

Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 2017

2016-2017



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, 2017

ISSUED BY

DONALD C. KENDIG, CPA
RETIREMENT ADMINISTRATOR

and

DORIS RENTSCHLER
ASSISTANT RETIREMENT ADMINISTRATOR

FCERA

FRESNO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
7772 N. Palm Ave.
FRESNO, CALIFORNIA 93711
www.FCERA.org

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

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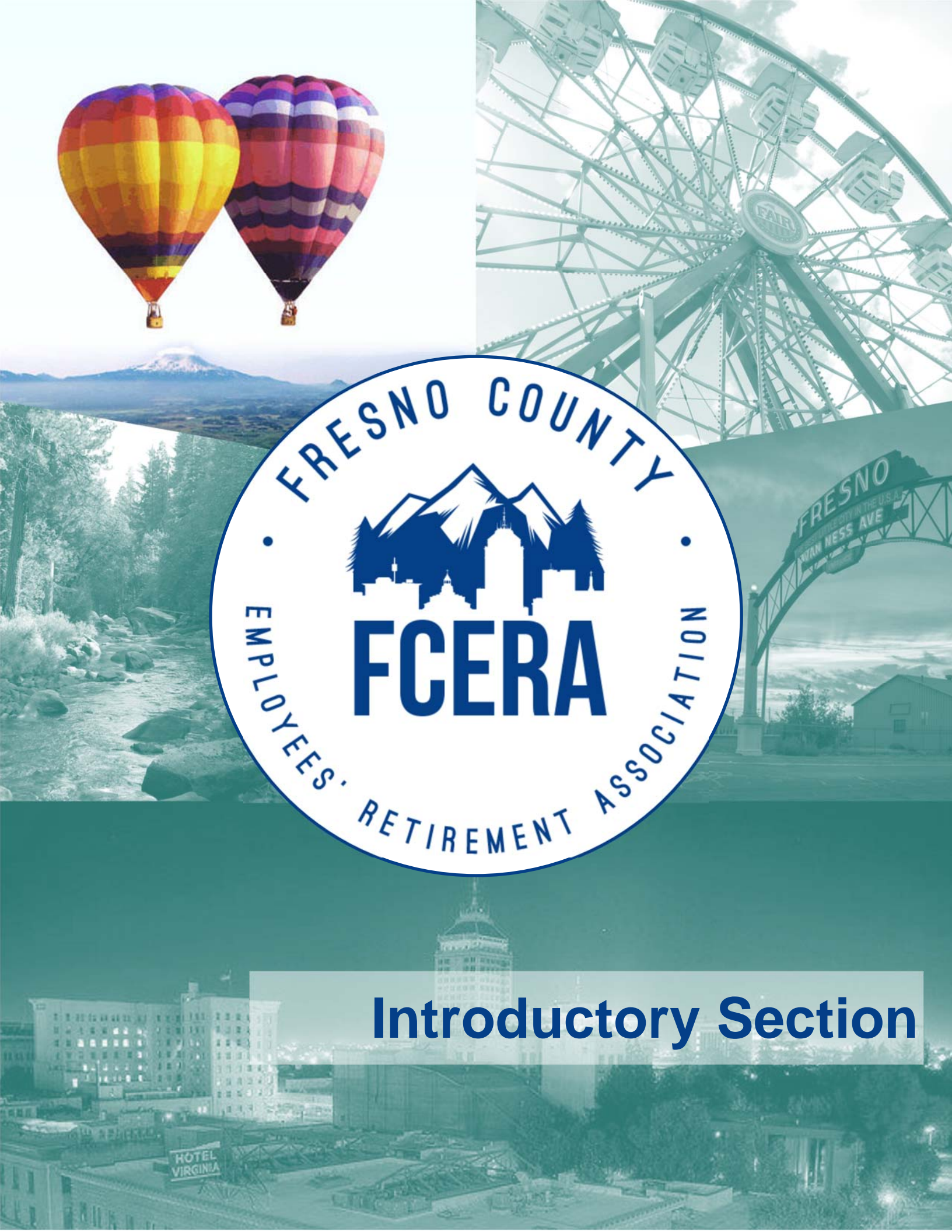
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Introductory Section



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December 6, 2017

Board of Retirement
Fresno County Employees' Retirement Association
7772 N Palm Ave
Fresno, CA 93711

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, 2017.

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 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 courteous, accurate, prompt and professional manner, while administering fund assets in a

Excellence • Professionalism • Teamwork • Integrity • Accountability • Innovation

"The County of Fresno is an Equal Employment Opportunity Employer."

Letter of Transmittal continued

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 employees, 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 11 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
- 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 courteous, accurate, prompt and professional 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

Dr. Rod Coburn, III served as Chair of the Board with Steven J. Jolly serving as Vice Chair. The Board had two changes during the fiscal year. Vicki Crow, serving as the ex-officio member, retired following the October 5, 2016 meeting and was succeeded by Oscar Garcia in time for meeting immediately following. The Board continued to have a vacancy for the Board of Supervisors member appointment during the first half of the fiscal year, until its January 18, 2017 meeting with the appointment of newly elected, Board of Supervisor Nathan Magsig. The August 2, 2017 meeting was Alan Cade, Jr.'s last meeting and a special election is underway with the partial term expiring December 31, 2018. Laura Basua will be retiring and there is an open election underway to replace her. Lastly, Gregory Baxter resigned his position after the October

Letter of Transmittal continued

4, 2017 meeting and the Clerk to the County Board of Supervisors has been notified of the vacancy.

Administration

The most significant project during the fiscal year was the sale of 1111 H Street and the construction of new offices at 7772 & 7778 North Palm Avenue. The process to sell 1111 H Street started two fiscal years earlier and was finally completed/closed on September 29, 2017. The purchase of a three office building “Forever Campus” started with the opening of escrow in April of 2016 after an extensive citywide search. The speculation related to the California High Speed Rail project appears to have inflated lease rates for prospective tenants in the downtown area; however, there were no completions substantially benefiting the appraised value of the H Street property. The elevated values made properties to the north more appealing and competitive, though. No one building seemed to have the requisite size requirements of 18,000 to 20,000 square feet, and the “Palm Bluffs” development offered the opportunity for new construction of two 9,000 square foot buildings and the acquisition of a third adjacent building for an immediate investment opportunity and a long term expansion ability, without having to relocate in fifteen to twenty years.

