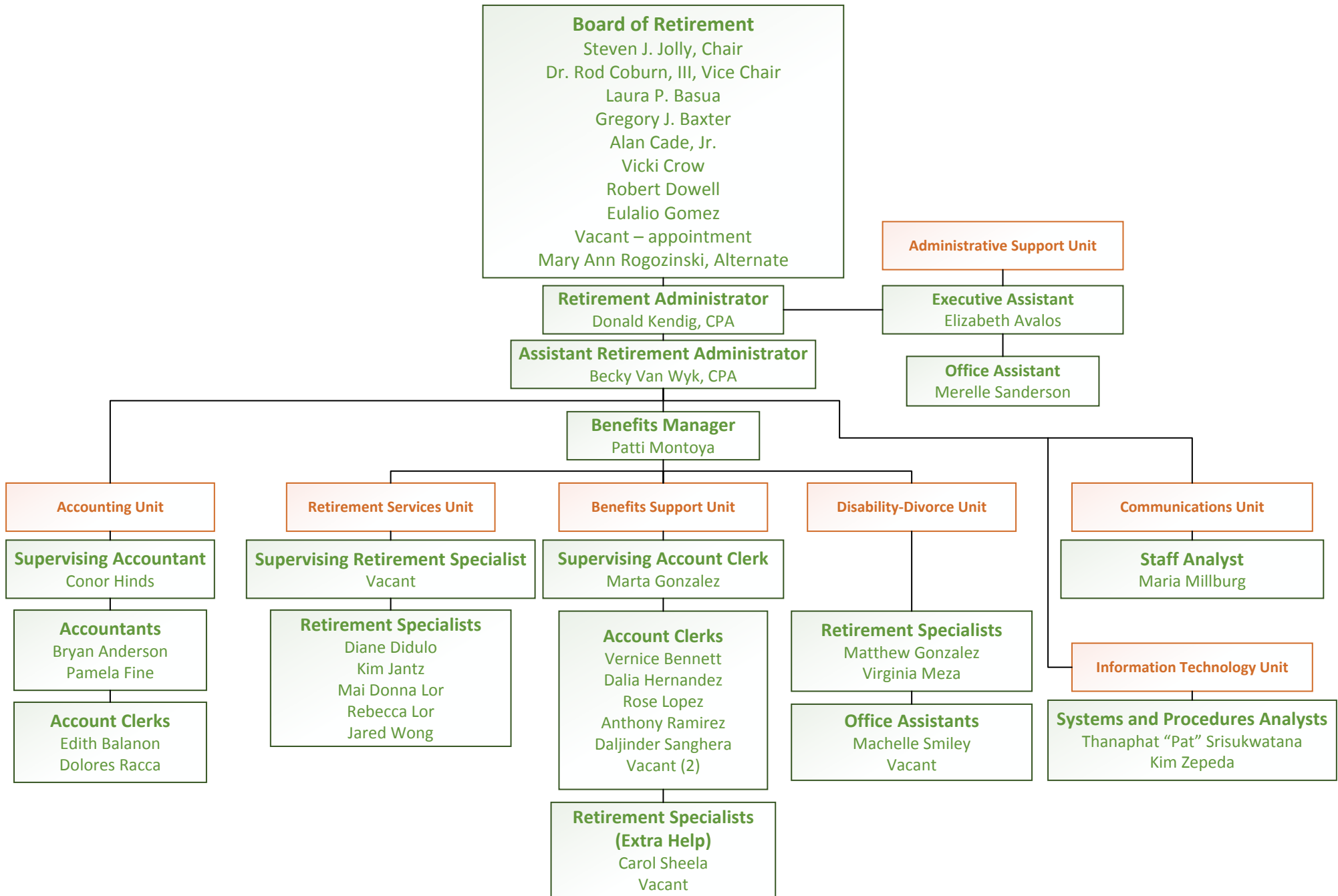
Appointed by Board of Supervisors
Present term expires December 31, 2015



**ALTERNATE RETIRED MEMBER
MARY ANN ROGOZINSKI**
Alternate Retired Member - Elected by Retirees
Present term expires December 31, 2016

Administrative Organizational Chart

At June 30, 2016



List of Professional Consultants

CONSULTING SERVICES

Actuary

- Segal Consulting

Auditor

- Brown Armstrong Accountancy Corporation

Commission Recapture Services

- ConvergeX

Custodian Bank

- Northern Trust

Investment Consultant

- Verus

Legal Counsel

- Baker, Manock & Jensen PC
- Bernstein Litowitz Berger & Grossmann LLP
- Cohen Milstein Sellers & Toll PLLC
- Harvey Leiderman, Reed Smith LLP
- Joseph J. Tabacco, Jr., Berman Devalerio
- Rafael Stone, Foster Pepper PLLC
- Fresno County Counsel

Securities Lending

- Northern Trust

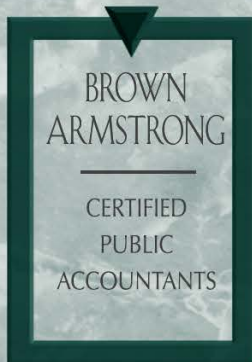
Technical and Pension System Design

- Linea Solutions, Inc.
- Tegrity Group

A complete list of Investment Managers, Schedule of Fees, and Schedule of Commissions can be found on pages 71, 72, and 73 of the Investment Section.

FINANCIAL SECTION





BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Audit Committee and Board of Retirement of
Fresno County Employees' Retirement Association
Fresno, California

Report on the Financial Statements

We have audited the accompanying Statement of Fiduciary Net Position of the Fresno County Employees' Retirement Association (FCERA) as of June 30, 2016, the related Statement of Changes in Fiduciary Net Position for the fiscal year then ended, and the related notes to the financial statements, which collectively comprise FCERA'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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

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

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

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FAX 559.476.3593

PASADENA OFFICE

260 S. LOS ROBLES AVENUE
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PASADENA, CA 91101
TEL 626.204.6542
FAX 626.204.6547

STOCKTON OFFICE

5250 CLAREMONT AVENUE
SUITE 150
STOCKTON, CA 95207
TEL 209.451.4833

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the fiduciary net position of FCERA as of June 30, 2016, and the changes in fiduciary net position for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 2 to the basic financial statements, based on the actuarial valuation of the pension plan as of June 30, 2015, rolled forward to June 30, 2016, the total pension liability of the participating employers exceeded the pension plan's fiduciary net position by \$1,533,010,000. The fiduciary net position as a percentage of the total pension liability as of June 30, 2016, was 72.34%. The actuarial valuations are very sensitive to the underlying actuarial assumptions, including a discount rate of 7.00%, which represents the long-term expected rate of return.

Additionally, as discussed in Note 2 to the basic financial statements, in 2016, FCERA adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*.

Our opinion is not modified with respect to these matters.

Other Matters

Required Supplementary Information

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

Other Supplementary Information

Our audit was conducted for the purpose of forming an opinion on FCERA's basic financial statements. The other supplementary information, introductory, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information 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 in the basic financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information 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 them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 9, 2016, on our consideration of FCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering FCERA's internal control over financial reporting and compliance.

Report on Summarized Comparative Information

We have previously audited FCERA's June 30, 2015, financial statements, and our report dated December 9, 2015, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2015, is consistent in all material respects, with the audited financial statements from which it has been derived.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 9, 2016

Management's Discussion and Analysis as of June 30, 2016

We are pleased to provide this overview and analysis of the financial activities of the Fresno County Employees' Retirement Association (FCERA) for the years ended June 30, 2016 and 2015. We encourage readers to take into account the information presented here in conjunction with additional information that we have furnished in the Letter of Transmittal, as well as the Financial Statements.

Financial Highlights

- FCERA's net position at the close of fiscal year 2016 totaled \$4.0 billion (net position restricted for pension benefits), a decrease of \$22,623 million, or 0.6% from 2015, primarily as a result of the net depreciation in the Fair Value of Investments.
- Total additions, as reflected in the Statement of Changes in Fiduciary Net Position, for the year ended June 30, 2016, were \$222.5 million, which includes employer and employee contributions of \$226.7 million, investment losses of \$5,178 thousand, and net securities lending income of \$920 thousand.
- Employer contributions increased from \$184.2 million in fiscal year 2015 to \$191.5 million in fiscal year 2016 primarily as the result of an increase in contribution rates attributed to the effect of changes in actuarial assumptions, an increase in total payroll, and the effect of investment losses on the valuation value of assets. Contribution rates are applied on a July 1 through June 30 fiscal year basis and increased as of July 1, 2015.
- Plan member contributions increased for fiscal year 2016 when compared to 2015, mainly due to an increase in contributions rates resulting from the effect of changes in the actuarial assumptions. For fiscal years 2016 and 2015, plan member contributions were \$35.2 and \$33.1 million, respectively.
- Total deductions, as reflected in the Statement of Changes in Fiduciary Net Position, increased from \$235.7 million to \$245.1 million over the prior year, or approximately 4.0%, mainly attributed to the pension payroll. Benefits paid to retirees and beneficiaries increased from \$229.1 million in 2015 to \$238.0 million in 2016, or approximately 3.9%. This increase can be attributed to an increase in the number of new retirees and an annual cost of living (COLA) increase.
- FCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. As of June 30, 2015, the date of FCERA's last actuarial valuation, the funded ratio for FCERA was 80.7%. In general, this indicates that for every dollar of projected benefits due FCERA has approximately \$0.81 to cover its obligation.
- Central banks produced low and negative interest rate policies resulting in volatility in the equity, energy, and currency markets for the fiscal year ended June 30, 2016.

Management's Discussion and Analysis continued

International equity assets depreciated 8.2% while the fixed income portfolio returned 3.7%. The total investment portfolio finished the fiscal year earning a -0.2% return net of fees, which was the same return as 2015.

Overview of the Financial Statements

This Management Discussion and Analysis is intended to serve as an introduction to FCERA's financial statements, which are comprised of these components:

1. Statement of Fiduciary Net Position
2. Statement of Changes in Fiduciary Net Position
3. Notes to the Basic Financial Statements
4. Required Supplementary Information
5. Other Supplementary Information

The implementation of Governmental Accounting Standards Board (GASB) Statement No. 67 in 2014 caused an increase in the number of schedules in the Required Supplementary Information section. These new schedules provide a broad scope of financial information including a pension liability measurement and changes to the liability, historical contributions, money-weighted investment return, and additional actuarial related disclosures.

The Statement of Fiduciary Net Position is a snapshot of account balances at year-end. It indicates the assets available for future payments to retirees and their beneficiaries and any current liabilities that are owed as of year-end. The net position, which is the assets less the liabilities, reflects the funds available for future use.

The Statement of Changes in Fiduciary Net Position provides a view of current year additions to and deductions from the plan. The trend of additions versus deductions to the plan will indicate whether FCERA's financial position is improving or deteriorating over time.

Both financial statements and the required disclosures are in compliance with the accounting principles and reporting guidelines as set forth by the GASB, using the accrual basis of accounting. FCERA complies with all material requirements of these principles and guidelines.

All of the current year's additions and deductions are taken into account regardless of when cash is received or paid. All investment gains and losses are shown at trade date, not settlement date. In addition, both realized and unrealized gains and losses are shown on investments, and all capital assets are depreciated over their useful lives.

Other factors, such as market conditions, should be considered in measuring FCERA's overall financial strength.

The Notes to the Basic Financial Statements are an integral part of the financial report and provide additional information that is essential to a full understanding of the data provided in

Management's Discussion and Analysis continued

the financial statements. The notes provide detailed discussion of key policies, programs, and activities that occurred during the year.

Required Supplementary Information. In addition to the financial statements and accompanying notes, this report presents certain required supplementary information as of the latest actuarial valuation concerning FCERA's progress in funding its obligations to provide pension benefits to members. Included are the Schedule of Employer Contributions, Schedule of Investment Returns – Pension Plan, Actuarial Methods and Assumptions, and Schedule of Changes in Net Position Liability and Related Ratios. Each schedule presents historical trend information about annual required contributions of the employer and the actual contributions made, investment returns of the Plan and the overall net pension liability as well as funded position. Actuarial Methods and Assumptions point to important criteria used in the determination of the Plan's required contributions to achieve full funding of the Plan. These schedules provide information to help promote understanding of the changes in the funded status of the Plan over time.

Other Supplementary Information. The schedules of administrative expenses, administrative budget analysis, information technology expenses, investment expenses, and payments to consultants are presented following the required supplementary information.

Financial Analysis

As of June 30, 2016, FCERA has \$4.0 billion in net position restricted for pension benefits, which means that assets of \$4.2 billion exceed operational liabilities of \$0.2 billion. At June 30, 2015, FCERA's net position restricted for pension benefits totaled \$4.0 billion. The net position restricted for pension benefits is available to meet FCERA's ongoing obligation to plan participants and their beneficiaries.

As of June 30, 2016, the net position restricted for pension benefits decreased by 0.6% compared to 2015, primarily due to the changes in the fair value of investments. Current assets and current liabilities also change by offsetting amounts due to the recording of the securities lending cash collateral.

Capital Assets

FCERA's investment in capital assets increased from \$9.8 million to \$10.4 million (net of accumulated depreciation and amortization). The investment in capital assets includes servers, equipment, and furniture. The total increase in FCERA's investment in capital assets from 2015 to 2016 was 5.7%. The new pension administration system was placed into production in November 2014 and was the primary reason for the increase in capital assets in both the 2016 and 2015 fiscal years.

Starting in fiscal year 2012, FCERA follows the California Government Code Section 31580.2, which states that expenses for software, hardware, and computer technology consulting

Management's Discussion and Analysis continued

services in support of the computer products shall not be a cost of the administration of the retirement system. During fiscal years 2016 and 2015, FCERA's expenses for software, hardware, and computer technology consulting services were \$822,725 and \$3,147,244 respectively.

Net Position Restricted for Benefits

As of June 30, 2016 and 2015

(Dollars in Thousands)

	2016	2015	% Change 2016-2015
Current Assets	\$ 341,933	\$ 326,293	4.8%
Investments	3,890,142	3,908,246	-0.5%
Capital Assets, net	10,379	9,816	5.7%
Total Assets	4,242,454	4,244,355	0.0%
Total Liabilities	232,958	212,236	9.8%
Net Position Restricted for Benefits	\$ 4,009,496	\$ 4,032,119	-0.6%

FCERA has annual valuations completed by its independent actuary, Segal Consulting. The purpose of the valuation is to determine the future contributions by the members and employers needed to pay all the expected future benefits. Despite variations in the stock market, FCERA's management and independent actuary concur that FCERA remains in a financial position that will enable the plan to meet its obligations to participants and beneficiaries. FCERA remains focused on the long-term performance of the Plan, dependent on a strong and successful investment program, risk management, and strategic planning.

Management's Discussion and Analysis continued

FCERA's Activities

Changes in FCERA's Fiduciary Net Position

As of June 30, 2016 and 2015

(Dollars in Thousands)

	2016	2015	% Change 2016-2015
Employer Contributions	\$ 191,529	\$ 184,213	4.0%
Plan Member Contributions	35,212	33,110	6.3%
Net Investment (Loss)/Income	(5,178)	(327)	1483.5%
Net Securities Lending Income	920	733	25.5%
Total Additions	222,483	217,729	2.2%
Pension Benefits	238,028	229,115	3.9%
Refunds	2,203	2,282	-3.5%
Administrative	4,814	4,297	12.0%
Other	61	45	35.5%
Total Deductions	245,106	235,739	4.0%
Change in net position	\$ (22,623)	\$ (18,010)	25.6%

Additions to Fiduciary Net Position

The primary sources to finance the benefits that FCERA provides to its members are accumulated through the collection of member (employee), employer contributions, and through the earnings on investments (net of investment expenses). The Net Investment Income or Loss for the years ended June 30, 2016 and 2015, totaled losses of \$5,178 and \$327 thousand, respectively.

By year-end, total additions had increased by \$4,754 thousand from 2015, or 2.2%, due primarily to higher employer and employee contributions than in the previous year. The Investment Section of this report reviews the result of investment activity for the year ended June 30, 2016.

Deductions from Fiduciary Net Position

The primary uses of FCERA's assets include the payment of benefits to retirees and their beneficiaries, refunds of contributions to terminated employees, and the cost of administering the Plan. Deductions in the year ended June 30, 2016, totaled \$245.1 million, an increase of 4.0% over June 30, 2015. The increases are mostly attributed to the growth in the number and average amount of benefits paid to retirees year over year.

The Board of Retirement (Board) approves the annual budget for FCERA. The California Government Code Section 31580.2(a) limits the annual administrative expenses to not exceed

Management's Discussion and Analysis continued

the greater of either of the following: (1) twenty-one hundredths of one percent (0.21%) of the accrued actuarial liability of the retirement system; (2) two million dollars (\$2,000,000), as adjusted annually by the amount of the annual COLA computed in accordance with Article 16.5. The 2016 Technology Budget was amended to increase appropriations by \$425,377 for contract amounts on the purchase and design of the pension administration system. Expenses for computer software, computer hardware, and computer technology consulting services in support of these computer products are not considered a cost of administration of the retirement system. FCERA has consistently met its administrative expenses budget for the current year and prior years.

Pension Liabilities

As GASB Statement No. 67 requires, FCERA reports the Total Pension Liability and the Net Pension Liability as calculated by FCERA's actuary. It is important to note that these liabilities are solely calculated for financial reporting purposes and are not intended to provide information about the funding of FCERA's benefits.

FCERA's Total Pension Liability as of June 30, 2016, was \$5.54 billion resulting from an increase of 8.3 percent from \$5.12 billion as of June 30, 2015. FCERA's Net Pension Liability as of June 30, 2016, was \$1,533 million, representing an increase of 41.3 percent from \$1,085 million as of June 30, 2015. This \$448 million increase in liabilities is primarily as a result of the annual investment return of -0.1 percent which was significantly below the assumed rate of 7.25%. This loss was somewhat offset by gains from lower than expected active salary increases and lower than expected retiree COLA increases during the fiscal years of 2015 and 2014 (because liabilities are rolled forward from June 30, 2015 to June 30, 2016, the gains are not reflected until this valuation as of June 30, 2016).

Under GASB Statement No. 67, the Fiduciary Net Position as a percentage of the Total Pension Liability is required to be presented. For the fiscal years ended June 30, 2016 and 2015, and the Fiduciary Net Position as a percentage of the Total Pension Liability is reported as 72.34 percent and 78.79 percent respectively. The change at 2016 is an 8.2 percent increase from 2015 and is due to the growth in the Total Pension Liability of \$425 million in conjunction with a moderate decrease in FCERA's Fiduciary Net Position of \$23 million, which results in a less favorable financial position at June 30, 2016, when compared to June 30, 2015.

Management's Discussion and Analysis continued

Net Pension Liability

As of June 30, 2016 and 2015

(Dollars in Thousands)

	2016	2015	\$ Change 2016-2015	% Change 2016-2015
Total Pension Liability	\$5,542,506	\$5,117,241	\$ 425,265	8.3%
Less: Fiduciary Net Position	(4,009,496)	(4,032,119)	(22,623)	-0.6%
Net Pension Liability	\$1,533,010	\$1,085,122	\$ 447,888	41.3%
Fiduciary Net Position as a Percentage of Total Pension Liability	72.34%	78.79%		8.2%

FCERA's Fiduciary Responsibilities

The Board and management staffs are fiduciaries of the pension trust fund. Under the California Constitution, the assets can only be used for the exclusive benefit of plan participants and their beneficiaries.

Requests for Information

This financial report is designed to provide the Board, our membership, taxpayers, investment managers, and others with a general overview of FCERA's financial condition and to demonstrate FCERA's accountability for the funds under its stewardship.

Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

FCERA
Attn: Accounting Unit
1111 H Street
Fresno, CA 93721

Respectfully submitted,



Doris Rentschler
Assistant Retirement Administrator
December 9, 2016

Basic Financial Statements

Statement of Fiduciary Net Position

As of June 30, 2016, with Comparative Totals

(Dollars in Thousands)

	2016	2015
Assets		
Cash and cash equivalents with fiscal agents	\$ 94,407	\$ 94,235
Securities lending investments pool:		
Short-term investments	200,178	192,520
Receivables:		
Investment trades receivable	26,812	13,313
Interest and dividends receivable	13,077	12,608
Administrative receivable	82	42
Contributions receivable	6,969	13,246
Securities lending receivable	133	82
Total Receivables	47,073	39,291
Investments, at fair value:		
Domestic and international fixed income	1,633,551	1,557,325
Domestic and international equities	1,525,931	1,626,682
Private equity	333,127	338,802
Real estate	183,049	159,533
Hedge funds	146,819	154,465
Private credit	67,665	71,439
Total Investments	3,890,142	3,908,246
Prepaid expenses	275	247
Capital assets		
Nondepreciable	619	501
Depreciable, net of accumulated depreciation	9,760	9,315
Total Capital Assets, Net	10,379	9,816
Total Assets	4,242,454	4,244,355
Liabilities		
Accounts payable - purchase of investments	28,989	16,512
Cash collateral payable for securities lending	200,178	192,520
Administrative accounts payable	3,759	3,185
Securities lending bank and broker fees	32	19
Total Liabilities	232,958	212,236
Net Position Restricted for Pension Benefits	\$ 4,009,496	\$ 4,032,119

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

Basic Financial Statements continued

Statement of Changes In Fiduciary Net Position

For the Fiscal Year Ended June 30, 2016, with Comparative Totals

(Dollars in Thousands)

	2016	2015
Additions		
Contributions:		
Employers	\$ 191,529	\$ 184,213
Plan members	35,212	33,110
Total Contributions	226,741	217,323
Investment (Loss):		
From Investment Activities		
Net (depreciation) in fair value of investments	(105,124)	(90,676)
Interest	48,033	45,996
Dividends	31,817	27,662
Private markets	37,305	32,713
Investment expenses	(17,766)	(16,374)
Miscellaneous income	557	352
Net investment (loss), before securities lending	(5,178)	(327)
From securities lending activities		
Securities lending income	1,220	972
Securities lending expenses		
Security lending management fees	(300)	(239)
Net income from securities lending activities	920	733
Net investment income	(4,258)	406
Total Additions	222,483	217,729
Deductions		
Benefits paid to plan members and beneficiaries	238,028	229,115
Refunds of member contributions	2,203	2,282
Administrative expenses	4,814	4,297
Other	61	45
Total deductions	245,106	235,739
Change in Net Position	(22,623)	(18,010)
Net Position Restricted for Pension Benefits		
Beginning of Year	4,032,119	4,050,129
End of Year	\$ 4,009,496	\$ 4,032,119

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

Notes to the Basic Financial Statements: Note 1

NOTE 1 - DESCRIPTION OF THE RETIREMENT PLAN (The PLAN)

The following description of the Fresno County Employees' Retirement Association (FCERA) is provided for general information purposes only. FCERA is governed by the Board of Retirement (Board) under the 1937 County Employees Retirement Law (1937 Act) and the California Public Employees' Pension Reform Act (PEPRA) of 2013. Readers should refer to the 1937 Act and PEPRA for more complete information.

General

FCERA is a contributory defined benefit plan initially organized under the provisions of the 1937 Act on January 1, 1945. Effective January 1, 2013, PEPRA added requirements and benefit levels for new members joining the Plan after January 1, 2013, as well as modifying some provisions of the 1937 Act for existing members. FCERA provides benefits upon retirement, death, or disability of members. FCERA is a cost-sharing, multiple-employer plan that includes substantially all full-time employees and permanent part-time employees who work 50% or more for the County of Fresno (County), the Superior Court of California-County of Fresno, Clovis Veterans Memorial District, Fresno-Madera Area Agency on Aging, and Fresno Mosquito & Vector Control District. An employee becomes eligible for membership commencing with the pay period following the date of employment in an eligible permanent position.

Plan Membership

As of June 30, 2016

	2016
Active Members	
Vested	4,606
Non-Vested	2,692
Total Active Members	7,298
Retired Members	7,035
Terminated Vested (Deferred)	1,457
Terminated Non-Vested	1,859
Total Membership	17,649

Benefit Provisions

The Board, under the provisions of the 1937 Act, administers benefit provisions adopted by the Plan Sponsors. Benefits are based upon a combination of age, years of service, final average salary (the highest year, highest three consecutive years or average of the highest three one-year periods of employment), benefit tier (including membership classification) and the payment option selected by the member. Disability and death benefits are additionally based upon whether the disability was service connected or not, and whether the death occurred before or after retirement. Retirement benefit payments consist of regular retirement benefits and, depending on the date of retirement, may include cost of living benefits, supplemental

Notes to the Basic Financial Statements: Note 1 continued

benefits, supplemental annuity benefits, and vested health benefits. Benefits may also include a supplemental cost of living and a non-vested health benefit if approved by the Board. General members enrolled in Tiers 1, 2, 3, or 4 may retire at age 50 with 10 years of service, at any age with 30 years of service, or at age 70 with any years of service. General members enrolled in Tier 5 may retire at age 52 with 5 years of service, or age 70 with any years of service. Safety members enrolled in Tiers 1, 2, or 4 may retire at age 50 with 10 years of service or at any age with 20 years of service. Safety members enrolled in Tier 5 may retire at age 50 with 5 years of service, or age 70 with any years of service.

At June 30, 2016, there were five tiers for general members (1, 2, 3, 4 & 5) and four tiers for safety members (1, 2, 4 & 5). General Tiers 1, 2, 3 and 4, and Safety Tiers 1, 2 and 4 are closed to new members unless they meet the requirements under California Government Code Section 7522 et al. Safety includes members in active law enforcement or certain other "Safety" classifications as designated by the Board.

Disability retirements may be granted as service connected with no minimum service credit required or non-service connected with five years of service credit required.

PEPRA limits the amount of compensation FCERA can use to calculate a retirement benefit. The 2016 compensation limits used to determine contribution amounts for Tier 5 members is \$117,020 for members covered by Social Security and \$140,424 for members not covered by Social Security and will be adjusted in future years for changes in the Consumer Price Index. Most FCERA members are covered by Social Security.

Notes to the Basic Financial Statements: Note 1 continued

The tiers and their basic provisions are listed below:

Tier Name	California Government Code Section	Effective Date	Basic Provisions	Vested Health Benefit	Final Average Salary Period	Plan Sponsors
Pre-Ventura General	31676.12	Various	2.0% at 57; maximum 3% cost of living benefit	Yes	Highest 1 – year	All
General Tier 1	31676.14 and the Settlement Agreement	January 1, 2001	2.5% at 55; maximum 3% cost of living benefit	Yes	Highest 1 - year	All
General Tier 2	31676.16	September 12, 2005	2.0% at 55; maximum 3% cost of living benefit	Yes	Highest 1 - year	County and FMAAA ¹
General Tier 3	31676.15	December 17, 2007	2.0% at 55; maximum 3% cost of living benefit	Yes	3 Highest Years	County
General Tier 4	31676.1	June 11, 2012	2.0% at 61; no cost of living benefit	No	3 Highest Years	County
General Tier 5	7522.20	January 1, 2013	2.5% at 67; no cost of living benefit	No	Highest 3 Consecutive Years	All
Pre-Ventura Safety	31664	Various	2.0% at 50; maximum 3% cost of living benefit	Yes	Highest 1 – year	County and NCFPD ²
Safety Tier 1	31664 and the Settlement Agreement	January 1, 2001	2.5% at 50; maximum 3% cost of living benefit	Yes	Highest 1 - year	County and NCFPD ²
Safety Tier 2	31664.2	September 12, 2005	3.0% at 55; maximum 3% cost of living benefit	Yes	Highest 1 - year	County
Safety Tier 4	31664	June 11, 2012	2.0% at 50; no cost of living benefit	Yes	3 Highest Years	County
Safety Tier 5	7522.25(d)	January 1, 2013	2.7% at 57; no cost of living benefit	No	Highest 3 Consecutive Years	County

¹ FMAAA – Fresno-Madera Area Agency on Aging

² NCFPD – North Central Fire Protection District. NCFPD withdrew active membership from FCERA as of August 31, 2007.

Notes to the Basic Financial Statements: Note 1 continued

Administration

The management of FCERA is vested in the Board, which is composed of the following nine members and an alternate member:

1. County Treasurer,
2. Two active members of FCERA elected by the general members,
3. One active member of FCERA elected by the safety members,
4. One retired member of FCERA elected by the retired members,
5. Four members appointed by the County Board of Supervisors. These members shall be qualified electors of the County who are not connected with County government in any capacity, except one may be a County Supervisor, and
6. One alternate member of FCERA elected by the retired members.

As of the printing of this CAFR, one of the four appointed seats on the Board of Retirement remained vacant due to a resignation of an appointed County Supervisor.

As of the June 30, 2015, Actuarial Valuation adopted by the Board, administrative expenses are financed through a 1.10% load of payroll. The employer's share is .93% and employee's share is .17% of payroll allocated to the employer and member rates, respectively.

Notes to the Basic Financial Statements: Note 2

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

FCERA is the public employee retirement system established by the County on January 1, 1945, and administered independently by the Board to provide retirement, disability, death, and survivor benefits for its employees under the 1937 Act. FCERA's actuarially determined financial data is included in the County's Comprehensive Annual Financial Report (CAFR) in the Notes to the Basic Financial Statements and the Required Supplementary Information section.

Basis of Accounting

FCERA's financial statements are prepared using the accrual basis of accounting. Investment income is recognized when it is earned and expenses are recognized in the period in which they are incurred. Employee and employer contributions are recognized as revenues when due, pursuant to formal commitments, as well as statutory or contractual requirements. Benefits and refunds of prior contributions are recognized when due and payable under the provisions of the Plan.

Deposits and Investments

Cash and cash equivalents with fiscal agent include deposits in the County Treasurer's commingled cash and investment pool and investments held by the custodian bank. Investments with the custodian bank are comprised of foreign currencies, cash held in a short-term investment fund and other short-term, highly liquid investments. Short-term investments considered cash equivalents are recorded at cost, which approximates fair value. The County Treasurer's commingled cash and investment pool operates in accordance with appropriate state laws and regulations and is governed by an investment policy formally adopted by the County. (Please refer to the CAFR prepared by the County for additional information on the County Treasurer's commingled cash and investment pool.)

Plan investments are reported at fair value. The fair values of equity and fixed income securities are derived from quoted market prices. The fair values of private market investments are estimated from fair values provided by the real estate investment funds, futures investment managers, and alternative investment managers. All investment purchases and sales are recorded on the trade date. Additional information regarding the Plan's investments can be found in the Investment Section of this CAFR.

Asset Allocation Policy

The current Board adopted policy targets that were established in March 2014, which resulted from an asset liability study conducted in the fourth quarter of 2013. The new policy reduced the investment risk by reducing equity exposure and restructuring the fixed income portfolio.

Notes to the Basic Financial Statements: Note 2 continued

The new asset allocation policy is incorporated into FCERA's updated Investment Policy Statement, which helps guide the manner in which FCERA invests.

Investment Concentrations

FCERA does not hold investments in any one organization that represent 5 percent or more of the Plan's Fiduciary Net Position.

Implementation of New Accounting Standards

For the year ended June 30, 2016, FCERA adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*; GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement No. 68*, and *Amendments to Certain Provisions of GASB Statement No. 67 and No. 68*; Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*; and GASB Statement No. 82, *Pension Issues – An Amendment to GASB Statements No. 67, No. 68, and No. 73*.

GASB Statement No. 72 requires state and local governments to apply a hierarchy of inputs to valuation techniques used to measure fair value. The hierarchy has three levels, for assets that do not meet the criteria for leveling within the hierarchy, a net asset value (NAV) is disclosed. Note disclosures related to GASB Statement No. 72 can be located in Note 3 – Deposits and Investments.

GASB Statement No. 73 establishes requirements for defined benefit pensions that are not within the scope of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions, as well as for the assets accumulated for purposes of providing those pensions*. GASB Statement No. 76 establishes the hierarchy of Generally Accepted Accounting Principal (GAAP) for state and local governments, in the context of the current governmental financial reporting environment. FCERA's fiduciary net position was not materially affected by the implementation of these Statements.

FCERA has elected to early implement GASB Statement No. 82 in an effort to present consistency throughout the reporting of GASB Statement No. 67 within this CAFR and GASB 68 which is provided to the employer sponsors for reporting in their own CAFR. As it pertains to FCERA, GASB Statement No. 82 amends Statement No. 67 and now requires the presentation of covered payroll, defined as the payroll on which contributions for the Plan are based, as well as ratios that utilize this measure.

Long-term Expected Rate of Return by Asset Class

The long-term expected rate of return on the Plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the

Notes to the Basic Financial Statements: Note 2 continued

long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, by adding expected inflation, and deducting expected investment expenses. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table below.

The long-term expected arithmetic real rate of return assumption was developed using recent economic assumptions included in the latest Actuarial Experience Study completed in March 2016. Prior to the development of these current assumptions, adjustments were approved by the Board in December 2013 to the target allocation of investments, referred to as Mix B. The impact of the adjustments to the new asset allocation by selecting Mix B, compared to the economic assumptions developed in the Actuarial Experience Study, is not considered substantial enough to invalidate the long-term expected rate of return assumption. However, users of this report must be aware that due to the selection of Mix B there is a difference in the target allocation presented below and the target allocation presented in the Investment Section on page 66 and 67.

	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equity	14%	5.80%
Small Cap U.S. Equity	3%	6.52%
Developed International Equity	12%	6.89%
Emerging International Equity	7%	8.88%
U.S. Core Fixed Income	5%	0.76%
High Yield Fixed Income	5%	3.55%
Bank Loans	5%	2.34%
Global Sovereign	7%	0.41%
Emerging Market Debt	5%	4.52%
Treasury Inflation-Protected Securities (TIPS)	4%	0.41%
Commodities	3%	4.14%
Real Estate	5%	4.48%
Infrastructure	3%	3.80%
Hedge Funds	8%	4.40%
Private Equity	6%	9.00%
Private Credit	8%	7.70%
Total	100%	

Net Pension Liability

GASB Statement No. 67 requires public pension plans to disclose the net pension liability of the Plan. The net pension liability is measured as the total pension liability less the amount of the Plan's fiduciary net position. The net pension liability is an accounting measurement for

Notes to the Basic Financial Statements: Note 2 continued

financial statement reporting purposes. The components of FCERA's net pension liability at June 30, 2016, are disclosed on the following schedule and on page 33.

Net Pension Liability

As of June 30, 2016

(Dollars in Thousands)

	2016
Total pension liability	\$ 5,542,506
Fiduciary net position	4,009,496
Net pension liability	\$ 1,533,010
Fiduciary net position as a percentage of the total pension liability	72.34%

The measurement date of the net pension liability was determined at June 30, 2016. Fiduciary net position (plan assets) was valued as of the measurement date while the total pension liability was determined based upon rolling forward the total pension liability from actuarial valuations as of June 30, 2015.

The following Actuarial Assumptions were approved by the Board of Retirement in March 2016. The total plan liability as of June 30, 2016 was remeasured by (1) revaluing the total liability as of June 30, 2015 (before the roll forward) to include the following actuarial assumptions that the Retirement Board had adopted for use in the pension funding valuation as of June 30, 2016 and (2) using this revalued total pension liability in rolling forward the results from June 30, 2015 to June 30, 2016:

Inflation	3.00%
Salary Increases	General: 4.50% to 11.50%; and Safety: 4.90% to 11.50%, varies by service, including inflation.
Investment Rate of Return	7.00%, net of Pension Plan investment expenses, including inflation.
Administrative Expenses	1.10% of payroll, allocated 0.93% to employers and 0.17% to employees.
Mortality	Various rates based on RP-2000 Mortality tables in the June 30, 2015, actuarial valuation.

Notes to the Basic Financial Statements: Note 2 continued

Discount rate

The Board of Retirement approved a new discount rate of 7.00% in March 2016 that was used to measure the total pension liability as of June 30, 2016. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current Plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future Plan members and their beneficiaries, as well as projected contributions from future Plan members, are not included. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2016.

Sensitivity of the net pension liability to changes in the discount rate. The following schedule below presents the net pension liability of FCERA as of June 30, 2016, calculated using the discount rate of 7.00%, as well as what the FCERA's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate.

(Dollars in Thousands)	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
FCERA's net pension liability as of June 30, 2016	\$2,309,197	\$1,533,010	\$897,473

Money-Weighted Rate of Return

For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 0.022%. For commentary on the overall investment performance of the Plan which impacted the money-weighted rate of return compared to prior year, please see the Investment Consultant's Report on page 61. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Capital Assets

Capital assets are valued at historical cost less accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of three years for computer equipment, five years for office equipment, ten years for furniture, fifteen years for software (accounting general ledger and pensions administration systems, and thirty years for buildings. Depreciation expense is reported as part of administrative expense.

Notes to the Basic Financial Statements: Note 2 continued

Income Taxes

The Internal Revenue Service (IRS) has ruled that Plans such as FCERA qualify under Section 401(a) of the Internal Revenue Code (IRC), which prevents FCERA from being subjected to taxation under present income tax laws. In 2016, the FCERA Plan was again determined by the IRS to be a tax qualified plan. In accordance with this determination, no provisions for income taxes have been made in the accompanying basic financial statements, as FCERA is exempt from federal and state income taxes under provisions of the IRC, Section 401(a), and the California Revenue and Taxation Code, Section 23701, respectively.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Actual results could differ from those estimates.

Administrative Expenses

FCERA's Board annually approves the budget for administrative expenses. Under the California Government Code Section 31580.2 administrative expenses are limited to 0.21% of the accrued actuarial liability of the Plan. Previously, administrative expenses were limited to 23 basis points of total assets. As a result of the change in basis points, the information technology expenses are no longer included in the administrative expenses. The Schedule of Information Technology Expenses includes computer software, hardware, computer maintenance, and equipment. With the exclusion of the information technology costs, FCERA's administrative expenses totaled 0.09% of the accrued actuarial liability of the Plan.

Notes to the Basic Financial Statements: Note 3

NOTE 3 - DEPOSITS AND INVESTMENTS

Except as otherwise expressly restricted by the California Constitution and by law, the Board may, at its discretion, invest, or delegate FCERA to invest its assets through the purchase, holding, or sale of any form or type of instrument, or financial transaction when prudent in the informed opinion of the Board. In addition, the Board has established an investment policy that places limits on the compositional mix of cash, fixed income and equity securities, alternative investments, and real estate investments. FCERA currently employs external investment managers to manage its assets subject to the guidelines of the investment policy. GASB Statements No. 40 and No. 53 detail the disclosure requirements associated with FCERA's deposits, investments, and derivatives. The statements identify the following risks: investment risk, custodial credit risk, concentration of credit risk, interest rate risk, and foreign currency risk. Rather than creating an across the board policy addressing limitations on credit ratings of certain debt securities, FCERA has chosen to manage the investment risks detailed in GASB Statements No. 40 and No. 53 by requiring each investment manager responsible for a separately held portfolio to follow specific agreed upon investment guidelines that meet the requirements of FCERA for the individual investment mandate. FCERA's investment guidelines do not govern control over commingled portfolios and therefore only apply to separately held portfolios.

Custodial credit risk - deposits. This type of risk associated with deposits is the risk that, in the event of a failure in a depository financial institution, a government will not be able to recover its deposits or recover collateral securities that are in the possession of an outside party. FCERA does not have a policy for managing custodial credit risk. As of June 30, 2016, all domestic deposits were insured, registered, and held by the custodian bank in FCERA's name. FCERA held foreign currencies deposits at June 30, 2016, with a United States Dollar value of \$1,669,000, all of which is subject to custodial credit risk since the deposits are unsecured and uncollateralized.

Custodial credit risk - investments. For an investment, this is the risk that, in the event of the failure of the counterparty, the government will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. FCERA's investments are not subject to custodial credit risk because investments are insured and registered in FCERA's name. FCERA's investment policy does not limit the amount of securities that can be held by counterparties.

Credit risk. Credit risk is the risk that an issuer or other counterparty to a debt instrument will not fulfill its obligations. This risk is measured by the assignment of ratings by nationally recognized statistical rating organizations. FCERA has adopted policies specific to each investment manager to manage credit risk. In general, fixed income securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. The County's external investment pool is unrated for credit risk purposes.

Notes to the Basic Financial Statements: Note 3 continued

The credit ratings disclosed below were obtained from Moody's rating agency as of June 30, 2016.

Credit Quality Ratings of Investments in Fixed Income Securities

As of June 30, 2016

(Dollars in Thousands)

Moody's Credit Rating	2016	
	Total Fixed Income	FCERA's Fixed Income Securities
Northern Institutional Liquid Assets Portfolio / Tier 1 Quality		\$ 200,178
Fixed Income Securities		
Aaa	7.4%	121,490
Aa	4.5%	73,719
A	9.3%	152,389
Baa	9.5%	155,569
Ba	8.9%	145,173
B	3.5%	57,764
Caa	1.1%	18,700
Ca	0.0%	369
Agency/Exempt	10.0%	164,071
NR	45.6%	744,307
Total Fixed Income Securities	100.0%	1,633,551
Total Securities Lending Pool and Fixed Income Securities		\$ 1,833,729

NR = Securities that are not rated by Moody's, an independent research company.

Agency/Exempt = Securities that are exempt from rating disclosure and are implicitly or explicitly guaranteed by the U.S. Government.