The Board supported a SACRS (State Association of County Retirement Systems) bill proposal that would have provided for independent operating authority, whereby FCERA could recruit and retain its own staff independent of the County. This legislation was vetoed by the Governor and it is Status Quo.

Both Doris Rentschler, the Assistant Retirement Administrator, and Patti Montoya, the Benefits Manager, and two positions directly below the Retirement Administrator have on-boarded nicely. They have hit the ground running and are making great strides in management oversight, strategic planning, and succession planning initiatives desired of the Board. This greatly enhances the administration of the Plan.

Staffing, Operations, and Benefit Delivery

During the previous fiscal year, substantial turnover and recruiting challenges resulted in the close of 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 the start of fiscal year 2017, and were reduced to just the 8:00-9:00 a.m. hour and lunch hour. The Board approved the addition of an Account Clerk in the Benefits Support Unit to serve as the “backlog buster” and “frictional vacancy filler” to address FCERA’s current backlogs in service purchases and contribution adjustments. Once the backlogs have been handled, the position can be absorbed with the next vacancy. FCERA lost a veteran, Pat Srisukwatana, to the Public Works & Planning Department and he will be sorely missed. FCERA “stole” veteran employee, Steve Mayer from the Department of Social Services.

Affecting both benefit delivery and Systems news, is the implementation of FCERA’s member web portal. Registered users are over 2,500 and growing. The members are able to request purchases of service credit, review their beneficiary and personal information, and calculate

Letter of Transmittal continued

estimated benefits.

Growing accounting and reporting requirements, and an extended vacancy in the Accounting Unit, brought to light the need to have an additional Accountant, which will help with the frictional vacancies and the increased technical nature of the accounting for investments. One additional duty in particular, will be the accounting for FCERA Realty Group LLC, the entity formed to administer the Palm Bluffs offices. I will be greatly relieved to pass along the daily accounting, monthly reporting, annual tax submissions, and periodic financial requests from various levels of government.

Systems

The association began implementation a new pension administration system in November 2014 and its implementation was technically completed November 2016. Development and design started several fiscal years earlier. 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. Staff also acquired an e-learning software package and will be developing internally and externally facing training modules to help with staff training and to enhance member self-service. The questions we can answer before they're asked, will greatly improve efficiency.

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.

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

Letter of Transmittal continued

decisions with respect to the fund, including, but not limited to, the strategic allocation of assets to various investment classes. As of June 30, 2017, the categorical targets are as follows, and remain unchanged from June 30, 2016:

	<u>2017</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% to 14%, and doubling Hedge Strategies from 4% to 8%. These changes are the results from the endeavor of the Board and Verus 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 significant 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. The board took specific actions to fund 8% of the hedge funds utilizing a fund-of-one vehicle named the Better Futures Fund (BFF) non-discretionarily advised under Grosvenor. The BFF incorporated a hub of 4% in the Grosvenor Flagship Fund, and 4% in 5 direct hedge fund investments. The Board sees this as reducing fees overall for the allocation and gaining direct access to the best ideas in the space.

The Board also initiated actions to retain Hamilton Lane as its discretionary private equity investment management advisor, anticipated to be fully operational during the 4th quarter of 2017 greatly enhancing FCERA's ability to build out its private equity allocation. On the same token, the Board initiated actions to retain Carlyle as its discretionary private credit investment management advisor, anticipated to be fully operational by the end of 2017 with the same enhanced results. FCERA has underperformed its SACRS peers as of late and some of this is due to not yet having the private assets fully committed and invested.

The Board terminated Kalmar for operational concerns and selected a PIMCO Stocks Plus Fund where PIMCO invests in a passive growth stocks index for the beta, and then actively invests in bonds for the plus (or alpha).

FCERA's cash overlay program has been working well and the Board, shortly after the close of the fiscal year approve the holding of up to \$150,000,000 in the County's Treasury Pool, as

Letter of Transmittal continued

opposed to Northern trust, so that FCERA could earn a current margin of about 100 basis points annually, while taking on very little additional risk.

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, 2016, completed by Segal Consulting, determined that the ratio of plan assets to plan liabilities was 78.2%, based on a valuation value of assets, which represented a decrease over the same ratio on June 30, 2015, of 80.7%. 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, 2016 actuarial valuation, the Board adopted an assumed rate of return of 7.00%, gross of administration and net of investment expenses for FY2017. The Board also adopted a 3.00% inflation rate, down from 3.25% the previous valuation. 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 7.00% is considered an actuarial loss, and actuarial gains are not realized until after 7.00% has been exceeded.

BUDGET

The first part of our mission is to *administer the retirement benefits for the members and beneficiaries in a courteous, accurate, prompt and professional 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 2017-18 Proposed Administrative Budget.

For fiscal year ended June 30, 2017, administrative expenses of \$4,762,253 represented 0.09% of the accrued actuarial liability of the plan of \$5,472,149,000. 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, 2016, on page 10 of the Introductory Section, which marks twenty 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 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



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, 2016

Executive Director/CEO

The Board of Retirement As of June 30, 2017



CHAIRMAN
ROD COBURN, III, DDS
Appointed by Board of Supervisors
Present term expires December 31, 2017



VICE CHAIRMAN
STEVEN JOLLY
Appointed by Board of Supervisors
Present term expires upon appointment



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
OSCAR J. GARCIA, CPA
Auditor-Controller/Treasurer-Tax Collector
Ex-Officio Trustee



MEMBER
ROBERT DOWELL
Elected by Retirees
Present term expires December 31, 2019



MEMBER
EULALIO GOMEZ
Elected by Safety Members
Present term expires December 31, 2017



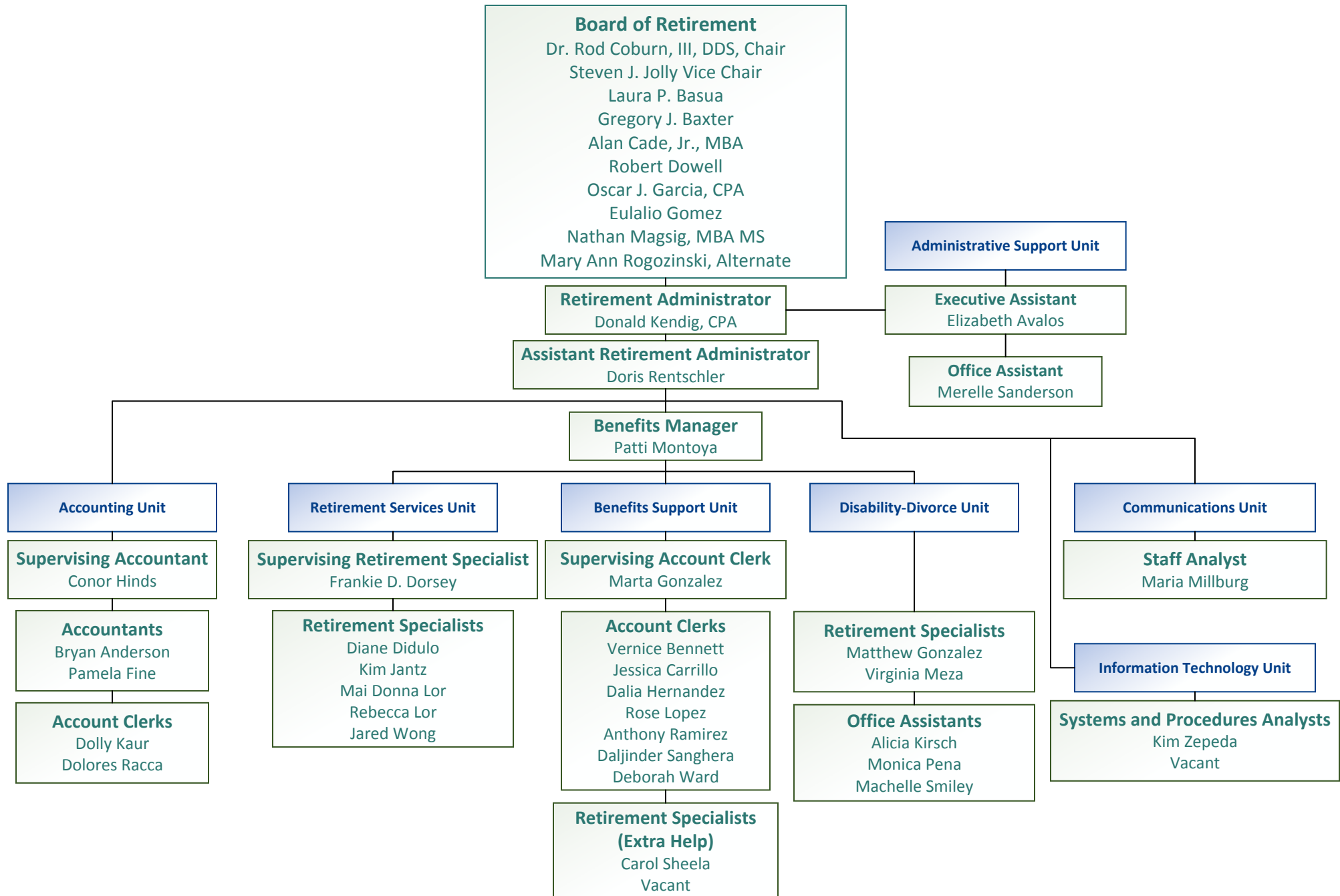
MEMBER
NATHAN MAGSIG, MBA, MS
Appointed by Board of Supervisors
Present term expires upon appointment



ALTERNATE RETIRED MEMBER
MARY ANN ROGOZINSKI
Alternate Retired Member - Elected by Retirees
Present term expires December 31, 2019

Administrative Organizational Chart

At June 30, 2017



List of Professional Consultants

CONSULTING SERVICES

Actuary

- Segal Consulting

Auditor

- Brown Armstrong Accountancy Corporation

Commission Recapture Services

- Cowen (previously Convergenx)

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

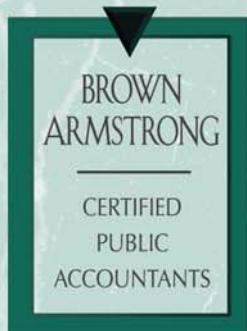
- Tegrity Group

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.

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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, 2017, 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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STOCKTON OFFICE

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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, 2017, 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.

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 Governmental Accounting Standards Board (GASB), who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on FCERA's basic financial statements. The other supplementary information and the 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 6, 2017, 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, 2016, financial statements, and our report dated December 9, 2016, 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, 2016, 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 6, 2017

Management's Discussion and Analysis as of June 30, 2017

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, 2017 and 2016. 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 2017 totaled \$4.4 billion (net position restricted for pension benefits), an increase of \$397.7 million, or 9.9% from 2016, primarily as a result of the net appreciation 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, 2017, were \$652.4 million, which includes employer and employee contributions of \$234.7 million, investment income of \$417 million, and net securities lending income of \$525 thousand.
- Employer contributions increased from \$191.5 million in fiscal year 2016 to \$198.4 million in fiscal year 2017 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, 2016.
- Plan member contributions increased for fiscal year 2017 when compared to 2016, mainly due to an increase in contributions rates resulting from the effect of changes in the actuarial assumptions. For fiscal years 2017 and 2016, plan member contributions were \$36.3 and \$35.2 million, respectively.
- Total deductions, as reflected in the Statement of Changes in Fiduciary Net Position, increased from \$245.1 million to \$254.7 million over the prior year, or approximately 3.9%, mainly attributed to the pension payroll. Benefits paid to retirees and beneficiaries increased from \$238.0 million in 2016 to \$247.5 million in 2017, or approximately 4.0%. 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, 2016, the date of FCERA's last actuarial valuation, the funded ratio for FCERA was 78.2%. In general, this indicates that for every dollar of projected benefits due FCERA has approximately \$0.78 to cover its obligation.
- The global economy improved over fiscal year ended June 2017. FCERA's investment portfolio earned 10.2% return net of fees across its major asset classifications with

Management's Discussion and Analysis as of June 30, 2017 continued

domestic equity returning 18%, international equity assets returned 17.8%, while the fixed income portfolio returned 4.4%, real estate returned 7.6%, Infrastructure returned 12.4%, hedge funds returned 8.1%, commodities returned -8.7%, private equity and private credit returned 9.4% and 7.2%, respectively.