Interest rate risk. Interest rate risk is the risk that changes in the interest rate will adversely affect the fair value of an investment. FCERA has not adopted a policy to manage interest rate risk. FCERA selected the segmented time distribution method for the following investments subject to interest rate risk at June 30, 2016.

Notes to the Basic Financial Statements: Note 3 continued

Interest Rate Risk

As of June 30, 2016

(Dollars in Thousands)

Investment Type	Remaining Maturity in Months at June 30, 2016				
	Less than 12 months	13 to 60 months	61 to 120 months	More than 120 months	
Securities lending - investments					
Quality D Investment Fund	\$ 200,178	\$ 200,178	\$ -	\$ -	\$ -
Subtotal	200,178	200,178	-	-	-
U.S. Government and agencies					
U.S. Treasury notes	66,597	620	31,131	202	34,644
Federal agency securities	7,629	10	5,636	-	1,983
Subtotal	74,226	630	36,767	202	36,627
Domestic fixed income	312,349	32,667	85,650	131,515	62,517
Mortgages	2,351	-	-	501	1,850
Foreign fixed income	483,747	30,038	158,597	176,036	119,076
Barclays U.S. AGG Index Fund	390,983	390,983	-	-	-
Eaton Vance Bank Loans	207,106	207,106	-	-	-
TIPS Index Fund	162,789	162,789	-	-	-
Total Securities Lending					
Pool and Fixed Income					
Securities	\$ 1,833,729	\$ 1,024,391	\$ 281,014	\$ 308,254	\$ 220,070

At June 30, 2016, FCERA had \$33,284,000 invested in the County external investment pool, which has a dollar weighted average maturity of 1.8 years.

Concentration of credit risk. This is the risk of loss attributed to the concentration of the FCERA's investment in a single issuer. FCERA's investment policy does not permit any one manager to invest more than five percent of the market value of its portion of the portfolio in any one issue, with the exception of investments issued by the U.S. Government and its agencies. As of June 30, 2016, no investments in any one issuer are greater than five percent of total investments. Investment managers authorized to invest in below investment grade securities are limited to holding no more than 20% of their portfolio market value in such securities.

Foreign currency risk. This is the risk that FCERA will not be able to recover the value of its investment in local currency when the exchange value of the currency lowers. FCERA has not adopted a policy to manage the foreign currency risk. FCERA's investment in foreign currency at June 30, 2016 is as follows:

Notes to the Basic Financial Statements: Note 3 continued

Foreign Currency Risk

As of June 30, 2016

(Dollars in Thousands)

Currency	Fair Value 2016
British Pound Sterling	\$ 166
Euro Currency	751
Hong Kong Dollar	17
Japanese Yen	267
Mexican Peso	64
Other Foreign Currencies	405
Total Foreign Currency	\$ 1,670

Foreign currency table expressed in U.S. dollars and thousands.

Derivatives. The investment derivatives schedule below reports the fair value and notional value of the derivatives held by FCERA at June 30, 2016. For reporting purposes, FCERA's derivatives are classified as investment derivatives. 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*. FCERA, through its external investment managers, enters into forward foreign currency contracts as well as equity rights to hedge against changes in the fair values of foreign bonds and equity securities, primarily denominated in European and Asian currencies. It is possible that, due to foreign exchange fluctuations, FCERA may be exposed to a potential loss. At June 30, 2016, FCERA has approximately (\$2,434,000) of its \$1,144,127,000 international fixed income and international equity portfolio invested in such forward foreign currency and equity rights contracts.

Investment Derivatives

As of June 30, 2016

(Dollars in Thousands)

Derivative Type	2016	
	Notional Value	Fair Value
Credit Default Swaps	\$ -	\$ (84)
Fixed Income Futures	(8,737)	-
Forward Foreign Currency	-	(2,438)
Forward Foreign Swaps	-	230
Interest Rate Swaps	-	(14)
Options	-	(115)
Rights	-	4
Total	\$ (8,737)	\$ (2,417)

Notes to the Basic Financial Statements: Note 3 continued

FCERA could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. FCERA anticipates that counterparties will be able to satisfy their obligations under the contracts. FCERA's investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits and exposure monitoring procedures, including requirements for cash collateral at certain defined levels. At June 30, 2016, FCERA held \$2,325,000 to offset potential risks it may encounter through counterparty transactions.

FCERA's comparative counterparty exposure is detailed in the following schedule:

Counterparty Credit Risk Analysis

As of June 30, 2016

(Dollars in Thousands)

	Aa		A		Exchange		Total	
					Traded	Not Rated		
Futures	\$	-	\$	-	\$	-	\$	-
Options		-		-		(115)		(115)
Rights/Warrants		-		-		4		4
Swaps		-		-		132		132
Forwards		-		-		(2,438)		(2,438)
	\$	-	\$	-	\$	(2,417)	\$	(2,417)

At June 30, 2016, FCERA was exposed to Foreign Currency Risk related to its investments in equity rights and forward contracts denominated in foreign currencies. The table below displays FCERA's position in each of the foreign currency contracts.

Notes to the Basic Financial Statements: Note 3 continued

Foreign Currency Risks at Fair Value

As of June 30, 2016

(Dollars in Thousands)

Currency Name	Equities	Forward Currency Contracts		Total Exposure
		Net Receivables	Net Payables	
Australian dollar	\$ 415	\$ -	\$ -	\$ 415
Brazil Real	-	(3,196)	1,314	(1,882)
British Pound	-	(24)	1	(23)
Chilean Peso	-	(12)	976	964
Chinese Yuan	-	28	-	28
Colombian Peso	-	(1)	138	137
Euro	4	10	(943)	(929)
HK Offshore Chinese Yuan	-	25	23	48
Hungarian Forint	-	5	(144)	(139)
Indian Rupee	-	(10)	(171)	(181)
Indonesia Rupiah	-	(52)	323	271
Japanese Yen	-	(3)	94	91
Malaysian Ringgit	-	-	84	84
Mexican Peso	-	39	23	62
New Israeli Shekel	-	-	(15)	(15)
New Romania Leu	-	22	-	22
New Taiwan Dollar	-	(51)	-	(51)
Norwegian Krone	-	-	(137)	(137)
Peruvian Nuevo Sol	-	(13)	-	(13)
Phillipine Peso	-	3	-	3
Polish Zloty	-	(13)	(203)	(216)
Russian Ruble	-	(68)	207	139
Singapore Dollar	-	(26)	(1)	(27)
South African Rand	-	(6)	261	255
South Korean Won	-	(24)	17	(7)
Swedish Krona	-	-	(817)	(817)
Thai Bhat	-	(24)	65	41
Turkish Lira	-	(161)	(65)	(226)
Total	\$ 419	\$ (3,552)	\$ 1,030	\$ (2,103)

The derivative securities included as equities above consist of rights. Foreign currency forward contracts are commitments to purchase or sell a stated amount of foreign currency at a specific future date.

Interest rate risk applies to derivatives such as Fixed Income Options, Credit Default Swaps, Interest Rate Swaps, Forward Foreign Currency and Rights. At June 30, 2016 FCERA was exposed to the following interest rate risk on its investments in these securities. The table below displays the maturity periods of these derivative investments.

Notes to the Basic Financial Statements: Note 3 continued

Interest Rate Risk Analysis

As of June 30, 2016

(Dollars in Thousands)

Investment Types	Fair Value	Investment Maturities (in months)				Total
		Less than 12	13 to 60	61 to 120	More than 120	
Credit Default Swaps	\$ (84)	\$ -	\$ (69)	\$ (15)	\$ -	\$ (84)
Forward Currency Contracts	(2,438)	(2,438)	-	-	-	(2,438)
Interest Rate Swaps	(14)	(5)	(89)	348	(268)	(14)
Currency Swaps	230	-	163	67	-	230
Options	(115)	(115)	-	-	-	(115)
Rights	4	4	-	-	-	4
Total	\$ (2,417)	\$ (2,554)	\$ 5	\$ 400	\$ (268)	\$ (2,417)

Securities Lending. The Board authorized FCERA, through its custodian bank, to enter into securities lending transactions, whereby securities owned by FCERA are loaned on a short-term basis to various banks and brokers. Securities on loan include domestic and international stocks, U.S. government agency and domestic bonds. All securities on loan must be collateralized at 102% of the fair value of the loaned securities, except for non-United States based equities which are initially collateralized at 105%. Collateral may take the form of cash, commercial paper, certificates of deposit, bankers' acceptances, repurchase and reverse repurchase agreements, obligations issued or guaranteed as to interest and principal by the United States Government (or agencies or instrumentalities thereof), bank time deposits, variable rate demand notes, money market mutual fund and any common trust fund maintained by a bank, other financial institution, any commingled, or pooled trust.

The lending agreement places no restriction on the amount of loans that can be made. FCERA's lending agent is authorized to invest and reinvest cash collateral, but it is not expressly permitted to pledge or sell securities collateral without borrower default. FCERA's agent invests cash collateral in individual securities and the securities are held by the trustee in FCERA's name. The maturities of the investments made with the cash collateral generally match the maturities of their securities on loan.

Securities on Loan - At year-end, FCERA had no credit risk exposure to borrowers because the collateral received exceeded the amount owed to borrowers. As of June 30, 2016, there were no violations of the securities lending provisions and no losses resulted within the securities lending program due to borrower default.

Reinvestment of Collateral - FCERA is subject to credit risk through the reinvestment of collateral cash which FCERA received at the time securities were placed on loan. The risk can include the devaluation of underlying securities where the collateral has been reinvested. FCERA invests its collateral in Northern Trust's cash collateral pool called the Northern Institutional Liquid Assets Portfolio (NILAP). The NILAP is considered a Tier 1 quality fund, investing in the highest credit quality securities. The goal of the NILAP is to maintain a \$1.00

Notes to the Basic Financial Statements: Note 3 continued

net asset value per share of the fund, preserving reinvested collateral while providing a stable source of income. The collateral reported in these Financial Statements excludes non-cash collateral amounts.

FCERA is unable to quantify the dollar devaluation that would have existed if collateral had been called upon. Income from these transactions is reported on *the Statement of Changes in Fiduciary Net Position*. Securities on loan are reported at fair value on the *Statement of Fiduciary Net Position*. The carrying values of the cash collateral securities lending investment pool as of June 30, 2016 was \$200,178,000. The fair values of loaned securities are listed below:

Fair Values of Loaned Securities

As of June 30, 2016

(Dollars in Thousands)

	2016
Domestic equity	\$ 127,885
International equity	8,219
Total equity on loan	136,104
U.S. Government and agencies	1,562
Domestic bonds	49,928
Foreign Bonds	8,986
Total bonds on loan	60,476
Total equities and bonds on loan	\$ 196,580

Highly Sensitive Investments. FCERA utilizes investments that are highly sensitive to interest rate changes in its actively managed fixed income portfolio. Highly sensitive investments include mortgage-backed securities, asset-backed securities and collateralized mortgage obligations. FCERA's investment portfolio contains certain variable rate notes and collateralized mortgage obligations. At June 30, 2016, FCERA had approximately \$505,000 in these investments.

Investment Type

As of June 30, 2016

(Dollars in Thousands)

Investment Type	2016
Asset - Backed / Variable Rate Notes	\$ 592
Collateralized Mortgage Obligations	2,351
Forward Foreign Currency	(2,438)
Total	\$ 505

Fair Value Measurement

In fiscal year 2016, FCERA implemented GASB Statement No. 72, *Fair Value Measurement and Application*. The Statement provides guidance on fair value measurement under GAAP, FCERA discloses the fair value of its investments in a hierarchy that prioritizes the inputs to valuation techniques used to measure the fair value. The objective of fair value measurement is to determine the price that would be received to sell an asset or paid to transfer a liability in a transaction between market participants at the measurement date (an exit price). The hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

- Level 1 – reflects prices quoted in active markets for identical assets;
- Level 2 – reflects prices based on other similar observable inputs and
- Level 3 – reflects prices based upon unobservable inputs.

FCERA's classifies its investments in Level 1 based on direct analysis provided by a primary external pricing service and are quoted in active markets. Investments in Level 1 consist of public equity assets.

Investments classified as Level 2 are based on inputs other than quoted prices attributed to Level 1, but are still observable. Level 2 assets consist of fixed income securities as well as commingled investment funds that may report using the NAV. Fixed income investments are valued using a bid evaluation or matrix pricing technique. For commingled investments that are capable of redemption at the NAV per share price at the measurement date, then the fair value is classified in Level 2.

Where the inputs from market activity are unobservable, the Level 3 classification is used. This classification requires significant judgement and estimation to determine fair value. Due to the difficulty of determining accurate estimates, the values of these investments may differ significantly from values that could have been determined if a market existed at the measurement date. FCERA classifies certain assets within Real Estate, Private Equity and Private Credit in the fair value hierarchy at the lowest priority level input.

Investments measured at the Net Asset Value consist of certain commingled funds, private equity, private credit and hedge funds. The structure of private equity, private credit and hedge funds typically exist as limited partnerships. There are no readily available markets to determine accurate fair value for these limited partnerships as they may contain investments in non-liquid assets, real estate or other assets. The valuations for these investments may occur at various times throughout the investment cycle in accordance with guidelines established through the limited partnership agreement.

Notes to the Basic Financial Statements: Note 3 continued

FAIR VALUE MEASUREMENT

June 30, 2016

(Dollars in Thousands)

Investments by Fair Value Level	June 30, 2016	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs
		(Level 1)	(Level 2)	(Level 3)
Domestic and International Fixed Income	\$ 869,571	\$ -	\$ 866,023	\$ 3,548
Domestic and International Equities	908,061	907,290	684	87
Domestic and International Commingled Funds	990,867	620,973	369,894	-
Real Estate	183,049	-	-	183,049
Private Equity	266,327	-	-	266,327
Private Credit	28,262	-	-	28,262
Collateral from Securities Lending	200,178	-	200,178	-
Total Investments by Fair Value Level	\$ 3,446,315	\$ 1,528,263	\$ 1,436,779	\$ 481,273
Investments Measured at Net Asset Value (NAV)				
Domestic Commingled Funds	390,983			
Private Equity	66,800			
Hedge Funds	146,819			
Private Credit	39,403			
Total Investments Measured at NAV	\$ 644,005			
Total Investments	\$ 4,090,320			
Investment Derivatives				
Derivative Type				
Credit Default Swaps	\$ (84)	\$ -	\$ (84)	\$ -
Forward Foreign Currency (Net Payable)	(2,438)	-	(2,438)	-
Forward Foreign Swaps	230	-	-	230
Interest Rate Swaps	(14)	-	(14)	-
Options	(115)	-	(115)	-
Rights (Equities)	4	4	-	-
Total	\$ (2,417)	\$ 4	\$ (2,651)	\$ 230

INVESTMENTS MEASURED AT NET ASSET VALUE

June 30, 2016

(Dollars in Thousands)

Investments Measured at NAV	June 30, 2016	Unfunded Commitments	Frequency (if eligible)	Redemption Notice Period
Domestic Commingled Funds ¹	\$ 390,983	\$ -	Daily	1-2 days
Private Equity ²	66,800	70,594	Not Eligible	Not applicable
Private Credit ²	39,403	55,943	Not Eligible	Not applicable
Hedge Funds ³	146,819	-	Quarterly	70 days
Total Investments Measured at NAV	\$ 644,005	\$ 126,537		

¹ Domestic Commingled Fund – This investment represents Northern Trust's Barclays U.S. Agg Bond Index Fund. The fund adopted the NAV expedient during the year.

² Private Equity and Private Credit – FCERA's allocation in these investments totals 23 limited partnerships. The limited partnerships invest primarily in buyout funds, venture capital, distressed debt, mezzanine debt, special situations. The measurement of the fair values of these investments has been determined using NAV typically

Notes to the Basic Financial Statements: Note 3 continued, Notes 4, and 5

one quarter in arrears with updated cash flows. These funds are not eligible for redemption, funding takes place over a time horizon of 1 to 5 years with the expectation of limited partnerships to liquidate within 7 to 10 years.

³ Hedge Funds – As of June 30, 2016, FCERA is invested in one hedge fund, a fund of funds investment in Grosvenor Institutional Partners, L.P. The limited partnership relies on fair value determination from managers handling its underlying investments.

NOTE 4 - INVESTMENT TRADES RECEIVABLE AND PAYABLE

Investment trades receivable and payable include forward currency contracts, and sales and purchases of investments. Forward currency contracts are used to control currency exposure and facilitate the settlement of international security purchase and sale transactions. At June 30, 2016, forward foreign currency contracts receivable and payable totaled \$3,992,000 and \$6,430,000, respectively.

NOTE 5 – CAPITAL ASSETS

The following is a summary of changes in depreciable capital assets for the year ended June 30, 2016:

Depreciable Capital Assets

As of June 30, 2016

(Dollars in Thousands)

	Balance July 1, 2015	Additions	Dispositions/ Reclassifications	Balance June 30, 2016
Capital assets, depreciable:				
Computer hardware/software	\$ 8,288	\$ 1,107	\$ -	\$ 9,395
Furniture and fixtures	164	-	-	164
Equipment	81	-	-	81
Building	2,103	-	-	2,103
Total capital assets, depreciable	10,636	1,107	-	11,743
Less accumulated depreciation for:				
Computer hardware/software	(318)	(588)	-	(906)
Furniture and fixtures	(151)	(2)	-	(153)
Equipment	(75)	(2)	-	(77)
Building	(777)	(70)	-	(847)
Total accumulated depreciation	(1,321)	(662)	-	(1,983)
Total capital assets, depreciated, net	\$ 9,315	445	-	\$ 9,760
Depreciation charged for the current year and included in administrative expenses totaled:		\$ 662		

Notes to the Basic Financial Statements: Note 6

NOTE 6 – CONTRIBUTIONS AND RESERVES

Contributions

Contributions are made by the members and the employers at rates recommended by FCERA's independent actuary and approved by the Board and the County Board of Supervisors. Employee contribution rates vary according to age, classification (safety or general), and benefit tier. Employee contribution rates are designed to provide funding for approximately one-fourth of the regular retirement benefits and one-half of all cost of living benefits for members enrolled in Tiers 1 through 4 and one half of the normal cost of the retirement benefit for members enrolled in Tier 5. Members are required to contribute between 3.79% and 12.58% of their annual covered salary. Employee contribution rates are established and may be amended pursuant to Articles 6 and 6.8 of the 1937 Act.

Interest is credited to member contributions every six months based on the prior six months ending balance. Members are not permitted to borrow against their contributions. Upon termination of employment, members may withdraw their contributions by requesting a refund of their accumulated contributions and interest. Non-vested members may leave their contributions on deposit with FCERA without establishing reciprocity. These members receive interest on their contributions and may withdraw their contributions and interest at any time.

Employer contribution rates are determined pursuant to Section 31453 of the 1937 Act and are designed to provide funding for the remaining regular retirement and cost of living benefits, as well as all regular disability and survivors' benefits.

Contribution rates are actuarially determined using the entry age normal method and consist of normal cost (the estimated amount necessary to finance benefits earned by employees during the current year) and, beginning in 1980, the unfunded actuarial accrued liability was amortized over a 30 year period. Effective with the valuation completed for June 30, 2002, the amortization period was modified to allow a 30 year amortization period for changes in the unfunded actuarial accrued liability that result from Plan amendments and a fifteen year amortization period for all other changes in the unfunded actuarial accrued liability. The schedule of employer contributions, which include 10 year trend data, is presented in the required supplementary information schedule on page 53. Details on funding progress are presented in the Actuarial Section on page 82.

Benefits attributable to employers' contributions do not become vested until completion of five years of credited service. A member may receive a regular retirement allowance after meeting the minimum eligibility requirements for eligibility as defined in Note 1 of these Financial Statements.

On September 12, 2012, PEPRA was signed into law by the Governor of California, Jerry Brown, establishing a new tier for General and Safety employees entering FCERA membership on or after January 1, 2013. The benefit formula for General members is 2.5% at age 67 and the

Notes to the Basic Financial Statements: Note 6 continued

Safety formula is 2.5% at age 57. Benefits under the new PEPRA tiers are based on a consecutive three-year final average compensation period.

Reserved and Designated Accounts of Net Position Restricted for Pension Benefits

Net Position Restricted for Pension Benefits is segregated into members' and employers' accumulated contributions reserves established by the Board and undistributed earnings. The Board has established reserves for various benefit payments pursuant to the 1937 Act, and it has designated an account for market stabilization. Effective as of fiscal year end June 30, 2009, the Contra Tracking Account was added to represent the amount of interest credited to reserve accounts that had not been paid for out of current or excess earnings.