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.

Management's Discussion and Analysis as of June 30, 2017 continued

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 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, 2017, FCERA has \$4.4 billion in net position restricted for pension benefits, which means that assets of \$4.5 billion exceed operational liabilities of \$53.3 million. At June 30, 2016, 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, 2017, the net position restricted for pension benefits increased by 9.9% compared to 2016, 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 \$10.4 million to \$10.8 million (net of accumulated depreciation and amortization). The investment in capital assets includes the administrative building, pension administration system, servers, equipment, and furniture. The total increase in FCERA's investment in capital assets from 2016 to 2017 was 4.0%. Escrow deposits into a construction in progress account for the purchase of the new FCERA campus buildings are the primary reason for the increase in capital assets at June 30, 2017 when compared to capital assets at June 30, 2016.

Management's Discussion and Analysis as of June 30, 2017 continued

FCERA follows the California Government Code Section 31580.2 that states that expenses for software, hardware, and computer technology consulting services in support of the computer products shall not be a cost of the administration of the retirement system. During fiscal year 2017, FCERA's expenses for software, hardware, and computer technology consulting services decreased to \$448,016 from \$822,725 in fiscal year 2016, primarily due to completion of the pension administration system and termination of the consulting services used during the implementation of the system.

Net Position Restricted for Benefits

As of June 30, 2017 and 2016

(Dollars in Thousands)

	2017	2016	% Change 2017-2016
Current Assets	\$ 389,787	\$ 341,933	14.0%
Investments	4,059,989	3,890,142	4.4%
Capital Assets, net	10,793	10,379	4.0%
Total Assets	4,460,569	4,242,454	5.1%
Total Liabilities	53,347	232,958	-77.1%
Net Position Restricted for Benefits	\$ 4,407,222	\$ 4,009,496	9.9%

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, on a strong and successful investment program, risk management, and strategic planning.

FCERA's Activities

Changes in FCERA's Fiduciary Net Position

For the Fiscal Years ended June 30, 2017 and 2016

(Dollars in Thousands)

	2017	2016	% Change 2017-2016
Employer Contributions	\$ 198,472	\$ 191,529	3.6%
Plan Member Contributions	36,259	35,212	3.0%
Net Investment Income /(Loss)	417,156	(5,178)	8156.3%
Net Securities Lending Income	525	920	-42.9%
Total Additions	652,412	222,483	193.2%
Pension Benefits	247,491	238,028	4.0%
Refunds	2,356	2,203	6.9%
Administrative	4,762	4,814	-1.1%
Other	77	61	26.2%
Total Deductions	254,686	245,106	3.9%
Change in net position	\$ 397,726	\$ (22,623)	1858.1%

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, 2017 and 2016, totaled income of \$417.2 million and losses of \$5.2 million, respectively.

By year-end, total additions were \$652.4 million, a substantial increase over 2016 of 193.2%, due primarily to investment income rather than losses in the previous year. The Investment Section of this report reviews the result of investment activity for the year ended June 30, 2017.

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, 2017, totaled \$254.7 million, an increase of 3.9% over June 30, 2016. The increases are mostly attributed to the growth in the number and 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 the greater of either of the following: (1) twenty-one hundredths of one percent (0.21%) of the

Management's Discussion and Analysis as of June 30, 2017 continued

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 2017 Technology Budget was amended to increase appropriations by \$399,700 with the transfer of excludable IT expenditures from the Administrative Budget into the Technology Budget and an increase of \$20,000 for computer equipment in the new offices. 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, 2017, was \$5.71 billion resulting from an increase of 3.1 percent from \$5.54 billion as of June 30, 2016. FCERA's Net Pension Liability as of June 30, 2017, was \$1.3 billion, representing a *decrease* of 14.8 percent from \$1.5 billion as of June 30, 2016. This \$227 million decrease in liabilities is primarily as a result of the net annual investment return of 10.2 percent which was above the assumed rate of 7.00%.

GASB Statement No. 67 requires reporting the Fiduciary Net Position as a percentage of the Total Pension Liability. For the fiscal years ended June 30, 2017 and 2016, and the Fiduciary Net Position as a percentage of the Total Pension Liability is reported as 77.14 percent and 72.34 percent respectively. While growth in the Total Pension Liability at 2017 increased by \$171 million, or 3.1 percent, from 2016, FCERA's Net Pension Liability decreased due to the increase in Fiduciary Net Position of \$397.7 million, which results in a more favorable financial position at June 30, 2017, when compared to June 30, 2016.

Net Pension Liability

As of June 30, 2017 and 2016

(Dollars in Thousands)

	2017	2016	\$ Change 2017-2016	% Change 2017-2016
Total Pension Liability	\$ 5,713,539	\$ 5,542,506	\$ 171,033	3.1%
Less: Fiduciary Net Position	(4,407,222)	(4,009,496)	(397,726)	9.9%
Net Pension Liability	\$ 1,306,317	\$ 1,533,010	\$ (226,693)	-14.8%
Fiduciary Net Position as a Percentage of Total Pension Liability	77.14%	72.34%		6.6%

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
7772 N. Palm Avenue
Fresno, CA 93711

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Doris Rentschler", written in a cursive style.

Doris Rentschler
Assistant Retirement Administrator
December 11, 2017

Basic Financial Statements

Statement of Fiduciary Net Position

As of June 30, 2017, with Comparative Totals

(Dollars in Thousands)

	2017	2016
Assets		
Cash and cash equivalents with fiscal agents	\$ 316,739	\$ 94,407
Securities lending investments pool:		
Short-term investments	37,941	200,178
Receivables:		
Investment trades receivable	13,016	26,812
Interest and dividends receivable	14,001	13,077
Administrative receivable	13	82
Contributions receivable	7,943	6,969
Securities lending receivable	62	133
Total Receivables	35,035	47,073
Investments, at fair value:		
Domestic and international fixed income	1,437,449	1,633,551
Domestic and international equities	1,631,672	1,525,931
Private equity	375,323	333,127
Real estate	211,086	183,049
Hedge funds	315,964	146,819
Private credit	88,495	67,665
Total Investments	4,059,989	3,890,142
Prepaid expenses	72	275
Capital assets		
Nondepreciable	1,427	619
Depreciable, net of accumulated depreciation	9,366	9,760
Total Capital Assets, Net	10,793	10,379
Total Assets	4,460,569	4,242,454
Liabilities		
Accounts payable - purchase of investments	12,249	28,989
Cash collateral payable for securities lending	37,941	200,178
Administrative accounts payable	3,138	3,759
Securities lending bank and broker fees	19	32
Total Liabilities	53,347	232,958
Net Position Restricted for Pension Benefits	\$ 4,407,222	\$ 4,009,496

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, 2017, with Comparative Totals

(Dollars in Thousands)

	2017	2016
Additions		
Contributions:		
Employers	\$ 198,472	\$ 191,529
Plan members	36,259	35,212
Total Contributions	234,731	226,741
Investment Income/(Loss):		
From Investment Activities		
Net appreciation/(depreciation) in fair value of investments	319,119	(105,124)
Interest	51,026	48,033
Dividends	32,449	31,817
Private markets	38,704	37,305
Investment expenses	(24,608)	(17,766)
Miscellaneous income	466	557
Net investment income/(loss), before securities lending	417,156	(5,178)
From securities lending activities		
Securities lending income	723	1,220
Securities lending expenses		
Borrower rebate expenses	(31)	-
Security lending management fees	(167)	(300)
Net income from securities lending activities	525	920
Net investment income/(loss)	417,681	(4,258)
Total Additions	652,412	222,483
Deductions		
Benefits paid to plan members and beneficiaries	247,491	238,028
Refunds of member contributions	2,356	2,203
Administrative expenses	4,762	4,814
Other	77	61
Total deductions	254,686	245,106
Change in Net Position	397,726	(22,623)
Net Position Restricted for Pension Benefits		
Beginning of Year	4,009,496	4,032,119
End of Year	\$ 4,407,222	\$ 4,009,496

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, 2017

	2017
Active Members	
Vested	4,569
Non-Vested	2,782
Total Active Members	7,351
Retired Members	7,240
Terminated Vested (Deferred)	1,519
Terminated Non-Vested	1,943
Total Membership	18,053

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

Notes to the Basic Financial Statements: Note 1 continued

and, depending on the date of retirement, may include cost of living benefits, supplemental 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, 2017, 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 2017 compensation limits used to determine contribution amounts for Tier 5 members are \$118,775 for members covered by Social Security and \$142,530 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 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 .94% and employee's share is .16% 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

There were no new accounting standards issued by the Governmental Accounting Standards Board (GASB) that were implemented by FCERA during the fiscal year ended June 30, 2017.

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 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 pages 65, 66, and 67.

Notes to the Basic Financial Statements: Note 2 continued

	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%
Global Bonds	7%	0.41%
Bank Loans	5%	2.34%
TIPS	4%	0.41%
Emerging Market Debt	5%	4.52%
Real Estate	5%	4.48%
Commodities	3%	4.14%
Infrastructure	3%	3.80%
Hedge Funds	8%	4.40%
Private Credit	8%	7.70%
Private Equity	6%	9.00%
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 financial statement reporting purposes. The components of FCERA's net pension liability at June 30, 2017, are disclosed on the following schedule and on page 33.

Net Pension Liability

As of June 30, 2017

(Dollars in Thousands)

	2017
Total pension liability	\$ 5,713,539
Less: Fiduciary net position	(4,407,222)
Net pension liability	\$ 1,306,317
Fiduciary net position as a percentage of the total pension liability	77.14%

The measurement date of the net pension liability was determined at June 30, 2017. 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, 2016.

Notes to the Basic Financial Statements: Note 2 continued

The following Actuarial Assumptions were approved by the Board of Retirement in March 2017. The total Plan liability as of June 30, 2017 was re-measured by (1) revaluing the total liability as of June 30, 2016 (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, 2017 and (2) using this revalued total pension liability in rolling forward the results from June 30, 2016 to June 30, 2017:

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 0.94% to employers and 0.16% to employees.
Mortality	Various rates based on RP-2000 Mortality tables in the June 30, 2016, actuarial valuation.

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, 2017. 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, 2017.

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, 2017, 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.

Notes to the Basic Financial Statements: Note 2 continued

(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, 2017	\$2,103,213	\$1,306,317	\$653,541

Money-Weighted Rate of Return

For the fiscal year ended June 30, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 10.47%. For commentary on the overall investment performance of the Plan please see the Investment Consultant's Report on page 61. It is important to note that the Investment Consultant's Report discloses the Plan's return data using the industry standard time-weighted rate of return which will differ from the money-weighted rate of return referenced here. The money-weighted rate of return (identical in concept to Internal Rate of Return) expresses investment performance, net of investment expense, adjusted for the changing amounts (inflows and outflows) 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 and amortization expense is reported as part of administrative expense.

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 September 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. Government Code section 31580.2 provides for the adoption by the Board of Retirement an annual budget covering the entire expense of administration. This expense of administration is a direct charge against the earnings of the Plan and shall not exceed the greater of twenty-one hundredths of one percent of the accrued actuarial liability of the Plan or two million dollars (\$2,000,000), as adjusted annually by the amount of the annual cost-of-living adjustment. Government Code section 31580.2(b) provides that expenditures for software, hardware and computer technology maintenance and equipment are not considered a cost of administration and are therefore excludable from the administrative expenses. With the exclusion of the information technology costs, FCERA's administrative expenses totaled 0.09% of the accrued actuarial liability of the Plan.

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, 2017, all domestic deposits were insured, registered, and held by the custodian bank in FCERA's name. FCERA held foreign currencies deposits at June 30, 2017, with a United States Dollar value of \$2,042,000, 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, 2017.

Credit Quality Ratings of Investments in Fixed Income Securities

As of June 30, 2017

(Dollars in Thousands)

Moody's Credit Rating	2017	
	Percentage of Total Fixed Income	FCERA's Fixed Income Securities
Northern Institutional Liquid Assets Portfolio / Tier 1 Quality		\$ 37,941
Fixed Income Securities		
Aaa	9.4%	134,728
Aa	3.1%	44,041
A	13.1%	188,246
Baa	13.0%	186,159
Ba	9.9%	143,022
B	4.0%	58,134
Caa	1.1%	16,353
Ca	0.0%	76
Agency/Exempt	12.0%	172,797
NR	34.4%	493,893
Total Fixed Income Securities	100.0%	1,437,449
Total Securities Lending Pool and Fixed Income Securities		\$ 1,475,390

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, 2017.