The amounts and changes in reserves and designations for the year ended June 30, 2016 consist of the following:

Reserve Balances

As of June 30, 2016

(Dollars in Thousands)

	Balance July 1, 2015	Increase (Decrease) In Fiduciary Net Position	Net Transfers	Balance June 30, 2016
Reserves:				
Members' accumulated contributions	\$ 427,130	\$ 33,008	\$ (15,587)	\$ 444,551
Current service reserve	1,198,312	141,545	1,841	1,341,698
Annuity pension reserve	157,842	(25,262)	26,287	158,867
Current service pension reserve	1,194,655	(119,018)	167,593	1,243,230
Settlement annuity pension reserve	582,403	(32,667)	64,658	614,394
Settlement benefit reserve	106,787	(6,195)	7,769	108,361
Cost of living adjustment reserve	1,040,773	1,361	94,480	1,136,614
Supplemental cost of living reserve	730	(570)	(1)	159
Survivors' death benefit reserve	155	(1,217)	372	(690)
Retiree health benefit reserve	(3,418)	2	-	(3,416)
Retiree health benefit reserve (VS)	36,976	(4,477)	2,649	35,148
Contingency reserve	-	-	-	-
Designated for market stabilization	(61,258)	-	(207,407)	(268,665)
Undistributed earnings	-	(9,133)	9,133	-
Contra Tracking Account	(648,968)	-	(151,787)	(800,755)
Net Position Restricted for Pension Benefits	\$ 4,032,119	\$ (22,623)	\$ -	\$ 4,009,496

Notes to the Basic Financial Statements: Note 6 continued

Members' accumulated contributions include all member contributions net of refunds paid to members. At retirement, member balances are transferred to the *annuity and settlement annuity pension reserves* and the *cost of living adjustment reserve*. Employers' contributions are paid into *current service reserve*, *settlement annuity reserve*, and *cost of living reserve*. The employer current service and settlement annuity contributions are combined in the *current service reserve*, although tracked separately within the *current service reserve* balance. When an employee retires, the employer portion of their accumulated contributions for current service and settlement annuity are transferred from the *current service reserve* into the *current service pension reserve* and the *settlement annuity pension reserve*. *Undistributed earnings* are credited with all investment income and charged with investment and other fees. Transfers from undistributed earnings to other reserves are made twice a year.

Prior to July 1, 2007, the Board authorized an annual rate equal to the actuarial rate of return be apportioned as the interest. Effective July 1, 2007, the Board adopted a new interest crediting policy which implemented the following objectives: 1) maintain consistency between the reserving structure accounts and the actuarial funding policies of FCERA, 2) assure that the reserve values track the market value of assets over the long-term and 3) to the extent possible, maintain reasonable stability in both the interest crediting and contribution rates by avoiding charging short-term losses to reserves. This policy resulted in interest apportionments of \$172,007,480 for the December 31, 2015 interest-crediting period, and \$178,053,603 for the June 30, 2016, interest-crediting period. The semi-annual rates of interest for the two periods were 3.625% and 3.625%, respectively. Any additional transfers out of undistributed earnings are made in accordance with the authorization of the Board.

The *survivors' death benefit reserve* is credited with balances transferred from *members' accumulated contributions* and the employer *current service reserve*, in those instances where the survivor of an active deceased member is entitled to continuation benefits. The *current service reserve* consists of current service and settlement annuity contributions (which are tracked separately within the *current service reserve*). Lump sum survivor benefits are paid directly from *members' accumulated contributions* and the *current service reserve*. Pension and disability benefits are paid from the *annuity pension reserve*, *current service* and *settlement annuity pension reserves* and *cost of living adjustment reserve*.

Both the *retiree health benefit* and the *supplemental cost of living reserves* are non-valuation reserves approved annually by the Board. Non-valuation reserves are under the control of the Board and are not available to fund vested benefits of the Plan. The *retiree health benefit reserve* was initiated in 1987 to establish funds for payment of supplemental benefits which would provide retirees additional monies with the expectation (but not the requirement) that the funds be used to offset the cost of health insurance premiums. Effective with the actuarial valuation completed for the year ended June 30, 2003, the retiree health benefit reserve was apportioned into two reserves, the *retiree health benefit reserve* and the *retiree health benefit reserve (VS)* to more clearly account for the liability associated with additional health benefits granted as part of the Settlement Agreement negotiated between the County and certified

Notes to the Basic Financial Statements: Note 6 continued

employee organizations in December 2000. FCERA ceased issuing benefit payments from the non-vested retiree health benefit reserve in November 2014.

The *supplemental cost of living reserve* was established in 1990 to provide additional benefits for eligible members. The benefit was adopted annually under Government Code Section 31874.3 to provide purchasing power protection to those retirees whose accumulated excess cost of living credits exceeds 25%, therefore the affected members changed each year. The *supplemental cost of living reserve* balance reflects Board approved transfers from *undistributed earnings*. Analysis of the expenses of this reserve indicated that sufficient funding was unavailable to continue the benefit past August 2005. Thus, the Board authorized transfers sufficient to provide funds to continue the benefit at levels in existence at June 30, 2006. FCERA staff, in conjunction with the Actuary, monitors the declining balance of the supplemental cost of living reserve and have determined that the benefit will cease either at the end of fiscal year 2016 or the beginning of fiscal year 2017.

The *supplemental benefit reserve* was established to account for the benefit increase given to retirees or the beneficiaries of retirees who retired prior to January 1, 2001, as part of the Settlement Agreement approved in December 2000.

The *supplemental annuity benefit* reserve was established to account for the benefit increase given to members who retired on or after January 1, 2001, as part of the Settlement Agreement approved in December 2000.

The designation for market stabilization serves to spread unanticipated market gains and losses over a five-year period and represents a portion of the variance between net investment earnings and actuarial expectations based on the assumed rate of returns.

FCERA maintains a Statutory Contingency Reserve based on 1% of the total valuation account reserve balances. As part of the Interest Credit policy modified by the Board in September 2008, the Board established an additional Board Contingency Reserve of up to 2% of the total Fiduciary Net Position. Funding of this additional reserve is subject to Board approval.

The Contra Tracking Account represents interest that has been credited to the reserve accounts that was not available to be paid out of the current or excess earnings. A balance in this account is the result of the application of the Board's full interest crediting policy and will be replenished in subsequent periods when there are sufficient earnings.

Notes to the Basic Financial Statements: Notes 7, 8 and 9

NOTE 7 - ACTUARIAL VALUATIONS

Pursuant to provisions in the 1937 Act, FCERA engages an independent actuarial firm, Segal Consulting, to perform an annual actuarial valuation. An experience study is performed every three years (triennial experience study).

The economic and non-economic assumptions are updated at the time each triennial experience study is performed. Triennial experience studies serve as the basis for assumptions required in developing employer and member contribution rates necessary to properly fund the Plan. FCERA periodically hires an independent actuarial firm to audit the results of the valuations. New assumptions were adopted by the Board for the June 30, 2016 actuarial valuation based on the results of the June 30, 2015 triennial non-economic and economic Experience Study.

The latest actuarial valuation decreased the County normal cost rate from 19.76% to 19.42% of payroll primarily due to the effects of investment gain on valuation value of assets, lower than expected salary increases along with lower than expected COLA increases as of June 30, 2015. The County's required contribution rate to finance the UAAL decreased from 32.80% to 32.60% of payroll. There is a decrease in the total required contribution rate from the prior valuation of .54%, from 52.56% to 52.02% of payroll.

NOTE 8 - COMMITMENTS AND CONTINGENCIES

FCERA invests in real estate, infrastructure, private credit, and private equity partnerships. Each partnership's investment activity is controlled by a general partner and defined in the prospectus and Commitment Agreement. The Commitment Agreement defines the period of the investment, which is typically five to ten years and the capital commitment. The Board approves the capital commitment at the time the partnership agreement is approved.

As of June 30, 2016, the Plan had capital commitments to the various partnerships, as approved by the Board, totaling \$1,109,548,000. Subsequent to June 30, 2016, FCERA funded \$943,169,000 of these capital commitments, with remaining unfunded commitments totaling \$184,464,000 outstanding.

NOTE 9 – SUBSEQUENT EVENTS

Date of Management's Review

The potential for subsequent events were evaluated from the year-end report date of June 30, 2016 through December 9, 2016, which is the date the financial statements were available to be issued. Management did not identify any subsequent events that would require disclosure.

Notes to the Basic Financial Statements: Note 9 continued

Reserves

Based on Actuarial calculations and staff monitoring, it was determined that the Supplemental Cost of Living Reserve would be unable to issue the full monthly allocation of member benefits after the July 31, 2016 benefit payment cycle. As a result, the Board directed staff to cease payments from the Supplemental Cost of Living Reserve beginning August 1, 2016.

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REQUIRED SUPPLEMENTARY INFORMATION



Required Supplementary Information

Schedule of Employer Contributions

Last Ten Fiscal Years

Fiscal Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
2007	\$ 69,997,000	\$ 69,997,000	\$ -	\$ 370,720,000	18.88%
2008	97,305,000	97,305,000	-	394,449,000	24.67%
2009	113,959,000	113,959,000	-	399,799,000	28.50%
2010	126,138,000	126,138,000	-	392,713,000	32.12%
2011	130,290,000	130,290,000	-	385,204,000	33.82%
2012	157,869,000	157,869,000	-	346,742,000	45.53%
2013	158,572,000	158,572,000	-	346,808,000	45.72%
2014	165,309,000	165,309,000	-	350,326,000	47.19%
2015	184,213,000	184,213,000	-	351,109,000	52.47%
2016	191,529,000	191,529,000	-	370,318,000	51.72%

Schedule of Investment Returns – Pension Plan

*For the Years Ended June 30, 2014 through 2016**

	2016	2015	2014
Annual Money-Weighted Rate of Return, Net of Investment Expenses	0.022%	0.021%	17.258%

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Actuarial Methods and Assumptions

As required by GASB Statement No. 67, FCERA's actuary completed the measure of the net pension liability as of June 30, 2016 and June 30, 2015 by rolling forward the total pension liability information for financial reporting, as of June 30, 2015 and June 30, 2014, respectively. The basis for these calculations was the latest Valuation Report, prepared for funding purposes. All actuarial methods and assumptions used for this roll forward analysis were the same as those used in the June 30, 2014 Valuation Report. Actuarially determined contribution rates are based on the actuarial valuation one year prior to the beginning of the Plan year.

Valuation date June 30, 2014

Actuarial cost method Entry age actuarial cost method

Required Supplementary Information continued

Amortization method	Level percent of payroll (3.75% payroll growth assumed).
Remaining amortization period	18 years (declining) for Unfunded Actuarial Accrued Liability (UAAL) established as of June 30, 2003 plus 15 years (declining) for UAAL due to actuarial gains or losses, changes in actuarial assumptions or plan amendments established on each subsequent valuation.
Asset valuation method	The actuarial value of assets is determined by recognizing any difference between the actual and the expected market return over 10 six-month interest crediting periods. The actuarial value of assets is further adjusted, if necessary, to be within 30% of the market value of assets. The valuation value of assets is the actuarial value of assets reduced by the value of the non-valuation reserves. Deferred gains and losses as of June 30, 2011 have been combined and will be recognized in equal amounts over a period of four and a half years from that date.
<u>Actuarial assumptions:</u>	
Investment rate of return	7.25% net of pension plan investment expenses (includes inflation at 3.25%)
Inflation rate	3.25%
Administrative expenses	1.10% of payroll allocated to both the employer and member based on the components of the total contribution rate (before expenses) for the employer and member.
Projected salary increases	Rates vary by service type:
- General Members	Salary increases range from 4.75% to 10.75%, including 3.25% inflation.
- Safety Members	Salary increases range from 5.25% to 10.75%, including inflation.

Cost of living adjustments	3.00% of retirement income for General Tiers 1, 2 and 3, and Safety Tiers 1 and 2. 0.00% for General and Safety Tiers 4 and 5.
Other assumptions	Same as the assumptions in the June 30, 2014 funding actuarial valuation, these assumptions will be brought forward and used in the June 30, 2015 funding actuarial valuation.
Other information	All members with membership dates on or after January 1, 2013 enter the Tier 5 created by PEPRA.

*For the Years Ended June 30, 2016, 2015, 2014, and 2013**

Notes to Schedule:

Benefit changes: All new members with membership dates on or after January 1, 2013 enter the new tier created by PEPR.

* Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

¹ Estimated liability impact for including a group of about 1,420 members reported for the first time as vested terminated members in the upcoming June 30, 2015 funding valuation.

² Covered employee payroll represents compensation earnable and pensionable compensation.

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OTHER SUPPLEMENTARY INFORMATION



Other Supplementary Information

Schedule of Administrative Expenses

For the Fiscal Year Ended June 30, 2016, with Comparative Totals

	2016	2015
Personnel Services		
Salaries and Benefits	\$ 2,531,927	\$ 2,331,252
Total Personnel Services	2,531,927	2,331,252
Office Expenses		
Election Expenses	-	11,331
Office Supplies and Miscellaneous Admin.	79,151	77,688
Postage	31,930	25,009
Telephone	8,371	8,518
Utilities	27,457	26,563
Total Office Expenses	146,909	149,109
Other Services and Charges		
Equipment / Furnishings	1,642	541
Insurance	132,781	129,400
Maintenance	37,763	38,250
Professional and Specialized Services	710,946	792,243
Disability Expenses	296,906	227,417
Data Processing Services	152,315	145,773
Transportation, Travel, and Education - Staff	68,454	26,207
Transportation, Travel, and Education - Board	72,658	49,025
Total Other Services and Charges	1,473,465	1,408,856
Depreciation	661,701	407,873
Total Administrative Expenses	\$ 4,814,002	\$ 4,297,090

Other Supplementary Information continued

Administrative Budget Analysis

For the Fiscal Year Ended June 30, 2016

	Approved Budget	Final Budget	Fiscal Year Expenses	Percentage Expended
Personnel Services				
Salaries	\$ 1,478,500	\$ 1,478,500	\$ 1,398,484	94.59%
Benefits	1,122,900	1,122,900	1,133,443	100.94%
Total Personnel Services	2,601,400	2,601,400	2,531,927	97.33%
Professional Services				
Actuarial ¹	100,000	100,000	74,654	74.65%
Legal Counsel	420,000	420,000	203,826	48.53%
Professional Services - Disability	175,000	175,000	296,906	169.66%
Other Professional Services	686,900	686,900	432,466	62.96%
Total Professional Services	1,381,900	1,381,900	1,007,852	72.93%
Travel, Transportation, and Education				
Transportation, Travel, and Education - Board	74,900	74,900	72,658	97.01%
Transportation, Travel, and Education - Staff	36,700	45,769	68,454	149.56%
Total Travel, Transportation, and Education	111,600	120,669	141,112	116.94%
Other				
Data Processing	153,300	153,300	152,315	99.36%
Depreciation	1,577,000	1,577,000	661,701	41.96%
Insurance	133,900	133,900	132,781	99.16%
Maintenance	45,700	45,700	37,763	82.63%
Office Supplies and Miscellaneous Admin.	170,800	170,800	148,551	86.97%
Total Other	2,080,700	2,080,700	1,133,111	54.46%
Capital Assets ^{2, 3}	-	-	-	N/A
Total Administrative Expenses ⁴	\$ 6,175,600	\$ 6,184,669	\$ 4,814,002	77.84%

¹ Excludes annual valuation costs which are included as part of investment expenses.

² Capital Assets are included in the adopted Administrative Budget when purchased.
However, the costs are recognized as a result of the depreciation process.

³ Computer Equipment is included in Information Technology (IT) Infrastructure page 59.

⁴ As defined in Government Code Section 31580.2, excludes Information Technology expenses.

Other Supplementary Information continued

Schedule of Information Technology Expenses

For the Fiscal Year Ended June 30, 2016, with Comparative Totals

	2016	2015
Property and Equipment	\$ 16,013	\$ 13,106
Pension System Maintenance	44,828	32,414
Subtotal Excluded IT Expenses ¹	60,841	45,520
IT Infrastructure ²	761,884	3,101,724
Total Information Technology Expenses	\$ 822,725	\$ 3,147,244

¹ As defined by Government Code Section 31580.2.

² IT Infrastructure amounts are accounted for in the Depreciable Capital Assets.

Schedule of Investment Expenses

For the Fiscal Year Ended June 30, 2016, with Comparative Totals

	2016	2015
Investment Manager Fees	\$ 16,908,492	\$ 15,660,239
Custodian Service Fees ²	115,000	110,143
Actuarial Valuation Fees ^{1,2}	109,000	66,000
Due Diligence Travel	5,153	-
Investment Legal Fees ²	239,179	164,429
Investment Consultant Fees ²	389,173	373,570
Subtotal Investment Expenses²	17,765,997	16,374,381
Securities Lending Expenses	300,248	239,216
Total Investment and Security Lending Expenses	\$ 18,066,245	\$ 16,613,597

¹ Actuarial Valuation Fees are the fees for producing the Actuarial Valuation Report .

² Investment Legal Fees, Investment Consultant Fees, Custodian Service Fees, and Actuarial Valuation Fees can also be found on page 60 as Payments to Consultants.

Other Supplementary Information continued

Schedule of Payments to Consultants

For the Fiscal Year Ended June 30, 2016, with Comparative Totals

	2016	2015
Disability Attorney Fees	\$ 69,704	\$ 66,670
Retirement Board Attorney Fees	203,826	217,483
Disability Medical, Investigation, and Copying Fees	227,202	160,747
Other Professional Expenses	220,352	285,068
Audit Fees	59,799	70,340
Actuarial Consulting Fees (non-actuary study costs)	74,654	219,352
Actuarial Valuation Fees ¹	109,000	66,000
Investment Legal Fees ¹	239,179	164,429
Custodian Service Fees ¹	115,000	110,143
Investment Consultant Fees ¹	389,173	373,570
Data Processing Fees	152,315	145,773
Total Payments to Consultants	\$ 1,860,204	\$ 1,879,575

Refer to page 72 for information on fees paid to investment managers.

¹ Investment Legal Fees, Investment Consultant Fees, Custodian Service Fees, and Actuarial Valuation Fees can also be found on page 59 as Investment Expenses.

INVESTMENT SECTION



August 29, 2016

Board of Trustees
Fresno County Employees' Retirement Association
1111 H. Street
Fresno, CA 93721

Dear Trustees:

Verus Advisory ("Verus") is pleased to provide the Board of Trustees of Fresno County Employees' Retirement Association ("FCERA") with an overview of the market environment for the fiscal year ended June 30, 2016 as well as an update on performance and a summary of recent developments.

Investment Landscape

The 2016 fiscal year was marked by continued challenges in the global economy and capital markets; continued volatility in equity, energy and currency markets prompted central banks globally to foster low and even negative interest rate policies.

The US continued its moderate recovery during fiscal year 2016 with real GDP growth of 2.1% (as of March 31st) year over year, positive but below long-term trend. Headline inflation was 1% during the period. Our research suggests that the current cycle, while above average in terms of duration, has resulted in lower cumulative economic growth than most prior cycles. The labor market in the U.S. continues to improve with headline U-3 unemployment at 4.9% as of June 30, 2016; participation rate declines of the last several years appeared to have stabilized.

The fiscal year began with concerns over an economic slowdown in China and continued pressure on energy markets causing broadly negative sentiment across risk markets. FCERA was not immune to this sell-off, and this market downturn cost the portfolio approximately 5.6% during the third quarter.

In the fourth quarter of 2015, disinflationary pressures continued globally prompting the European Central Bank to push deposit rates further into negative territory. The US dollar appreciated to its highest point since 2003 relative to a trade weighted basket of currencies. The most notable event in markets was the Federal Reserve raising the Fed Funds Rate for the first time since the Great Financial Crisis, creating a notable divergence in central bank policies between the U.S. and other developed markets.

The first quarter of 2016 witnessed a precipitous drop in equity markets as recessionary fears escalated. With the Federal Reserve offering more dovish commentary, oil prices finding a bottom, and economic stimulus propping up China's economy, markets quickly stabilized and re-traced new highs, with emerging markets seeing a particularly significant recovery.

The second quarter of 2016 ended with the U.K. voting to leave the EU catching the market by surprise. Brexit led to a short-term market sell-off followed by most markets snapping back relatively quickly. More impactful to performance for FCERA has been interest rates' continued moves lower; as of June 30 approximately one third of all global government bonds were trading with a negative yield, more than \$10 trillion in market value. Two of the largest sovereign bond

Annual Investment Consultant's Review

markets outside the U.S., German and Japanese yield curves had negative yields out to the 15 year tenor.

Plan Performance

The FCERA investment portfolio ("the Portfolio") earned a -0.2 percent return net of fees for the fiscal year ending June 30, 2016. This return trailed the policy index return by 310 basis points.