Notes to the Basic Financial Statements: Note 3 continued

Interest Rate Risk

As of June 30, 2017

(Dollars in Thousands)

Investment Type	Remaining Maturity in Months at June 30, 2017				
	Less than 12 months	13 to 60 months	61 to 120 months	More than 120 months	
Northern Institutional Liquid Assets Portfolio	\$ 37,941	\$ 37,941	\$ -	\$ -	\$ -
Subtotal	37,941	37,941	-	-	-
U.S. Government and agencies					
U.S. Treasury notes	106,395	5,341	79,036	1,109	20,909
Federal agency securities	1,122	-	-	446	676
Subtotal	107,517	5,341	79,036	1,555	21,585
Derivatives	2,146	2,146	(696)	479	217
Domestic fixed income	289,824	24,034	84,859	123,546	57,385
Mortgages	3,393	-	-	558	2,835
Foreign fixed income	511,907	54,435	138,038	170,597	148,837
Barclays U.S. AGG Index Fund	151,024	151,024	-	-	-
Eaton Vance Bank Loans	211,853	211,853	-	-	-
TIPS Index Fund	159,785	159,785	-	-	-
Total Securities Lending Pool and Fixed Income Securities	\$ 1,475,390	\$ 646,559	\$ 301,237	\$ 296,735	\$ 230,859

At June 30, 2017, FCERA had \$103,987,931 invested in the County external investment pool, which has a dollar weighted average maturity of 2.2 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, 2017, 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, 2017 is as follows:

Notes to the Basic Financial Statements: Note 3 continued

Foreign Currency Risk

As of June 30, 2017

(Dollars in Thousands)

Currency	Fair Value 2017
Argentine Peso	\$ 285
British Pound Sterling	181
Canadian Dollar	138
Euro	389
Japanese Yen	387
Other Foreign Currencies	662
Total Foreign Currency	\$ 2,042

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, 2017. 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, 2017, FCERA has approximately \$2,802,000 of its \$1,349,107,000 international fixed income and international equity portfolio invested in such forward foreign currency and equity rights contracts.

Investment Derivatives

As of June 30, 2017

(Dollars in Thousands)

Derivative Type	2017	
	Notional Value	Fair Value
Fixed Income Futures	\$ 92,237	\$ -
Equity Futures	211,201	-
Foreign Exchange Futures	4,480	-
Credit Default Swaps	-	(429)
Forward Foreign Currency	-	2,801
Forward Foreign Swaps	-	-
Interest Rate Swaps	-	(218)
Options	-	(21)
Rights	-	13
Total	\$ 307,918	\$ 2,146

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, 2017, FCERA held \$2,184,000 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, 2017

(Dollars in Thousands)

	Aa		A		Exchange Traded		Not Rated	Total
Futures	\$	-	\$	-	\$	-	\$	-
Options		-		-		-	(21)	(21)
Rights/Warrants		-		-		-	13	13
Swaps		-		-		-	(647)	(647)
Forwards		-		-		-	2,801	2,801
	\$	-	\$	-	\$	-	\$ 2,146	\$ 2,146

At June 30, 2017, FCERA was exposed to Foreign Currency Risk related to its investments in equity rights and forward contracts denominated in foreign currencies. The table on the following page 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, 2017

(Dollars in Thousands)

Currency Name	Equities	Forward Currency Contracts		Total Exposure
		Net Receivables	Net Payables	
Argentine peso	\$ -	\$ (1,037)	\$ 1,136	\$ 99
Australian dollar	-	-	7,091	7,091
Brazilian real	-	(68,714)	45,871	(22,843)
British pound sterling	-	-	28,003	28,003
Canadian dollar	-	-	9,307	9,307
Chilean peso	-	(478)	-	(478)
Colombian peso	-	(287)	2,147	1,860
Czech koruna	-	(2,764)	4,510	1,746
Egyptian pound	-	(487)	-	(487)
Euro	11	(17,770)	20,012	2,253
HK offshore Chinese Yuan Renminbi	-	(9,783)	7,579	(2,204)
Hungarian forint	-	(363)	4,130	3,767
Indian rupee	-	(1,355)	16,554	15,199
Indonesian rupiah	-	(456)	4,203	3,747
Japanese yen	-	(14,392)	14,847	455
Malaysian ringgit	-	(1,615)	4,026	2,411
Mexican peso	-	(3,959)	10,177	6,218
New Romanian leu	-	-	716	716
New Taiwan dollar	-	(4,075)	-	(4,075)
Norwegian krone	-	-	20,366	20,366
Peruvian nuevo sol	-	(622)	673	51
Philippine peso	-	-	235	235
Polish zloty	-	(2,248)	10,783	8,535
Russian ruble	-	(626)	2,272	1,646
Singapore dollar	-	(1,065)	-	(1,065)
South African rand	-	(1,918)	1,491	(427)
South Korean won	-	(1,051)	-	(1,051)
Swedish krona	-	-	19,309	19,309
Thai baht	-	-	16,912	16,912
Turkish lira	-	-	6,299	6,299
Total	\$ 11	\$ (135,065)	\$ 258,649	\$ 123,595

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, 2017, 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, 2017

(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	\$ (429)	\$ 33	\$ (462)	\$ -	\$ -	\$ (429)
Forward Currency Contracts	2,801	2,801	-	-	-	2,801
Interest Rate Swaps	(218)	(676)	(236)	477	217	(218)
Options	(21)	(21)	-	-	-	(21)
Rights	13	9	2	2	-	13
Total	\$ 2,146	\$ 2,146	\$ (696)	\$ 479	\$ 217	\$ 2,146

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, 2017, 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, 2017 was \$37,941,129. The fair values of loaned securities are listed below:

Fair Values of Loaned Securities

As of June 30, 2017

(Dollars in Thousands)

	2017
Domestic equity	\$ 12,009
International equity	2,093
Total equity on loan	14,102
U.S. Government and agencies	-
Domestic bonds	22,027
Foreign Bonds	701
Total bonds on loan	22,728
Total equities and bonds on loan	\$ 36,830

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, 2017, FCERA had approximately \$7,118,000 in these investments.

Investment Type

As of June 30, 2017

(Dollars in Thousands)

	2017
Asset - Backed / Variable Rate Notes	\$ 923
Collateralized Mortgage Obligations	3,393
Forward Foreign Currency	2,802
Total	\$ 7,118

Fair Value Measurement

Notes to the Basic Financial Statements: Note 3 continued

FCERA follows 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

As of June 30, 2017

(Dollars in Thousands)

Investments by Fair Value Level	June 30, 2017	Quoted Prices in Active Markets	Other Observable Inputs	Unobservable Inputs
		(Level 1)	(Level 2)	(Level 3)
Domestic and International Fixed Income	\$ 908,092	\$ -	\$ 904,666	\$ 3,426
Domestic and International Equities	922,871	920,832	1,966	73
Domestic and International Commingled Funds	1,087,135	715,497	371,638	-
Real Estate	211,086	-	-	211,086
Private Equity	265,274	-	-	265,274
Private Credit	43,132	-	-	43,132
Collateral from Securities Lending	37,941	-	37,941	-
Total Investments by Fair Value Level	\$ 3,475,531	\$ 1,636,329	\$ 1,316,211	\$ 522,991
Investments Measured at Net Asset Value (NAV)				
Domestic Commingled Funds	151,024			
Private Equity	110,047			
Hedge Funds	315,964			
Private Credit	45,364			
Total Investments Measured at NAV	\$ 622,399			
Total Investments	\$ 4,097,930			

Investment Derivatives

Derivative Type

Credit Default Swaps	\$ (429)	\$ -	\$ (429)	\$ -
Forward Foreign Currency (Net Payable)	2,801	-	2,801	-
Interest Rate Swaps	(218)	-	(218)	-
Options	(21)	-	(21)	-
Rights (Equities)	13	13	-	-
Total	\$ 2,146	\$ 13	\$ 2,133	\$ -

INVESTMENTS MEASURED AT NET ASSET VALUE

As of June 30, 2017

(Dollars in Thousands)

Investments Measured at NAV	June 30, 2016	Unfunded Commitments	Frequency (if eligible)	Redemption Notice Period
Domestic Commingled Funds ¹	\$ 151,024	\$ -	Daily	1-2 days
Private Equity ²	110,047	125,918	Not Eligible	Not applicable
Private Credit ²	45,364	16,845	Not Eligible	Not applicable
Hedge Funds ³	315,964	-	Quarterly	70 days
Total Investments Measured at NAV	\$ 622,399	\$ 142,763		

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 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.

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

³ Hedge Funds – As of June 30, 2017, 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, 2017, forward foreign currency contracts receivable and payable totaled \$3,668,000 and \$2,001,000, respectively.

NOTE 5 – CAPITAL ASSETS

The following is a summary of changes in depreciable capital assets as of June 30, 2017:

Depreciable Capital Assets

As of June 30, 2017

(Dollars in Thousands)

	Balance July 1, 2016	Additions	Dispositions/ Reclassifications	Balance June 30, 2017
Capital assets, depreciable:				
Computer hardware/software	\$ 9,395	\$ 339	\$ -	\$ 9,734
Furniture and fixtures	164	-	-	164
Equipment	81	-	(18)	63
Building	2,103	-	-	2,103
Total capital assets, depreciable	11,743	339	(18)	12,064
Less accumulated depreciation for:				
Computer hardware/software	(906)	(659)	-	(1,565)
Furniture and fixtures	(153)	(2)	-	(155)
Equipment	(77)	(1)	17	(61)
Building	(847)	(70)	-	(917)
Total accumulated depreciation	(1,983)	(732)	17	(2,698)
Total capital assets, depreciated, net	\$ 9,760	(393)	(1)	\$ 9,366
Depreciation charged for the current year and included in administrative expenses totaled:		\$ 732		

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 54. 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 earnings.

The amounts and changes in reserves and designations for the year ended June 30, 2017 consist of the following:

Reserve Balances

As of June 30, 2017

(Dollars in Thousands)

	Balance July 1, 2016	Increase (Decrease) In Fiduciary Net Position	Net Transfers	Balance June 30, 2017
Reserves:				
Members' accumulated contributions	\$ 444,551	\$ 33,903	\$ (17,791)	\$ 460,663
Current service reserve	1,341,698	146,882	9,642	1,498,222
Annuity pension reserve	158,867	(26,398)	27,960	160,429
Current service pension reserve	1,243,230	(123,825)	171,006	1,290,411
Settlement annuity pension reserve	614,394	(34,526)	68,837	648,705
Settlement benefit reserve	108,361	(5,931)	7,886	110,316
Cost of living adjustment reserve	1,136,614	747	102,919	1,240,280
Supplemental cost of living reserve	159	(51)	(108)	-
Survivors' death benefit reserve	(690)	(1,325)	2,015	-
Retiree health benefit reserve	(3,416)	(1)	3,417	-
Retiree health benefit reserve (VS)	35,148	(4,590)	2,511	33,069
Contingency reserve	-	-	-	-
Designated for market stabilization	(268,665)	-	146,378	(122,287)
Undistributed earnings	-	412,841	(412,841)	-
Contra Tracking Account	(800,755)	-	(111,831)	(912,586)
Net Position Restricted for Pension Benefits	\$ 4,009,496	\$ 397,726	\$ -	\$ 4,407,222

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 \$184,253,800 for the December 31, 2016 interest-crediting period, and \$190,731,203 for the June 30, 2017, 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. The Board voted a date certain to cease payments of the supplemental cost of living reserve on August 1, 2016.

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 19.42% to 18.77% 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, 2016. The County's required contribution rate to finance the UAAL increased from 32.60% to 37.97% of payroll. There is an increase in the total required contribution rate from the prior valuation of 5.38%, from 51.36% to 56.74% 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, 2017, the Plan had capital commitments to the various partnerships, as approved by the Board, totaling \$1,340,673,000. Subsequent to June 30, 2017, FCERA funded \$1,158,493,000 of these capital commitments, with remaining unfunded commitments totaling \$208,917,000 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, 2017 through December 6, 2017, which is the date the financial statements were available to be issued. Management did not identify any subsequent events that would require disclosure.