As previously discussed, the largest driver of returns during the fiscal year was depreciation in public equities. Within the U.S. most actively managed strategies fared poorly, a number of strategies struggled in the face of unanticipated events and the market's preference for income-generating equities. On the international equity side, FCERA's strategies outpaced the broader market but still depreciated 8.2%, in part due to the strength of the U.S. dollar. The fixed income portfolio generated a 3.7% return for the fiscal year, however this lagged the global benchmark significantly; the Barclays Global Aggregate Index was up 8.9% over the period. The disparity was driven by the portfolio's preference for higher carry credit strategies, which had trouble keeping up with the returns of global sovereign bonds, which appreciated behind negative interest rate policies globally. Over the longer-term we expect the credit overweight and international developed market sovereign bond underweight to provide a tailwind in future periods.

The Portfolio's investments in hedge funds and commodities exceeded their composite benchmarks however on an absolute basis returns were negative. The real estate allocation returned 8.6% but lagged the benchmark by 3.2%, in part due to an allocation to private infrastructure, which is more dependent on income than price appreciation for total return. The portfolio's private market strategies (equity and credit) underperformed their public-market-equivalent benchmarks, in part due to the relatively immature age of the portfolio and the associated "J-Curve" effect.

On a longer term basis, the portfolio has generated 5.3% annually for the last three years and 5.4% over the last five years. The trailing ten-year performance at fiscal-year-end was 5.6%, which exceeds the policy index by 50 basis points. Consistent with the System's goal of minimizing investment risk, the realized standard deviation of the program has averaged 6% for the last three years, this volatility ranks in the 23rd percentile relative to peers. In computing individual manager returns, Verus utilizes the industry-standard approach of computing a time-weighted rate of return based on the market rate of return.

Plan Activity

During the 2016 fiscal year, Verus worked with FCERA to further align the portfolio with the strategic asset allocation. This included a restructuring of the hedge fund portfolio, complementing the existing fund-of-funds investment with direct investments, which will have the benefit of reducing the weighted average fee significantly. In addition, Verus worked with FCERA to underwrite and invest in a number of private equity and credit strategies. Further effort to build out these exposures is currently in progress. Amidst an increasingly competitive capital markets environment, private strategies should greatly improve the long-term returns realized by the Plan. FCERA also implemented a cash securitization strategy during the year in order to minimize cash drag and improve liquidity.

Annual Investment Consultant's Review

All of us here at Verus appreciate the opportunity to assist the FCERA Board in meeting the Plan's investment objectives. We are confident in the direction of the portfolio given the System's demographics and fiscal strength. We look forward to continuing our partnership as we navigate ever-changing capital markets.

Sincerely,

A handwritten signature in blue ink, reading "Jeffrey J. MacLean". The signature is fluid and cursive, with the first name "Jeffrey" and last name "MacLean" clearly legible.

Jeffrey J. MacLean
Chief Executive Officer

General Information

The goal of FCERA is to provide retirement compensation, death benefits, and disability benefits to its members. The Plan should meet this goal through prudent investment of employee and employer contributions.

The County Employees Retirement Law of 1937 governs the Plan. California Public Law (including Sections 31594 and 31595) also regulates Plan action. Sections 31594 and 31595 are especially important because they provide for prudent person governance of the Plan. These laws do not specify the type, amount, and quality of plan investments. Rather, these laws guide the Plan to make investments assumed to be in the best interest of the Plan's beneficiaries. Such decisions should be consistent with the decisions of other investors possessing similar information.

The Board has exclusive control of the investments of the Plan's retirement fund. The assets of the Plan are trust funds and shall be held for the exclusive purposes of providing benefits to its members in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the Plan. Except as otherwise expressly restricted by the California Constitution and by law, the Board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment financial instrument, or financial transaction when prudent in the informed opinion of the Board.

The officers and employees of the Board shall discharge their duties to the Plan as follows:

- The Board will act solely in the interest of and for exclusive purposes of providing benefits to participants and their beneficiaries. The Board will keep employer contributions to the Plan at a minimum level. The Board will also pay reasonable expenses required to administer the plan.
- The Board will act like a prudent person under equivalent circumstances and having similar goals. Attention to care, skill, prudence, and diligence is of utmost importance when acting on behalf of the Plan.
- The Board shall diversify the Plan's investments to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so. The diversification of the Plan's portfolio is displayed in the tables and graphs included in the following pages.

The Plan's assets are exclusively managed by external, professional investment management firms. The Board closely monitors the performance of the managers with the assistance of an external investment consultant.

Summary of Investment Objectives

Summary of Investment Objectives

The Plan's primary objective is to efficiently allocate and manage the assets dedicated to the payment of retirement and disability benefits. While recognizing the importance of "preservation of capital," the Plan also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns in the long run.

To accomplish its investment objectives, the Plan has established a series of procedures and guidelines. The procedures, grouped together as the Investment Policy, serve to guide the Plan's investment program. The procedures also help to define the responsibilities of the Board members as they relate to the investment process.

The policy drives the investment actions of the Plan. This policy considers various mixes of different investment asset class risk and return expectations for each mixed-class portfolio current and projected plan liabilities. The policy places responsibility for proxy voting with its equity investment managers.

The Investment Results on page 68 are based on time-weighted rate of return using fair value and are annualized for three and five years. All other information is reported at fair value.

Target and Actual Asset Allocations

The Board reviews the Plan's investment results each quarter. Periodically, the Board reviews the asset allocation, taking into consideration the latest actuarial study. Based on this review, the Board adopts an asset allocation mix with the goal of helping the Plan achieve a fully funded status. Each asset class has a target allocation. The Plan treats these targets as long-term funding objectives. Adhering to these targets allows the Plan to keep investment risk at a manageable level and minimizes investment costs.

One keystone of asset allocation is diversification among asset classes. Diversification helps to maintain risk at a tolerable level. Therefore, the Board reviews the investment performance and volatility of each asset class on a regular basis over various time periods (quarterly, annually, multi-years) to ensure that the current allocation continues to meet the Plan's needs.

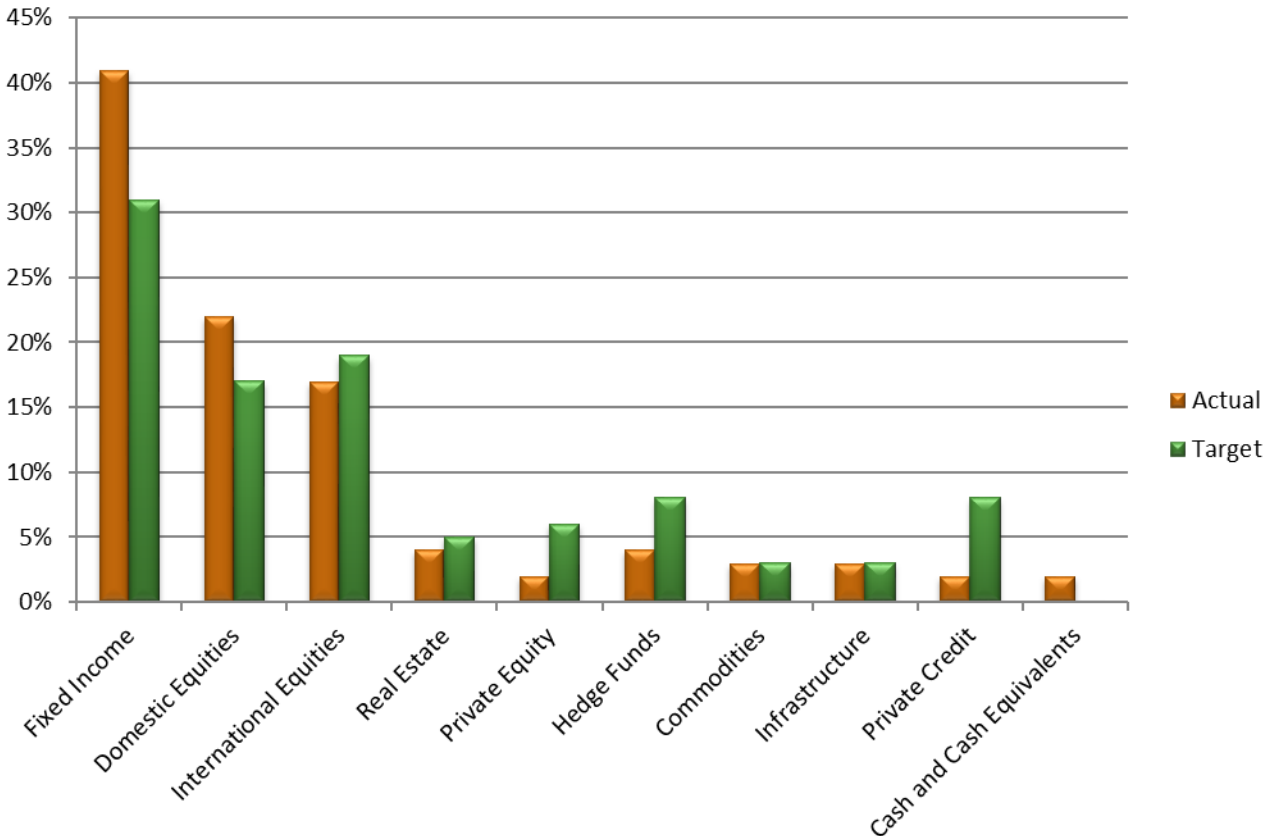
Over time, the Board implements the asset allocation plan by hiring investment managers to invest assets on behalf of the Plan, subject to investment guidelines incorporated into each firm's investment management contract.

The information provided below and on subsequent pages is a representation of the Plan's financial statements. Individually, they may not tie to the investment consultant's report on pages 61 to 63 of this Comprehensive Annual Financial Report (CAFR) due to the different reporting methodologies used by the investment consultant and the Plan.

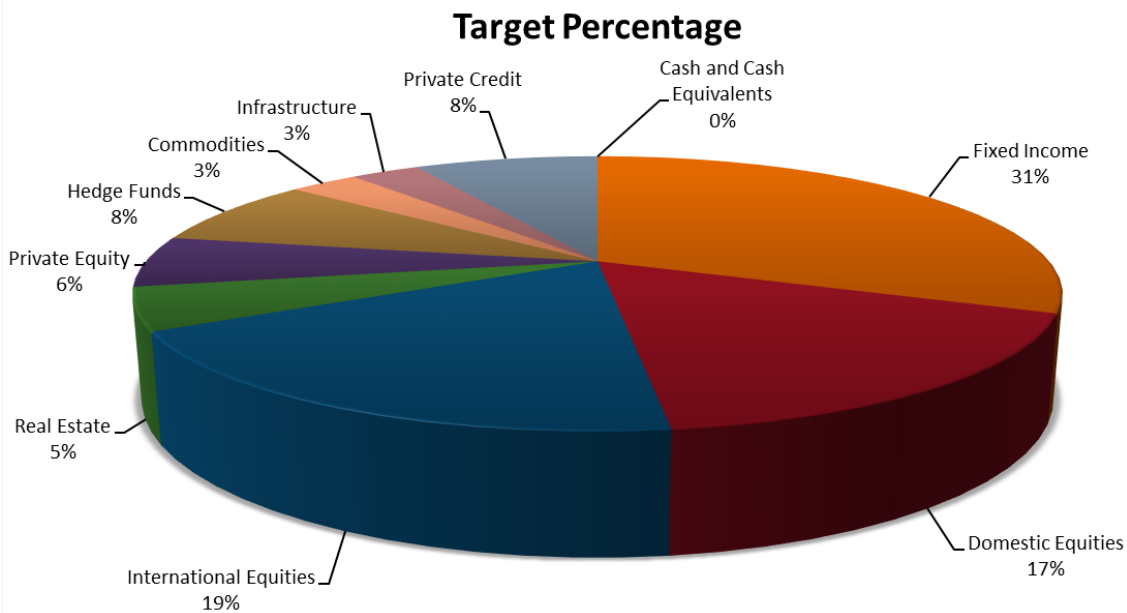
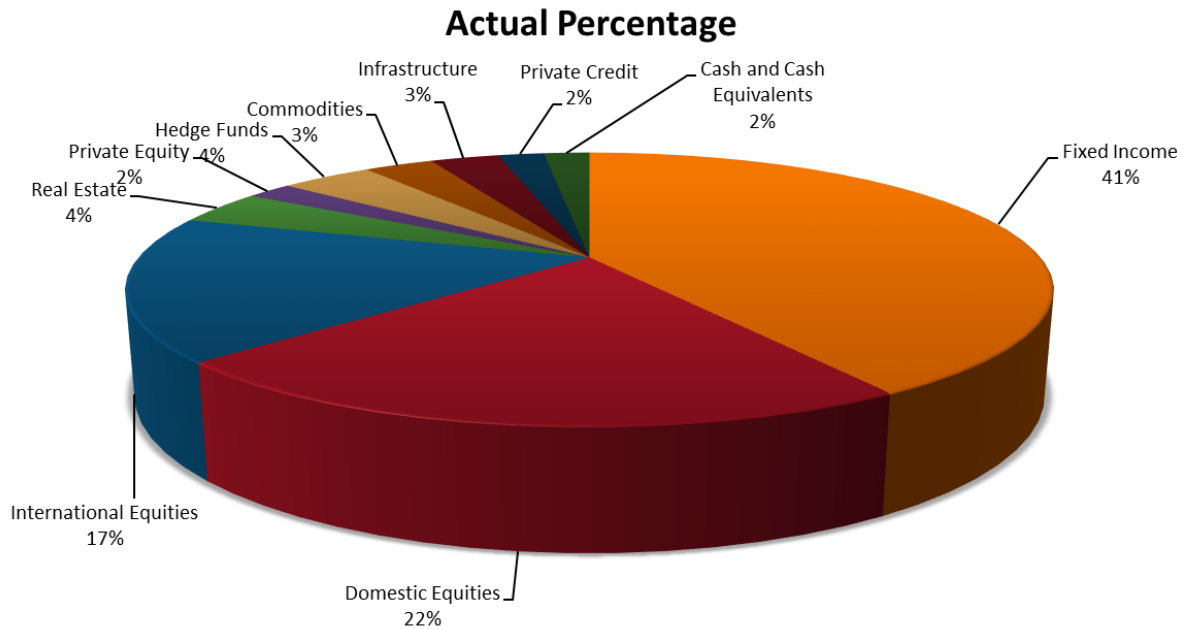
Target and Actual Asset Allocations continued

For example, the investment consultant reports cash held with investment managers as part of the investment manager's investment portfolio not as cash and cash equivalents as reported on the Investment Summary. Also, the target asset allocation calls for all cash requirements of the Plan to be classified as Fixed Income. However, the Plan's actual operating cash is reported separately the Financial Statements and on the Investment Summary.

The 2015 – 2016 target and actual asset allocations are presented in the following graphs and charts.



Target and Actual Asset Allocations continued



Investment Results

Investment Results

As of June 30, 2016

Investments	Current Year	3-Year Return	5-Year Return
Fixed Income			
Investment Grade Credit	8.00%	0.00% ¹	0.00% ¹
Benchmark : BC Credit	7.60%	0.00%	0.00%
Domestic High Yield	-0.30%	0.00% ¹	0.00% ¹
Benchmark : BC High Yield	1.60%	0.00%	0.00%
Domestic Senior Loan	1.50%	0.00% ¹	0.00% ¹
Benchmark : Leveraged Loan Index	0.90%	0.00%	0.00%
TIPS Index Fund	4.30%	2.30%	2.60%
BC U.S. TIPS	4.40%	2.30%	2.60%
Domestic	6.00%	0.00% ¹	0.00% ¹
Benchmark : BC Aggregate Index	6.00%	0.00%	0.00%
Global Sovereign	4.00%	0.00% ¹	0.00% ¹
Benchmark : Citi WGBI	11.30%	0.00%	0.00%
Emerging Markets Debt	0.40%	0.00% ¹	0.00% ¹
Benchmark : JP Morgan GBI EM Diversified	2.00%	0.00%	0.00%
Equities			
Domestic Large Capital Value	-7.00%	7.30%	9.80%
Benchmark: Russell 1000 Value	2.90%	9.90%	11.40%
Domestic Large Capital	4.10%	11.70%	12.10%
Benchmark: S&P 500 Index	4.00%	11.70%	12.10%
Domestic Large Capital Growth	-1.90%	12.90%	11.40%
Benchmark: Russell 1000 Growth	3.00%	13.10%	12.30%
Domestic Small Capital Growth	-7.90%	4.10%	6.40%
Benchmark: Russell 2000 Growth	-10.80%	7.70%	8.50%
Domestic Small/Mid Capital Value	-5.80%	7.90%	8.30%
Benchmark: Russell 2500 Value	0.20%	8.10%	9.60%
Emerging Markets Equity	-7.70%	-3.00%	-2.00%
Benchmark: MSCI Emerging Markets	-12.10%	-1.60%	-3.80%
International Growth	-10.50%	3.20%	0.00%
Benchmark : MSCI EAFE	-10.20%	2.10%	0.00%
International Equity	-10.10%	2.70%	2.20%
Benchmark : MSCI EAFE	-10.20%	2.10%	1.70%
International Equity Small Cap	-3.60%	4.30%	3.80%
Benchmark : S&P Developed ex U.S. SC	-3.80%	7.10%	4.20%
Private Markets			
Real Estate	10.00%	11.80%	11.20%
Benchmark : NCREIF Classic Property	11.80%	13.00%	12.70%
Infrastructure	7.30%	0.00% ¹	0.00% ¹
Benchmark : CPI + 5%	6.10%	0.00%	0.00%
Hedge Funds	-4.80%	2.90%	3.70%
Benchmark : HFRI FOF Composite Index	-5.50%	1.90%	1.60%
Private Equity	-1.50%	0.00% ¹	0.00% ¹
Benchmark : RUSS 3000 + 2.5%	4.70%	0.00%	0.00%
Commodities	-0.40%	-5.50%	-7.80%
Benchmark : Bloomberg Commodity Index	-13.30%	-10.60%	-10.80%
Private Credit	0.90%	0.00% ¹	0.00% ¹
Benchmark: BC Aggregate Index +250 bps	8.60%	0.00%	0.00%
Cash, Custodial, and Investment Pool			
Cash	0.10%	0.10%	0.10%
Benchmark: 90-Day Treasury Bill	0.20%	0.10%	0.10%
Total Fund	-0.20%	5.30%	5.40%

Notes: Hedge Funds, Private Equity and Commodities are net of fees. Private Equity returns are lagged one quarter. Other investments are reported gross of fees. Investment results were prepared using a time-weighted rate of return based on the market rate of return.

¹ Domestic Fixed Income and Emerging Market Debt is incorporated under Global Fixed Income, Return data will be available for the 3 year and 5 year going forward. Private Equity and Private Credit return data for 3 year or 5 year results are not currently available due to a change in reporting software at June 30, 2016. Infrastructure was funded in May 2015.

Investment Summary

Investment Summary

As of June 30, 2016

(Dollars in Thousands)

	Fair Value	Actual Percentages ²	Target Percentages
Investments			
Domestic Fixed Income	\$ 912,790	22.91%	19.00%
Foreign Fixed Income	483,747	12.14%	12.00%
U.S. Government and Agencies ¹	237,014	5.95%	0.00%
Total Fixed Income	1,633,551	41.00%	31.00%
Domestic Equities	846,464	21.24%	17.00%
International Equities	660,380	16.57%	19.00%
Real Estate Investment Trusts	19,087	0.48%	0.00%
Total Equities	1,525,931	38.30%	36.00%
Private Markets and Alternatives			
Real Estate	183,049	4.59%	5.00%
Private Equity	100,774	2.53%	6.00%
Hedge Funds	146,819	3.68%	8.00%
Commodities	103,972	2.61%	3.00%
Infrastructure	128,381	3.22%	3.00%
Private Credit	67,665	1.70%	8.00%
Total Private Markets and Alternatives	730,660	18.34%	33.00%
Total Investments	3,890,142	97.63%	100.00%
Cash and Cash Equivalents			
Cash Held in County Investment Pool	33,585	0.84%	0.00%
Short - Term Investment with Fiscal Agent	60,822	1.53%	0.00%
Total Cash and Cash Equivalents	94,407	2.37%	0.00%
Total Investment, Cash and Cash Equivalents	\$ 3,984,549	100.00%	100.00%

¹ Includes TIPS.

² Amounts may not equal 100% due to rounding.

Largest Fixed Income and Equity Holdings

Largest Fixed Income Holdings (By Fair Value)

As of June 30, 2016

Par	Name	Yield	Maturity Date	Fair Value
\$ 125	FUT SEP 16 US 2YR T-NOTE	0.6100	09/30/2016	\$ 27,416,016
22,265,000	UNITED STATES OF AMER TREAS BONDS DTD	2.4010	02/15/2045	23,180,826
22,980,000	UNITED STATES TREAS NTS DTD	0.3370	07/31/2017	22,980,873
18,900	BRAZIL(FED REP OF) 10% T-NTS	0.0110	01/01/2025	17,897,569
150,955	MEXICO(UNITED MEXICAN STATES)	0.0660	11/13/2042	17,601,402
1,571,580	CF LOOMIS SAYLES FULL DISCRETION INST	5.9300	N/A	17,271,664
15,426,671	UNITED KINGDOM(GOVERNMENT OF)	1.2220	07/22/2018	15,778,399
11,352,507	INDONESIA GOVERNMENT	8.1300	03/15/2029	12,567,225
98,270	MEXICO(UTD MEX ST)	0.0680	11/18/2038	12,258,363
11,800,000	EXPORT - IMPORT BK KOREA FLT RT	1.3780	01/14/2017	11,816,284
\$ 85,664,008	Total			\$ 178,768,621

Largest Equity Holdings (By Fair Value)

As of June 30, 2016

Shares	Name	Fair Value
123,193	PHILIP MORRIS INTL	12,531,192
133,473	LAM RESH CORP	11,219,740
14,806	AMAZON.COM INC	10,595,470
117,093	MEDTRONIC PLC	10,160,160
197,162	MICROSOFT CORP	10,088,780
135,200	VISA INC	10,027,784
81,820	JOHNSON & JOHNSON	9,924,766
110,950	MASTERCARD INC	9,770,257
76,200	HOME DEPOT INC	9,729,978
40,864	ALLERGAN PLC	9,443,262
1,030,761	Total	103,491,389

A complete list of portfolio holdings is available upon request.

List of Investment Managers

Domestic Bonds

Northern Trust Barclays Agg Bond Index Fund
Loomis Sayles
State Street TIPS Index Fund
Western Asset Management Company
Eaton Vance

Global Bonds

Brandywine
Pimco EMD

Domestic Stocks

Aronson, Johnson & Ortiz, LP
Kalmar Investments
State Street Global Advisors
Systematic Financial Management
Waddell & Reed Investment Management

International Stocks

Artisan Partners International
Mondrian Investment Partners
Research Affiliates

Private Credit

Angelo Gordon VII
Colony Distressed Credit I, L.P.
Colony Distressed Credit, III, L.P.
CVI Credit Value Fund III
GSO European Senior Debt Fund, L.P.
KKR Mezzanine Partners
Lone Star Fund IV
Oaktree Opportunities IX, L.P.
TCW Shop III

Private Equity

Blackstone IV
Hamilton Lane VI
Hamilton Lane IX
Landmark Equity X, L.P.
Landmark Equity, XIV, L.P.
New Mountain Partners III
New Mountain Partners, L.P.
WP Equity Partners, L.P.
WP Private Equity VIII, L.P.
WP Private Equity X, L.P.
WP Private Equity, XII L.P.

Real Estate Investments

Gerding Edlen Green Cities III, L.P.
Invesco Core Real Estate
Kennedy Wilson Real Estate Fund V, L.P.
TA Associates Realty

Infrastructure

IFM Global Infrastructure

Hedge Fund

Grosvenor Capital Management

Schedule of Fees

Schedule of Fees

For the Fiscal Year Ended June 30, 2016, with Comparative Totals

	2016	2015
Investment Managers' Fees		
Domestic Equity Managers:		
Aronson, Johnson & Ortiz, LP ¹	\$ -	\$ 424,267
Kalmar Management	513,571	483,466
State Street Global Advisors	60,363	59,578
Systematic Financial Management	265,381	256,341
Waddell & Reed Investment Management	642,681	375,361
Wellington Management Company, LLP ²	-	348,946
Winslow Capital Management ²	-	262,340
Total Domestic Equity Managers	1,481,996	2,210,299
International Equity Managers:		
Artisan International	1,117,206	1,782,517
Mondrian Investment Partners	2,259,663	2,474,674
Research Affiliates	238,629	415,457
Total International Equity Managers	3,615,498	4,672,648
Domestic Fixed Income Managers:		
Barclays U.S. AGG Bond	74,759	112,857
BlackRock Financial Management Inc. ²	-	319,215
Brandywine Global	281,378	127,147
Eaton Vance	1,108,462	828,247
Loomis Sayles	614,706	551,473
Pimco EMD	759,842	842,688
State Street TIPS Index Fund	62,797	63,088
Western Asset Management Company	367,607	317,972
Total Domestic Fixed Income Managers	3,269,551	3,162,687
Private Market Managers:		
Private Equity	1,468,902	1,028,526
Real Estate	2,367,501	1,439,893
Hedge Funds	1,237,638	1,240,065
Commodities	864,757	362,106
Infrastructure	1,148,747	212,155
Private Credit	1,453,902	1,331,860
Total Private Market Managers	8,541,447	5,614,605
Total Investment Managers' Fees	16,908,492	15,660,239
Other Investment Expenses		
Securities Lending	300,248	239,216
Due Diligence Travel	5,153	-
Custodian Service Fees	115,000	110,143
Actuarial Valuation Fees	109,000	66,000
Consulting and Legal Fees	628,352	537,999
Total Other Investment Expenses	\$ 1,157,753	\$ 953,358

¹ Performance Based Fee Agreement as of June 30, 2015

² Terminated in 2015

Schedule of Commissions

Schedule of Commissions

As of June 30, 2016

Brokerage Firm	Rank	Number of Shares Traded	Total Commissions	Commissions Per Share	Percentage of Commissions
Broadcort Capital (Thru MI)	1	1,688,213	\$ 59,942	\$ 0.03551	10.97%
Goldman, Sachs And Co.	2	35,244,538	31,309	0.00089	5.73%
Deutsche Bank Securities Inc.	3	19,717,269	27,091	0.00137	4.96%
Bny Convergenx	4	841,899	26,550	0.03154	4.86%
J.P. Morgan Clearing Corp.	5	4,404,165	26,054	0.00592	4.77%
Morgan Stanley And Co., Llc	6	35,235,505	24,037	0.00068	4.40%
Merrill Lynch International Limited	7	1,638,498,180	23,050	0.00001	4.22%
Instinet Investment Services Limite	8	1,657,408	17,875	0.01078	3.27%
Liquidnet Inc.	9	1,255,882	15,784	0.01257	2.86%
UBS Limited	10	2,119,936	15,414	0.00727	2.82%
Investment Technology Group Inc.	11	1,142,453	14,298	0.01251	2.62%
Sg Americas Securities Llc	12	4,640,734	12,888	0.00278	2.36%
Bank of America Corporation	13	13,537,920	8,871	0.00066	1.63%
HSBC Bank Plc	14	229,558,716	8,685	0.00004	1.59%
Barclays Capital Inc.	15	2,095,450	8,409	0.00401	1.54%
Investment Technology Group Ltd.	16	211,153	8,052	0.03813	1.48%
Credit Suisse Securities(Europe)Ltd	17	163,934	7,761	0.04735	1.42%
Barclays Capital	18	42,929,428	7,591	0.00018	1.39%
Convergenx Execution Solution	19	220,759	6,923	0.03136	1.27%
Jnk Securities Inc.	20	517,656	6,668	0.01288	1.22%
Top 20 Firms by Commission Dollars		2,035,681,198	\$ 357,250	\$ 0.00018	65.38%
All other Brokerage Firms		30,904,953,826	189,189	0.00001	34.62%
Total Brokerage Commissions		32,940,635,024	\$ 546,440	\$ 0.00002	100.00%

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ACTUARIAL SECTION





100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8268 www.segalco.com

November 18, 2016

Board of Retirement
Fresno County Employees' Retirement Association
1111 H Street
Fresno, CA 93721

**Re: June 30, 2015 Actuarial Valuation for the Fresno County Employees'
Retirement Association**

Dear Members of the Board:

Segal Consulting (Segal) prepared the June 30, 2015 actuarial valuation of the Fresno County Employees' Retirement Association (FCERA) for funding purposes. We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices and FCERA's funding policy that was adopted by the Board in 2014. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice (ASOPs).

Actuarial valuations are performed on an annual basis with the last valuation completed as of June 30, 2015. The actuarial calculations presented in the valuation report have been made on a basis consistent with our understanding of the historical funding methods used in determination of the liability for statutory retirement benefits.

The June 30, 2015 actuarial valuation is based on the plan of benefits verified by FCERA and on participant¹ and financial data provided by FCERA. Segal conducted an examination of these data and found them to be reasonably consistent and comparable with data used for other purposes. However, the scope of this examination does not qualify as an audit. Summaries of the employee data used in performing the actuarial valuations over the past several years are provided in our valuation report.

We did not audit the Association's financial statements. For actuarial valuation purposes, Retirement Plan assets are valued at actuarial value. Under this method, the assets used to

¹ As part of the data provided for the June 30, 2015 valuation from the new ARRIVOS pension administration system, FCERA has reviewed and reclassified 1,419 members who were previously reported in the data file reserved for terminated members and understood by Segal (and the prior actuary) as not owed any liability by FCERA. These members are now reported in the data file reserved for vested terminated members owed either a refund of contributions or deferred retirement benefit.

determine employer contribution rates take into account market value by recognizing the differences between the total return at market value and the expected investment return over a five-year period. Net deferred investment gains as of June 30, 2011 have been combined and will be recognized in equal amounts over nine six-month periods from that date. That amount plus any deferred gains and losses after June 30, 2011 are further adjusted, if necessary, so that the actuarial value of assets will stay within 30% of the market value of assets.

One of the general goals of an actuarial valuation is to establish rates, which, over time, will remain level as a percentage of payroll unless Plan benefit provisions are changed. Actuarial funding is based on the Entry Age Cost Method. Under this method, the employer contribution rate provides for current cost (Normal Cost) plus a level percentage of payroll to amortize any unfunded actuarial accrued liability (UAAL). The UAAL is amortized as a level percentage of payroll over a declining period with 18 years remaining for the outstanding balance of the UAAL established as of the June 30, 2003 valuation and a separate 15-year period is used for new UAAL established on each subsequent valuation as a result of actuarial gains/losses or changes in actuarial assumptions. Any increase in UAAL due to new benefit improvements is also amortized over 15 years. The progress being made towards meeting the funding objective through June 30, 2015 is illustrated in the Schedule of Funding Progress.

Note number 2 to the Financial Statements and the Required Supplemental Information (RSI) included in the Financial Section were prepared by the Association based on the results of the Governmental Accounting Standards (GAS) Statement No. 67 actuarial valuation as of June 30, 2015 prepared by Segal. For the Financial Section of the Comprehensive Annual Financial Report, Segal provided the Schedule of Change in Net Pension Liability and Schedule of Employer Contributions as shown in the RSI. A listing of supporting schedules Segal prepared for inclusion in the Actuarial and Statistical Sections of the Association's CAFR is provided below. These schedules were prepared based on the results of the actuarial valuation as of June 30, 2015 for funding purposes.

1. Solvency test;
2. Actuarial Analysis of Financial Experience;
3. Schedule of Funding Progress;
4. Average Benefit Payments; and
5. Years of Life Expectancy after Service and Disability Retirement.

The valuation assumptions included in the Actuarial Section were adopted by the Retirement Board based on the June 30, 2012 Experience Analysis or in conjunction with the June 30, 2013 actuarial valuation. Note that the investment return assumption was developed without taking into consideration the impact of the Board's policy of utilizing excess earnings to

provide contribution offsets and additional settlement and non-statutory benefits.² It is our opinion that the assumptions used in the June 30, 2015 valuation produce results, which, in aggregate, reflect the future experience of the Plan. An experience analysis is performed every three years and the actuarial assumptions adopted by the Board resulting from the experience analysis performed as of June 30, 2012 first became effective in the valuation as of June 30, 2013.³

In the June 30, 2015 valuation, the ratio of the valuation assets to actuarial accrued liabilities (funded percentage) increased from 78.4% to 80.7%. The aggregate employer rate has increased from 51.53% of payroll to 52.02% of payroll, while the aggregate member rate has increased from 9.40% to 9.41% of payroll.

Under the actuarial value of assets method, the total unrecognized net investment losses as of June 30, 2015 are \$61.3 million. These net investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, and will offset any investment gains that may occur after June 30, 2015. This implies that if the Association earns the assumed net rate of investment return of 7.25% per year on a market value basis, it will result in investment losses on the actuarial value of assets in the next few years. So, if the actual market return is equal to the assumed 7.25% rate and all other actuarial assumptions are met, the contribution requirements would increase in each of the next few years.

The net deferred losses of \$61.3 million represent 1.5% of the market value of assets as of June 30, 2015. Unless offset by future investment gains or other favorable experience, the recognition of the \$61.3 million market losses is expected to have an impact on the Association's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:

- If the net deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 80.7% to 79.4%.
- If the net deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 52.0% to about 53.4% of payroll.

² It should be noted that under the Board's interest crediting policy, the balance of \$649.0 million (negative) in the Contra Tracking Account has to be fully restored before any excess earnings can be utilized in the future to provide any of the above offsets and benefits.

³ Earlier this year, the Board adopted the new actuarial assumptions recommended in our review of demographic (non-economic) and economic assumptions reports, both dated March 10, 2016. Those assumptions will be applied in the next valuation as of June 30, 2016.

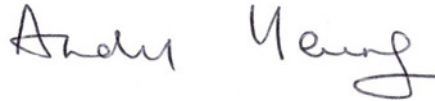
Board of Retirement
Fresno County Employees' Retirement Association
November 18, 2016

The undersigned are members of the American Academy of Actuaries and meet the qualification requirements to render the actuarial opinion contained herein.

Sincerely,



Paul Angelo, FSA, MAAA, FCA, EA
Senior Vice President & Actuary



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

JAC/bbf
Enclosures

Summary of Actuarial Assumptions and Methods

The Entry Age Normal Actuarial Cost Method was used in conjunction with the following actuarial assumptions. The Unfunded Actuarial Accrued Liability (UAAL) established as of the June 30, 2003 valuation is being amortized over a declining 30-year period with 18 years remaining as of June 30, 2015. Any new UAAL established on each subsequent valuation after June 30, 2003, as a result of actuarial gains or losses and changes in actuarial assumptions is amortized over a separate 15-year declining period. The increase in UAAL due to benefit improvements is amortized over 30 years for periods ending through June 30, 2010, and is 15 years for all periods thereafter. The following interest rate assumptions along with the post retirement and pre-retirement demographic experiences are based on the Plan's actuarial experience through June 30, 2015. The actuarial valuation report as of June 30, 2015, was approved and adopted by the Fresno County Employees' Retirement Association (FCERA) Board of Retirement (the Board) on December 15, 2015.

1. Investment Rate of Return 7.25% per annum
2. Interest Credited to Employee Accounts Nominal rate of 3.00% per annum, compounded semiannually
3. Inflation 3.25% per annum
4. Salary Scale:
 - General Members Salary increases range from 4.75% to 10.75% based on years of service (merit ranges from 1.00% to 7.00%; plus 3.25% inflation plus 0.50% "across the board" salary increase)
 - Safety Members Salary increases range from 5.25% to 10.75% based on years of service (merit ranges from 1.50% to 7.00%; plus 3.25% inflation plus 0.50% "across the board" salary increase)
5. Asset Valuation Smoothed market value
6. Spouses and Dependents: 75% of male active members and 55% of female active members assumed married at retirement, with wives assumed three years younger than husbands
7. Rates of Termination of Employment 0.00% to 17.00%, depending on age, gender, and service classification
8. Years of Life Expectancy After Retirement:

Summary of Actuarial Assumptions and Methods continued

	<ul style="list-style-type: none"> General Members: 	RP – 2000 Combined Healthy Mortality with Scale AA to 2015, set back one year for males and two years for females
	<ul style="list-style-type: none"> Safety Members: 	RP - 2000 Combined Healthy Mortality with Scale AA to 2015, set back one year
9.	Years of Life Expectancy After Disability:	RP - 2000 Combined Healthy Mortality set forward six years (males) and five years (females) for General members, and forward one year for Safety members
10.	Life Expectancy After Retirement for Employee Contribution Rate Purposes:	
	<ul style="list-style-type: none"> General Members: 	RP - 2000 Combined Healthy Mortality with Scale AA to 2015, set back one year for males and two years for females, weighted 35% male and 65% female for members and 65% male and 35% female for beneficiaries
	<ul style="list-style-type: none"> Safety Member: 	RP - 2000 Combined Healthy Mortality with Scale AA to 2015, set back one year weighted 80% male and 20% female
11.	Reciprocity Assumption	40% of General members and 65% of Safety members who terminate with a vested benefit are assumed to enter a reciprocal system
12.	Vested Terminations	Varies by age and years of service
13.	Service and Disability Retirements	Varies by tier of membership and by age
14.	Gains & Losses	18 years (declining) for UAAL established as of June 30, 2003 plus 15 years (declining) for UAAL and change in actuarial assumptions established on each subsequent valuation. The increase in UAAL due to benefit improvements is amortized over 30 years for periods ended June 30, 2010 and 15 years for all periods thereafter.

Note: Information compiled from Actuarial Report prepared by Segal Consulting as of June 30, 2015. Please refer to page 32 for the latest actuarial valuation methods.

Active Member Data

Schedule of Active Member Valuation Data

Valuation Date	Plan Type	Number	Annual Payroll (in thousands)	Average Monthly Salary	% Increase in Average Salary
6/30/2006 ¹	General	6,699	\$ 315,031	\$ 3,919	5.7%
	Safety	987	61,239	5,170	7.4%
	Total	7,686	\$ 376,270	4,080	4.8%
6/30/2007	General	6,837	\$ 339,368	4,136	5.3%
	Safety	965	64,908	5,605	7.8%
	Total	7,802	\$ 404,276	4,318	7.5%
6/30/2008 ²	General	6,787	\$ 355,992	4,371	5.4%
	Safety	953	68,091	5,954	5.9%
	Total	7,740	\$ 424,083	4,566	5.7%
6/30/2009	General	6,489	\$ 351,233	4,511	3.1%
	Safety	918	71,286	6,471	8.0%
	Total	7,407	\$ 422,519	4,754	4.1%
6/30/2010	General	6,134	\$ 342,741	4,656	3.1%
	Safety	812	66,120	6,786	4.6%
	Total	6,946	\$ 408,861	4,905	3.2%
6/30/2011	General	5,996	\$ 337,646	4,693	0.8%
	Safety	767	61,330	6,663	-1.8%
	Total	6,763	\$ 398,976	4,916	0.2%
6/30/2012 ³	General	5,900	\$ 307,416	4,342	-8.1%
	Safety	777	58,180	6,240	-6.8%
	Total	6,677	\$ 365,596	4,563	-7.2%
6/30/2013 ⁴	General	6,020	\$ 309,356	4,282	-1.4%
	Safety	846	60,723	5,981	-4.3%
	Total	6,866	\$ 370,079	4,492	-1.6%
6/30/2014	General	6,130	\$ 312,663	4,250	-0.8%
	Safety	838	61,111	6,077	1.6%
	Total	6,968	\$ 373,774	4,470	-0.5%
6/30/2015	General	6,159	\$ 322,735	4,367	2.7%
	Safety	842	61,040	6,041	-0.6%
	Total	7,001	\$ 383,775	4,568	2.1%

¹ New benefit tier effective September 2005.

² New benefit tier effective December 2007.

³ New benefit tier effective June 2012.

⁴ New benefit tier effective January 2013.

Please see Note 1 Description of the Plan-Benefit Provisions page 25 to 26.

Source: Segal Consulting Actuarial Valuation Reports dated June 30, 2006 through 2015.

Retiree Payroll & Funding Progress

Schedule of Retirants and Beneficiaries Added to and Removed From Retiree Payroll

(Dollars in Thousands)

Year	Number at Beginning of Year	Number Added to Payroll	Allowances Added	Number Removed From Payroll	Allowances Removed	Number at End of Year	Annual Allowance (in thousands)	Percent Increase in Annual Allowance	Average Annual Allowance (in thousands)	Percent Increase/ (Decrease) in Average Annual Allowance
2005-06	4,401	316	N/A	107	N/A	4,610	\$ 120,230	5.12%	\$ 26	0.35%
2006-07	4,610	315	N/A	146	N/A	4,779	130,568	8.60%	27	4.75%
2007-08	4,779	400	N/A	149	N/A	5,030	142,136	8.86%	28	3.44%
2008-09	5,030	393	\$ 7,370	140	\$ 1,051	5,283	154,794	8.91%	29	3.68%
2009-10	5,283	378	8,182	152	1,356	5,509	169,338	9.40%	31	4.91%
2010-11	5,509	414	9,022	154	1,827	5,769	180,063	6.33%	31	1.53%
2011-12	5,769	525 ¹	10,794	146	2,033	6,148	193,320	7.36%	31	0.74%
2012-13	6,148	397	8,249	142	2,132	6,403	210,654	8.97%	33	4.64%
2013-14	6,403	368	7,584	145	1,885	6,626	222,155	5.46%	34	1.91%
2014-15	6,626	367	7,972	150	1,871	6,843	229,053	3.11%	33	-0.18%
2015-16	6,843	339	7,606	147	2,064	7,035	237,950	3.88%	34	1.05%

¹ Number Added to Payroll in Year 2011-12 has been revised to tie to the Number at End of Year and to reconcile with the Schedule of Membership reported in the Notes to the Financial Section in the 2011-2012 CAFR.

Source: Schedule provided by FCERA.

Schedule of Funding Progress

(Dollars in Thousands)

Actuarial Valuation Date	Valuation Value of Assets (VVA) (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c) ⁽¹⁾	UAAL as a Percentage of Covered Payroll [(b) - (a)]/(c)
2005-06	\$ 2,398,454	\$ 2,803,990	\$ 405,536	85.5%	\$ 376,270	107.8%
2006-07	2,610,269 ⁽²⁾	3,149,570	539,301	82.9%	404,277	133.4%
2007-08	2,812,423	3,429,990	617,567	82.0%	424,083	145.6%
2008-09	2,864,956	3,644,743	779,787	78.6%	422,519	184.6%
2009-10	2,983,044	4,092,464	1,109,420	72.9%	408,861	271.3%
2010-11	3,114,483	4,237,961	1,123,478	73.5%	398,976	281.6%
2011-12	3,305,045	4,345,402	1,040,357	76.1%	365,596	284.6%
2012-13	3,518,982	4,694,780	1,175,798	75.0%	370,079	317.7%
2013-14	3,824,221	4,876,754	1,052,533	78.4%	373,774	281.6%
2014-15	4,092,647	5,074,333	981,686	80.7%	383,775	255.8%

Source: Schedule provided by Segal Consulting.

¹ Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of retirement benefits are included.

² After decreasing assets by \$3,169 for a net overpayment of member contributions discounted to June 30, 2007.

Actuarial Analysis

Schedule of Analysis of Financial Experience

(Dollars in Thousands)

Changes to UAAL	2015
1 Unfunded actuarial accrued liability at beginning of year	\$ 1,052,533
2 Total Normal Cost payable at middle of year ⁽¹⁾	108,399
3 Expected administrative expenses	4,111
4 Expected employer and member contributions ⁽²⁾	(232,250)
5 Interest (full year on (1) plus half year on (2)+(3)+(4))	72,477
6 Expected unfunded actuarial accrued liability at end of year	1,005,270
7 Actuarial (gain)/loss due to all changes:	
<u>Experience (gain)/loss</u>	
a. Gain from investment return	\$ (2,341)
b. Loss from actual contributions less than expected ⁽³⁾	15,459
c. Gain from lower than expected salary increases	(41,010)
d. Gain from lower than expected COLA increases	(36,749)
e. Loss from greater number of retirements than expected	25,693
f. Loss from reclassification of 1,419 members in the new ARRIVOS pension administration system	10,306
g. Other experience losses	5,058
h. Subtotal	(23,584)
7 Actual unfunded actuarial accrued liability at end of year (6) + (7h)	\$ 981,686

⁽¹⁾ Excludes administrative expense load.

⁽²⁾ Includes contributions toward administrative expenses.

⁽³⁾ Contribution loss from payroll increase less than expected offset somewhat by the contributions gain from one-year delay in implementing lower contribution rates recommended in June 30, 2014 valuation.

Changes to UAAL	2014
1 Unfunded actuarial accrued liability at beginning of year	\$ 1,175,798
2 Total Normal Cost payable at middle of year	110,342
3 Actual employer and member contributions	(195,463)
4 Interest (full year on (1) plus half year on (2)+(3))	82,160
5 Expected unfunded actuarial accrued liability at end of year ⁽¹⁾	1,172,837
6 Actuarial (gain)/loss due to all changes:	
<u>Experience (gain)/loss</u>	
a. Gain from investment return	\$ (60,779)
b. Lower than expected salary increases	(33,580)
c. Lower than expected COLA increases	(50,981)
d. Loss from member reclassification made by Association	44,514
e. Gain from restatement of the balance in the Retiree Health Benefit Reserve (Section 9)	(10,503)
f. Other experience gains	(8,975)
g. Subtotal	(120,304)
7 Actual unfunded actuarial accrued liability at end of year (5) + (6g)	\$ 1,052,533

⁽¹⁾ Includes a contribution loss of about \$54.3 million due to the one-year lag in implementation of the contribution rates determined in the June 30, 2013 valuation and the payment of the UAAL contributions based on lower than expected payroll.

Actuary Solvency

Solvency Test

(Dollars in Thousands)

Valuation Date	Actuarial Accrued Liabilities (AAL) for				Portion of Accrued Liabilities Covered by Reported Assets		
	(1) Active Member Contributions ^(a)	(2) Vested, Retirants and Beneficiaries	(3) Active Members Employer Financed	Valuation Value of Assets (VVA)	(1) Active Member Contributions	(2) Vested, Retirants and Beneficiaries	(3) Active Members Employer Financed
June 30, 2006	\$ 301,758	\$ 1,515,599	\$ 986,633	\$ 2,398,454	100%	100%	59%
June 30, 2007	330,610	1,710,524	1,108,436	2,610,269 (b)	100%	100%	51%
June 30, 2008	335,820	1,895,024	1,199,146	2,812,423	100%	100%	48%
June 30, 2009	356,159	2,055,024	1,233,560	2,864,956	100%	100%	37%
June 30, 2010	370,623	2,365,220	1,356,621	2,983,044	100%	100%	18%
June 30, 2011	379,029	2,486,960	1,371,972	3,114,483	100%	100%	18%
June 30, 2012	385,537	2,731,606	1,228,259	3,305,045	100%	100%	15%
June 30, 2013	398,888	2,961,186	1,334,706	3,518,982	100%	100%	12%
June 30, 2014	412,209	3,142,414	1,322,131	3,824,221	100%	100%	20%
June 30, 2015	427,130	3,347,346	1,299,857	4,092,647	100%	100%	24%

(a) Equal to the total balance (in market value) of the reserve account maintained for member contributions.

(b) After decreasing assets by \$3,169 for a net overpayment of member contributions discounted to June 30, 2007.

Source: Information provided by Segal Consulting.

Probability of Occurrence

Probabilities of Separation from Active Service

(Current Assumptions)

Age	Total Terminations	Ordinary Death ¹	Total Disability ²
General Members – Male			
20	0.05500	0.00000	0.00010
30	0.04900	0.00040	0.00020
40	0.03880	0.00090	0.00040
50	0.03540	0.00150	0.00280
60	0.03100	0.00470	0.00780
General Members – Female			
20	0.05000	0.00000	0.00010
30	0.05000	0.00020	0.00020
40	0.04200	0.00050	0.00100
50	0.03350	0.00110	0.00190
60	0.03000	0.00360	0.00440
Safety Members – Male			
20	0.03750	0.00000	0.00010
30	0.03300	0.00040	0.00240
40	0.02200	0.00090	0.00620
50	0.01000	0.00150	0.01020
60	0.00400	0.00470	0.03000
Safety Members – Female			
20	0.03750	0.00000	0.00010
30	0.03300	0.00020	0.00240
40	0.02200	0.00050	0.00620
50	0.01000	0.00120	0.01020
60	0.00400	0.00410	0.03000

¹ All pre-retirement deaths are assumed to be non-service connected.

² One-third of General disabilities are assumed to be duty disabilities. The other two-third are assumed to be ordinary disabilities. 100% of Safety disabilities are assumed to be duty disabilities.

Note: Information compiled from Actuarial Report prepared by Segal Consulting dated June 30, 2015. Assumptions for separation from active service are based on combined tiers with the exception of service retirement.

Probability of Occurrence continued

Probabilities of Separation from Active Service

(Current assumptions)

Age	Service Retirement
General Tier 1 - Male	
50	0.04000
55	0.08000
60	0.25000
65	0.40000
70	1.00000
General Tier 1 - Female	
50	0.05000
55	0.09000
60	0.19000
65	0.40000
70	1.00000
General Tier 2 - Male and Female	
50	0.03000
55	0.08400
60	0.15000
65	0.35000
70	1.00000
General Tier 3 - Male and Female	
50	0.03000
55	0.08400
60	0.19200
65	0.43300
70	1.00000
General Tier 4 - Male and Female	
50	0.02000
55	0.04000
60	0.09000
65	0.25000
70	1.00000
General Tier 5 - Male and Female	
50	0.00000
55	0.03500
60	0.08500
65	0.24000
70	1.00000
Safety Tiers 1 and 2 - Male and Female	
50	0.06000
55	0.40000
60	0.50000
65	1.00000
Safety Tiers 4 and 5 - Male and Female	
50	0.04000
55	0.20000
60	0.50000
65	1.00000

Note: Information compiled from Actuarial Report prepared by Segal Consulting dated June 30, 2015.
Assumptions for separation from active service are based on combined tiers with the exception of service retirement.

Probability of Occurrence continued

Proportion of Withdrawals from Active Service

(Current assumptions)

Years of Service	Refunds	Deferred Vested
0	90.00%	10.00%
1	90.00%	10.00%
2	90.00%	10.00%
3	90.00%	10.00%
4	90.00%	10.00%
5	30.00%	70.00%
6	30.00%	70.00%
7	30.00%	70.00%
8	30.00%	70.00%
9	30.00%	70.00%
10	30.00%	70.00%
11	30.00%	70.00%
12	30.00%	70.00%
13	30.00%	70.00%
14	30.00%	70.00%
15	15.00%	85.00%
16	15.00%	85.00%
17	15.00%	85.00%
18	15.00%	85.00%
19	15.00%	85.00%
20 or more	15.00%	85.00%

Note: Probability of refunds by age are not available. Refunds are more closely associated with years of service. Information compiled from Actuarial Report prepared by Segal Consulting dated June 30, 2015.

Probability of Occurrence continued

Years of Life Expectancy after Service Retirement

(Current Assumptions)

Age	Years of Life Expectancy
General Members - Male	
50	32.70
60	23.40
70	15.10
80	8.30
90	3.80
100	1.90
110	1.50
General Members - Female	
50	35.80
60	26.40
70	17.90
80	10.80
90	5.50
100	3.10
110	1.80
Safety Members - Male	
50	32.70
60	23.40
70	15.10
80	8.30
90	3.80
100	1.90
110	1.50
Safety Members - Female	
50	34.80
60	25.50
70	17.10
80	10.20
90	5.10
100	2.90
110	1.70

Probability of Occurrence continued

Years of Life Expectancy after Disability Retirement

(Current assumptions)

Age	Years of Life Expectancy	
General Members	Male	Female
20	55.00	58.30
30	45.20	48.40
40	35.60	38.70
50	26.20	29.10
60	17.50	20.30
70	10.20	12.80
80	4.90	6.80
90	2.30	3.50
100	1.50	2.10
110	1.30	1.40
Safety Members	Male	Female
20	59.90	62.30
30	50.10	52.40
40	40.40	42.60
50	30.80	32.90
60	21.70	23.70
70	13.70	15.60
80	7.20	9.00
90	3.30	4.50
100	1.70	2.70
110	1.50	1.60

Note: Information provided by Segal Consulting.

Summary of Major Plan Provisions

1. ELIGIBILITY

First day of pay period following date of employment in an eligible position.

2. DEFINITION OF SALARY

- Tiers 1 and 2
Highest one-year average compensation earnable.
- Tiers 3 and 4
Highest three-year average compensation earnable.
- Tier 5
Highest consecutive three years of pensionable compensation.

3. SERVICE RETIREMENT

Benefit Level

- Tier 1
 - General offers 2.5% at age 55, California Government Code § 31676.12, 31676.14 and 31627.
 - Safety offers 2.5% at age 50, California Government Code § 31664 and 31627.
- Tier 2
 - General offers 2% at age 55, California Government Code § 31676.16.
 - Safety offers 2.29% at age 50, California Government Code § 31664.2.
- Tier 3
 - General offers 2% at age 55, California Government Code § 31676.15.
- Tier 4
 - General offers 1.49% at age 55, California Government Code § 31676.1.
 - Safety offers 2% at age 50, California Government Code § 31664.
- Tier 5
 - General offers 1% at age 52, California Government Code § 7522.20(a).
 - Safety offers 2% at age 50, California Government Code § 7522.25(d).

Summary of Major Plan Provisions continued

Eligibility

- Early retirement
 - Tiers 1, 2, 3, and 4 - Age 50 with 10 years of service, or any age with 30 years of service for General, or any age with 20 years of service for Safety.
 - Tier 5 – Age 52 with 5 years of service for General or age 50 with 5 years of service for Safety
- Benefit Adjustments
 - General and Safety Tier 1
 - Reduced for retirement before age 55 and age 50, respectively.
 - Increased for retirement after age 55 and age 50, respectively.
 - Maximum benefit for retirement at or after age 60 and age 55, respectively.
 - General Tiers 2 and 3
 - Reduced for retirement before age 55.
 - Increased for retirement after age 55.
 - Maximum benefit for retirement at or after age 62 or age 65, respectively.
 - Safety Tier 2
 - Reduced for retirement before age 50.
 - Increased for retirement after age 50.
 - Maximum benefit for retirement at or after age 55.
 - General and Safety Tier 4
 - Reduced for retirement before age 61 $\frac{1}{4}$, General only.
 - Increased for retirement after age 61 $\frac{1}{4}$ and age 50, respectively.
 - Maximum benefit for retirement at or after age 65 or age 55, respectively.
 - General and Safety Tier 5
 - Reduced for retirement before age 62.
 - Maximum benefit for retirement at or after age 67 or age 57, respectively.

4. DISABILITY RETIREMENT

- Non-service connected

1.5% for General Tiers 1, 2, 4, and 5, 1.8% General Tier 3; and 1.8% for Safety of final average salary per year of service, with a maximum of 33.33% if projected service is used (age 65 for General Tiers 1, 2, 4, and 5, age 65 for Tier 3; age 55 for Safety), or service retirement benefit (if eligible).

Summary of Major Plan Provisions continued

- Service-connected

Greater of 50% of final average salary or service retirement benefit (if eligible)

5. DEATH BEFORE RETIREMENT

- Refund of contributions plus 1/12th of monthly salary per year of service, maximum of six months' salary.
- If eligible for non-service connected disability or service retirement, eligible beneficiary will receive 60% of member's accrued allowance.
- If service-connected, beneficiary will receive 50% of final compensation or 100% of service retirement, if eligible.

6. DEATH AFTER RETIREMENT

- Service retirement or non-service connected disability; eligible beneficiary will receive 60% of member's allowance.
- Service disability, eligible beneficiary will receive 100% of member's allowance.

7. VESTING

- After five years of service.
- Must leave contributions on deposit.

8. MEMBERS' CONTRIBUTIONS

Tiers 1, 2, 3, and 4 - Based on entry age.

Tier 5 – Flat rate as determined by valuation.

9. COST OF LIVING

Maximum 3% COLA for members enrolled in Tiers 1, 2, and 3. No COLA for members enrolled in Tier 4 or 5.

Note: Information for the Summary of Major Plan Provisions was compiled from the Actuarial Report prepared by Segal Consulting dated June 30, 2014.

STATISTICAL SECTION



Statistical Information and Fiduciary Net Position

STATISTICAL SECTION INFORMATION

This section contains additional comparative information in order to provide a more detailed understanding of the financial statements, note disclosures and supplementary information. The financial trend information displayed on the following pages is intended to show how FCERA's financial position has changed over a period of time, including changes of plan net position, revenues and expenses, retiree benefit information and membership history.

Table of Changes in Fiduciary Net Position

Last Ten Fiscal Years

(Dollars in Thousands)

	2012	2013	2014	2015	2016
Additions					
Employer Contributions	\$ 157,869	\$ 158,572	\$ 165,309	\$ 184,213	\$ 191,529
Member Contributions	32,627	30,516	30,154	33,110	35,212
Net Investment Income/(Loss)	(10,242)	378,483	583,169	406	(4,258)
Total Additions	180,254	567,571	778,632	217,729	222,483
Deductions¹					
Total Benefit Expenses	\$ 193,535	\$ 210,745	\$ 222,289	\$ 229,115	\$ 238,028
Refunds	1,786	2,211	2,103	2,282	2,203
Administrative Expenses	3,597	3,634 ²	3,542	4,297	4,814
Other	N/A	42 ²	21	45	61
Total Deductions	198,918	216,632	227,955	235,739	245,106
Change in Fiduciary Net Position	\$ (18,664)	\$ 350,939	\$ 550,677	\$ (18,010)	\$ (22,623)

	2007	2008	2009	2010	2011
Additions					
Employer Contributions	\$ 69,997	\$ 97,305	\$ 113,959	\$ 126,138	\$ 130,290
Member Contributions	33,528	30,272	34,562	32,209	31,293
Net Investment Income/(Loss)	442,355	(186,911)	(451,499)	341,439	605,422
Total Additions	545,880	(59,334)	(302,978)	499,786	767,005
Deductions¹					
Total Benefit Expenses	\$ 131,480	\$ 143,072	\$ 155,783	\$ 169,526	\$ 180,363
Refunds	2,114	6,072	2,077	1,915	2,044
Administrative Expenses	3,298	3,569	3,855	3,570	4,108
Other	N/A	N/A	N/A	N/A	N/A
Total Deductions	136,892	152,713	161,715	175,011	186,515
Change in Fiduciary Net Position	\$ 408,988	\$ (212,047)	\$ (464,693)	\$ 324,775	\$ 580,490

¹ See page 103 for detailed information on Benefit and Refund deductions by type.

² Restated as defined in Government Code Section 31580.2, excludes Information Technology expenses.

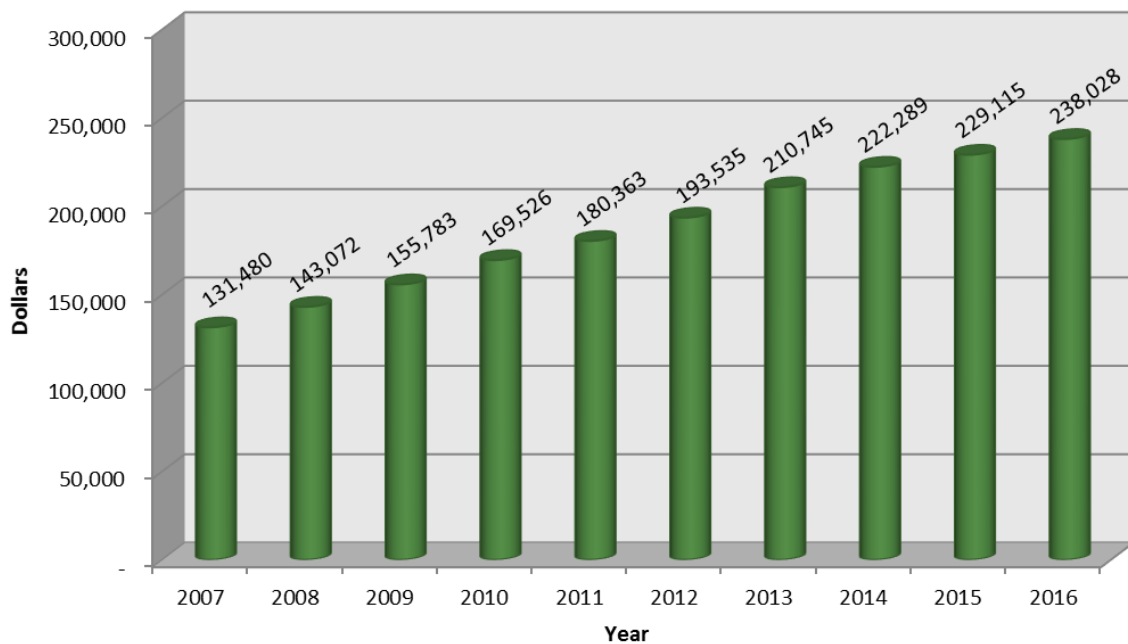
Retired Members

Schedule of Benefit Expenses by Type

Last Ten Fiscal Years

(Dollars in Thousands)

YEAR-END	SERVICE		SURVIVOR		DISABILITIES		TOTAL ¹
	GENERAL	SAFETY	GENERAL	SAFETY	GENERAL	SAFETY	
2007	\$ 100,807	\$ 20,542	\$ 1,369	\$ 446	\$ 3,952 ²	\$ 4,364 ²	\$ 131,480
2008	110,819	21,074	1,312	459	4,489	4,919	143,072
2009	120,975	23,014	1,398	470	4,771	5,155	155,783
2010	131,465	24,758	1,392	536	5,015	6,360	169,526
2011	139,412	26,584	1,548	703	5,655	6,461	180,363
2012	151,022	28,698	1,899	741	4,883	6,292	193,535
2013	165,066	31,343	1,971	994	5,241	6,130	210,745
2014	173,829	33,021	2,004	1,200	5,411	6,824	222,289
2015	179,054	34,516	2,298	1,426	5,314	6,507	229,115
2016	185,490	36,201	2,498	1,432	5,230	7,177	238,028



¹ Total Benefit Expenses are the actual expenses paid and will not equal Total Average Annual Benefits reported on page 96 .

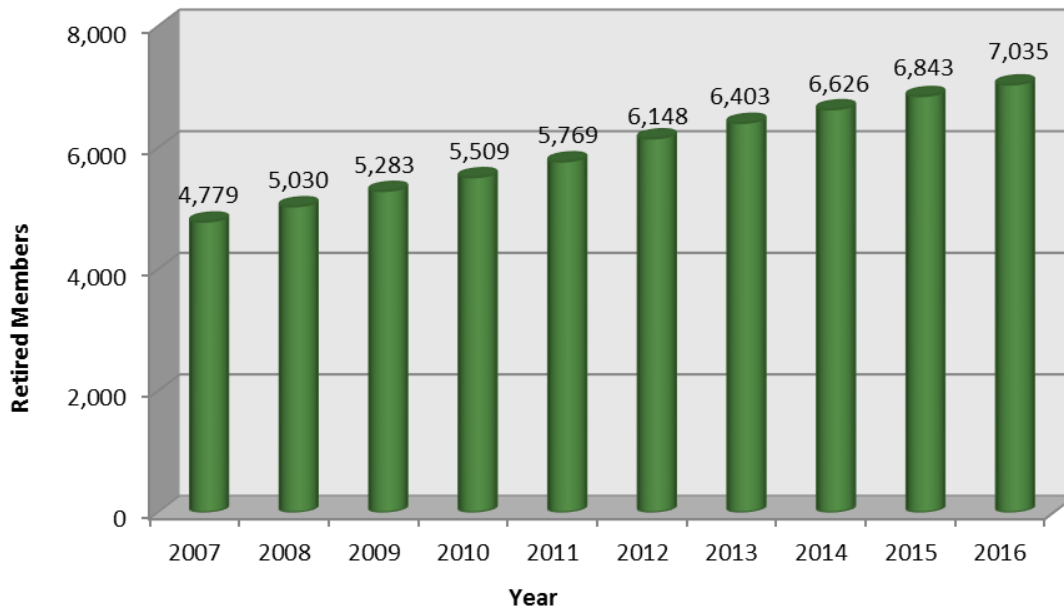
² Effective fiscal year ended June 30, 2007, Disability Benefit Expenses are reported separately from Service Retirement Benefit Expenses.

Retired Members continued

Schedule of Retired Members by Type of Retirement

Last Ten Fiscal Years

YEAR-END	GENERAL	SAFETY	SURVIVOR	TOTAL
2007	4,094	591	94	4,779
2008	4,303	631	96	5,030
2009	4,519	663	101	5,283
2010	4,705	702	102	5,509
2011	4,937	733	99	5,769
2012	5,276	772	100	6,148
2013	5,498	805	100	6,403
2014	5,687	841	98	6,626
2015	5,874	872	97	6,843
2016	6,036	901	98	7,035



Source: Schedule provided by FCERA

Retired Members continued

Schedule of Average Annual Benefit and Membership Distribution of Retired Members

Last Ten Fiscal Years

Valuation Date	Plan Type	Annual ² Number	Total Average ¹		Annual Average Benefits	Average Monthly Benefits	% Change in Average Benefits	
				Annual Benefits				
6/30/2006	General	4,020	\$	97,474,788	\$	24,247	4.4%	
	Safety	559		21,225,900		3,164	-3.2%	
	Total	4,579	\$	118,700,688		2,160	3.7%	
6/30/2007	General Tier 1	4,224	\$	106,296,432		25,165	2,097	3.8%
	General Tier 2	2		69,984		34,992	2,916	N/A
	Safety Tier 1	605		23,674,392		39,131	3,261	3.1%
	Total	4,831	\$	130,040,808		26,918	2,243	3.8%
6/30/2008	General Tier 1	4,405	\$	116,801,232		26,516	2,210	5.4%
	General Tier 2	2		72,600		36,300	3,025	3.7%
	Safety Tier 1	639		26,198,856		41,000	3,417	4.8%
	Total	5,046	\$	143,072,688		28,354	2,363	5.3%
6/30/2009	General Tier 1	4,481	\$	128,267,304		28,625	2,385	7.9%
	General Tier 2	-		-		-	-	N/A
	Safety Tier 1	672		28,448,568		42,334	3,528	3.3%
	Total	5,153	\$	156,715,872		30,413	2,534	7.3%
6/30/2010	General Tier 1	4,908	\$	137,157,624		27,946	2,329	-2.4%
	General Tier 2	5		151,680		30,336	2,528	N/A
	General Tier 3	1		39,480		39,480	3,290	N/A
	Safety Tier 1	722		31,247,496		43,279	3,607	2.2%
	Total	5,636	\$	168,596,280		29,914	2,493	-1.6%
6/30/2011	General Tier 1	5,118	\$	145,020,096		28,335	2,361	1.4%
	General Tier 2	5		124,080		24,816	2,068	-18.2%
	General Tier 3	2		42,960		21,480	1,790	-45.6%
	Safety Tier 1	762		33,218,904		43,594	3,633	0.7%
	Total	5,887	\$	178,406,040		30,305	2,525	1.3%
6/30/2012	General Tier 1	5,425	\$	160,482,984		29,582	2,465	4.4%
	General Tier 2	5		127,740		25,548	2,129	2.9%
	General Tier 3	2		44,208		22,104	1,842	2.9%
	Safety Tier 1	803		36,393,984		45,323	3,777	4.0%
	Total	6,235	\$	197,048,916		31,604	2,634	4.3%
6/30/2013	General Tier 1	5,536	\$	167,842,464		30,318	2,527	2.5%
	General Tier 2	5		130,380		26,076	2,173	2.1%
	General Tier 3	3		59,988		19,996	1,666	-9.5%
	Safety Tier 1	819		37,731,336		46,070	3,839	1.6%
	Total	6,363	\$	205,764,168		32,338	2,695	2.3%
6/30/2014	General Tier 1	5,707	\$	177,666,204		31,131	2,594	2.7%
	General Tier 2	8		260,352		32,544	2,712	24.8%
	General Tier 3	6		98,388		16,398	1,367	-18.0%
	Safety Tier 1	849		40,128,876		47,266	3,939	2.6%
	Total	6,570	\$	218,153,820		33,205	2,767	2.7%
6/30/2015	General Tier 1	5,918	\$	188,340,180		31,825	2,652	2.2%
	General Tier 2	11		329,076		29,916	2,493	-8.1%
	General Tier 3	9		116,892		12,988	1,082	-20.8%
	Safety Tier 1	901		42,943,056		47,662	3,972	0.8%
	Total	6,839	\$	231,729,204	\$	33,883	\$	2,824

¹ Total Average Annual Benefits will not equal the Actual Total Benefit Expenses reported on page 94.

² Total Annual Membership provided by the Actuary will not equal the Actual Membership reported on page 95.

Note: See page 97 for information organized by years of credited service in five year increments.

Retired Members continued

Note: Effective with fiscal year ended June 30, 2007 the schedule has been expanded to display membership by benefit tier.

Schedule of Average Benefit Payments by Years of Credited Service

Last Ten Fiscal Years

Retirement Effective Date	Years of Credited Service						
	0-4	5-9	10-14	15-19	20-24	25-29	30 and over
Period 7/1/2014 to 6/30/2015							
Average monthly benefit	\$654	\$1,242	\$1,974	\$3,483	\$3,412	\$4,967	\$5,549
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	18	52	66	70	36	46	35
Period 7/1/2013 to 6/30/2014							
Average monthly benefit	\$747	\$1,033	\$1,743	\$2,704	\$3,528	\$4,867	\$6,666
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	4	25	84	56	45	37	40
Period 7/1/2012 to 6/30/2013							
Average monthly benefit	\$1,064	\$1,341	\$2,038	\$3,268	\$4,072	\$4,714	\$5,842
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	10	27	46	24	43	21	41
Period 7/1/2011 to 6/30/2012							
Average monthly benefit	\$331	\$1,327	\$1,972	\$2,795	\$3,605	\$5,141	\$6,031
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	7	47	89	60	90	50	65
Period 7/1/2010 to 6/30/2011							
Average monthly benefit	\$699	\$1,489	\$1,847	\$2,881	\$3,140	\$5,237	\$5,703
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	16	47	63	57	58	29	40
Period 7/1/2009 to 6/30/2010							
Average monthly benefit	\$706	\$1,144	\$1,860	\$2,996	\$3,793	\$4,692	\$5,674
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	18	44	69	46	54	39	58
Period 7/1/2008 to 6/30/2009							
Average monthly benefit	\$539	\$1,116	\$1,772	\$2,643	\$3,746	\$4,489	\$5,937
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	11	51	75	59	50	34	54
Period 7/1/2007 to 6/30/2008							
Average monthly benefit	\$502	\$1,365	\$1,865	\$2,668	\$3,280	\$4,657	\$6,170
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	15	27	52	62	42	41	54
Period 7/1/2006 to 6/30/2007							
Average monthly benefit	\$332	\$967	\$1,525	\$2,235	\$2,642	\$4,266	\$5,325
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	7	26	58	47	33	33	51
Period 7/1/2005 to 6/30/2006							
Average monthly benefit	\$474	\$846	\$1,754	\$2,531	\$2,518	\$4,146	\$4,841
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	10	34	59	65	31	28	40

Notes: N/A means that information is not available.

Average final average salary is not available at this time due to system constraints.

Source: Information provided by The Segal Consulting.

Active and Deferred Members

Schedule of Active and Deferred Members

Last Ten Fiscal Years

Date	Plan Type	Active Vested	Active Nonvested	Total Active Members	Deferred Members
6/30/2007	General	4,707	2,108	6,815	1,465
	Safety	723	284	1,007	133
	Total	5,430	2,392	7,822	1,598
6/30/2008	General	4,596	2,133	6,729	1,466
	Safety	725	232	957	139
	Total	5,321	2,365	7,686	1,605
6/30/2009	General	4,476	1,967	6,443	1,403
	Safety	718	204	922	130
	Total	5,194	2,171	7,365	1,533
6/30/2010	General	4,536	1,568	6,104	1,379
	Safety	733	79	812	136
	Total	5,269	1,647	6,916	1,515
6/30/2011	General	4,581	1,374	5,955	1,325
	Safety	732	37	769	126
	Total	5,313	1,411	6,724	1,451
6/30/2012	General	4,605	1,259	5,864	1,289
	Safety	709	71	780	126
	Total	5,314	1,330	6,644	1,415
6/30/2013	General	4,653	1,346	5,999	1,131
	Safety	691	151	842	132
	Total	5,344	1,497	6,841	1,263
6/30/2014	General	4,417	1,674	6,091	1,264
	Safety	641	192	833	137
	Total	5,058	1,866	6,924	1,401
6/30/2015	General	4,134	1,997	6,131	1,293
	Safety	624	214	838	144
	Total	4,758	2,211	6,969	1,437
6/30/2016	General	4,009	2,369	6,378	1,314
	Safety	597	323	920	143
	Total	4,606	2,692	7,298	1,457

Note: Effective with fiscal year ended June 30, 2007, Deferred Members column is classified between General and Safety.

Participating Employers

Schedule of Principal Participating Employers

Current Year and Nine Years Ago

Participating Employers	2016			2007		
	Covered Employees	Rank	Percentage of Covered Employees	Covered Employees	Rank	Percentage of Covered Employees
County of Fresno	6,784	1	92.96%	7,730	1	98.82%
Superior Court of California-County of Fresno ¹	475	2	6.51%	-	N/A	0.00%
Fresno-Madera Area Agency on Aging	22	3	0.30%	35	3	0.45%
Clovis Veterans Memorial District	10	4	0.14%	5	5	0.06%
Fresno Mosquito and Vector Control District	7	5	0.10%	8	4	0.10%
North Central Fire Protection District ²	-	-	0.00%	44	2	0.56%
Total	7,298		100.00%	7,822		100.00%

¹ On December 11, 2011 the Superior Court of California-County of Fresno separated from the County of Fresno as a separate employer group.

² North Central Fire Protection District withdrew active membership from the Retirement Plan as of August 31, 2007.

Participating Employers and Active Members

Schedule of Participating Employers and Active Members

Last Ten Fiscal Years

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
County of Fresno										
General Members	5,864	5,704	5,641	5,533	5,376	5,912	6,059	6,395	6,681	6,762
Safety Members	920	837	833	842	780	769	812	922	957	968
Total	6,784	6,541	6,474	6,375	6,156	6,681	6,871	7,317	7,638	7,730
Participating Agencies (General Members)										
Clovis Veterans Memorial District	10	9	7	9	8	8	8	9	8	5
Fresno Mosquito and Vector Control District	7	5	6	5	5	5	6	8	7	8
Fresno-Madera Area Agency on Aging	22	24	25	26	28	30	31	31	33	35
North Central Fire Protection	-	-	-	-	-	-	-	-	-	5
Superior Court of California-County of Fresno ¹	475	390	412	426	447	-	-	-	-	-
Total	514	428	450	466	488	43	45	48	48	53
Participating Agencies (Safety Members)										
North Central Fire Protection	-	-	-	-	-	-	-	-	-	39
Total	0	0	0	0	0	0	0	0	0	39
Total Active Members										
General Members	6,378	6,131	6,091	5,999	5,864	5,955	6,104	6,443	6,729	6,815
Safety Members	920	838	833	842	780	769	812	922	957	1,007
Total	7,298	6,969	6,924	6,841	6,644	6,724	6,916	7,365	7,686	7,822

Note: North Central Fire Protection District withdrew active membership from the Retirement Plan as of August 31, 2007.

¹ On December 11, 2011 the Superior Court of California-County of Fresno disassociated from the County of Fresno to become a separate employer group.

Employers' Contribution Rates

Schedule of Employers' Contribution Rates

Last Ten Fiscal years

Effective Dates			General					Safety				Actuarial Report for Year Ended
			Tier 1	Tier 2	Tier 3 ¹	Tier 4 ³	Tier 5 ⁴	Tier 1	Tier 2	Tier 4 ³	Tier 5 ⁴	
July 1, 2015	to	June 30, 2016	50.80%	48.09%	47.38%	38.15%	37.36%	74.56%	74.20%	59.37%	57.87%	6/30/2014
July 1, 2014	to	June 30, 2015	51.07%	48.27%	47.33%	38.17%	37.48%	74.79%	74.26%	59.02%	57.41%	6/30/2013
July 1, 2013	to	June 30, 2014	44.99%	42.86%	41.64%	33.88%	32.70%	67.17%	67.21%	54.15%	51.76%	6/30/2012
July 1, 2012	to	June 30, 2013 ⁵	43.03%	41.15%	39.71%	31.87%	30.77%	65.06%	63.86%	51.42%	48.92%	6/30/2011
July 1, 2011	to	June 30, 2012	41.03%	38.78%	37.42%	N/A	N/A	61.25%	60.26%	N/A	N/A	6/30/2010
July 1, 2010	to	June 30, 2011	31.47%	29.48%	28.08%	N/A	N/A	47.40%	46.24%	N/A	N/A	6/30/2009
July 1, 2009	to	June 30, 2010	27.82%	25.64%	24.36%	N/A	N/A	42.19%	41.21%	N/A	N/A	6/30/2008
July 1, 2008	to	June 30, 2009	26.71%	24.86%	22.86%	N/A	N/A	38.56%	35.84%	N/A	N/A	6/30/2007
July 1, 2007	to	June 30, 2008	23.36%	21.15% ²	21.80%	N/A	N/A	31.34%	29.37%	N/A	N/A	6/30/2006
July 1, 2006	to	June 30, 2007	18.37%	N/A	N/A	N/A	N/A	20.76%	N/A	N/A	N/A	6/30/2005

¹ New benefit tier effective December 2007.

² Includes a correction to the rate reported at June 30, 2008.

³ New benefit tier effective June 2012.

⁴ New benefit tier effective January 1, 2013.

⁵ Includes a correction to the rates reported at June 30, 2013.

Note: As of fiscal year ended June 30, 2008, rates are displayed by benefit tiers.

Retired Members by Type of Benefit

Schedule of Retired Members by Type of Benefit

As of June 30, 2016

Monthly Benefit Amount	Members Receiving a Benefit	Type of Retirement ¹							Option Selected ²					
		1	2	3	4	5	6	7	U	1	2	3	4	D
\$1 - 500	552	291	3	153	64	6	4	31	392	19	116	11	4	10
501 - 1,000	844	637	32	7	91	31	1	45	604	40	156	22	5	17
1,001 - 1,500	999	777	46	8	113	24	1	30	751	60	137	44	-	7
1,501 - 2,000	819	666	31	17	72	11	2	20	621	59	109	20	3	7
2,001 - 3,000	1,326	1,111	22	55	115	6	4	13	1,041	104	133	38	4	6
3,001 - 4,000	879	755	4	47	65	4	1	3	704	70	77	18	7	3
4,001 - 5,000	556	523	-	11	19	2	1	-	461	24	52	17	1	1
5,001 - 6,000	398	378	1	5	14	-	-	-	335	21	39	2	1	-
Over 6,000	662	642	-	5	13	-	-	2	579	23	50	6	2	2
Totals	7,035	5,780	139	308	566	84	14	144	5,488	420	869	178	27	53

Notes:

¹ Type of Retirement

- 1 = Normal retirement
- 2 = Non-service connected disability
- 3 = Service connected disability
- 4 = Beneficiary payment - normal retirement
- 5 = Survivor non-service connected disability
- 6 = Survivor service connected disability
- 7 = Ex spouse

² Option Selected:

U = Unmodified: Eligible Surviving Spouse receives 60% continuance.

The following options reduce the retired member's monthly benefit:

- 1 = Beneficiary receives funds remaining in member's account.
- 2 = Beneficiary receives 100% continuance of member's reduced monthly benefit.
- 3 = Beneficiary receives 50% continuance of member's reduced monthly benefit.
- 4 = Multiple beneficiaries receive a continuance calculated by Retirement Board's actuary.
- D = Beneficiary receives disability retirement continuance for eligible active member death.

Benefits and Refund Deductions

Schedule of Benefits and Refund Deductions from Fiduciary Net Position by Type

Last Ten Fiscal Years

(Dollars in Thousands)

Type of Benefit	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Service Benefits										
General	\$ 100,807	\$ 110,819	\$ 120,975	\$ 131,465	\$ 139,412	\$ 151,022	\$ 165,066	\$ 173,829	\$ 179,054	\$ 185,490
Safety	20,542	21,074	23,014	24,759	26,584	28,698	31,343	33,021	34,516	36,201
Service Connected Disability¹										
General	2,178	2,278	2,447	2,746	3,321	2,787	3,208	3,214	3,164	3,385
Safety	4,212	4,763	4,999	6,211	6,309	6,138	6,016	6,718	6,340	7,067
Non-Service Connected Disability¹										
General	1,774	2,210	2,324	2,269	2,334	2,096	2,033	2,197	2,150	1,845
Safety	152	156	156	148	152	154	114	107	167	110
Non-Service Connected Disability Continuance¹										
General	923	1,000	1,070	1,118	1,188	1,276	1,383	1,421	1,705	1,764
Safety	129	133	135	139	138	139	155	162	248	236
Service Connected Disability Continuance¹										
General	136	141	142	126	183	408	496	583	593	734
Safety	317	327	335	357	442	602	839	903	1,117	1,118
Active Death Benefits²	310	171	186	188	300	215	92	134	61	78
Total Benefits	\$ 131,480	\$ 143,072	\$ 155,783	\$ 169,526	\$ 180,363	\$ 193,535	\$ 210,745	\$ 222,289	\$ 229,115	\$ 238,028
Type of Refund³										
Death	\$ 205	\$ 345	\$ 304	\$ 338	\$ 339	\$ 425	\$ 135	\$ 134	\$ 133	\$ 111
Miscellaneous - UAAL ⁴	-	4,140	13	1	-	-	-	-	-	-
Separation	1,909	1,587	1,760	1,576	1,705	1,361	2,076	1,969	2,149	2,092
Total refunds	\$ 2,114	\$ 6,072	\$ 2,077	\$ 1,915	\$ 2,044	\$ 1,786	\$ 2,211	\$ 2,103	\$ 2,282	\$ 2,203

¹ Prior to fiscal year 2007, all Disability Benefits were reported with Service Benefits.

² Prior to fiscal year 2007, Active Death Benefits included survivor continuances for service connected disability and non-service connected benefits. Beginning in 2007, survivor continuance for service connected disability and non-service connected disability benefits are reported separately.

³ Prior to fiscal year 2007, data was not available to categorize refunds.

⁴ UAAL means Unfunded Actuarial Accrued Liability.