FCERA Realty Group, LLC

There were two forces at work that drove FCERA to seek a new permanent home, first, the organization had outgrown the 1111 H Street (H Street) property many years earlier, however, the advancement of the High Speed Rail (HSR) project in downtown Fresno made the H Street property highly desirable for HSR to run its operations from. In anticipation of HSR purchasing the H Street property the Board of Retirement agreed to purchase three existing pads at the Palm Bluff business park in North Fresno.

To facilitate the purchase of the three properties FCERA created a Limited Liability Company named FCERA Realty Group, LLC. The LLC serves multiple purposes by ensuring that the office space that FCERA would eventually occupy and lease from FCERA Realty Group, LLC, would be fairly leased at market value, establishing an arm's length transaction, as well as providing additional protections against potential liabilities or loss.

The FCERA operations moved into the Palm Bluff office park and officially opened for business on Monday, October 2, 2017. At the time of this report, the second administrative building that will house the Board chambers, is finalizing construction and is expected to be occupied by December 13, 2017. The third property purchased through the LLC has been viewed as an investment and shall be leased out to a private business for long-term income generation.

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
2017	198,472,000	198,472,000	-	386,345,000	51.37%
2016	191,529,000	191,529,000	-	370,318,000	51.72%
2015	184,213,000	184,213,000	-	351,109,000	52.47%
2014	165,309,000	165,309,000	-	350,326,000	47.19%
2013	158,572,000	158,572,000	-	346,808,000	45.72%
2012	157,869,000	157,869,000	-	346,742,000	45.53%
2011	130,290,000	130,290,000	-	385,204,000	33.82%
2010	126,138,000	126,138,000	-	392,713,000	32.12%
2009	113,959,000	113,959,000	-	399,799,000	28.50%
2008	97,305,000	97,305,000	-	394,449,000	24.67%

Schedule of Investment Returns – Pension Plan

*For the Years Ended June 30, 2014 through 2017**

	2017	2016	2015	2014
Annual Money-Weighted Rate of Return, Net of Investment Expenses	10.47%	0.022%	0.021%	17.26%

*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, 2017 and June 30, 2016 by rolling forward the total pension liability information for financial reporting, as of June 30, 2016 and June 30, 2015, 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, 2015 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, 2015
Actuarial cost method	Entry age actuarial cost method
Amortization method	Level percent of payroll (3.75% payroll growth assumed).

Required Supplementary Information continued

Remaining amortization period	17 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.

Required Supplementary Information continued

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 PEPR.

Schedule of Changes in Net Pension Liability and Related Ratios

For the Years Ended June 30, 2017, 2016, 2015, 2014, and 2013*

	2017	2016	2015	2014	2013
Total pension liability					
Service cost	\$ 109,231,556	\$ 105,592,251	\$ 104,671,060	\$ 107,568,854	\$ 98,293,207
Interest	381,845,701	366,855,100	355,525,811	341,121,326	336,460,778
Change of benefit terms	-	-	-	-	-
Differences between expected and actual experience	(70,197,987)	(42,178,682)	(50,048,133)	(146,396,595)	(143,645,760)
Changes of assumptions	-	235,227,824	-	-	265,552,249
Benefit payments, including refunds of employee contributions	(249,846,894)	(240,231,254)	(231,396,472)	(224,392,602)	(212,956,631)
Other ¹	-	-	10,306,014	-	-
Net change in total pension liability	\$ 171,032,376	425,265,239	189,058,280	77,900,983	343,703,843
Total pension liability - beginning	5,542,506,355	5,117,241,216	4,928,182,936	4,850,281,953	4,506,578,110
Total pension liability - ending (a)	\$ 5,713,538,731	5,542,506,455	5,117,241,216	4,928,182,936	4,850,281,953
Fiduciary net position					
Contributions - employer	198,472,119	191,529,239	184,213,235	165,309,213	158,572,420
Contributions - employee	36,259,132	35,211,756	33,109,947	30,153,934	30,515,683
Net investment income	417,603,730	(4,319,055)	360,796	583,169,608	378,483,400
Benefit payments, including refunds of employee contributions	(249,846,894)	(240,231,354)	(231,396,472)	(224,392,602)	(212,956,631)
Administrative expenses	(4,762,253)	(4,814,003)	(4,297,090)	(3,541,682)	(3,633,683)
Other	-	-	-	(21,269)	(42,121)
Net change in fiduciary net position	397,725,834	(22,623,417)	(18,009,584)	550,677,202	350,939,068
Fiduciary net position - beginning	4,009,495,932	4,032,119,349	4,050,128,933	3,499,451,731	3,148,512,663
Fiduciary net position - ending (b)	4,407,221,766	4,009,495,932	4,032,119,349	4,050,128,933	3,499,451,731
Net pension liability - ending (a) - (b)	\$ 1,306,316,965	\$ 1,533,010,523	\$ 1,085,121,867	\$ 878,054,003	\$ 1,350,830,222
Fiduciary net position as a percentage of the total pension liability	77.14%	72.34%	78.79%	82.18%	72.15%
Covered employee payroll²	\$ 386,345,000	\$ 370,318,000	\$ 351,109,000	\$ 350,326,000	\$ 346,808,000
Net pension liability as percentage of covered employee payroll	338.12%	413.97%	309.06%	250.64%	389.50%

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.

Other Supplementary Information

Schedule of Administrative Expenses

For the Fiscal Year Ended June 30, 2017, with Comparative Totals

	2017	2016
Personnel Services		
Salaries and Benefits	\$ 2,682,121	\$ 2,531,927
Total Personnel Services	2,682,121	2,531,927
Office Expenses		
Election Expenses	8,418	-
Office Supplies and Miscellaneous Admin.	76,836	79,151
Postage	28,376	31,930
Telephone	8,615	8,371
Utilities	28,309	27,457
Total Office Expenses	150,554	146,909
Other Services and Charges		
Equipment / Furnishings	-	1,642
Insurance	130,759	132,781
Maintenance	42,864	37,763
Professional and Specialized Services	508,185	710,946
Disability Expenses	208,291	296,906
Data Processing Services	175,564	152,315
Transportation, Travel, and Education - Staff	66,573	68,454
Transportation, Travel, and Education - Board	64,655	72,658
Total Other Services and Charges	1,196,891	1,473,465
Depreciation	732,687	661,701
Total Administrative Expenses	\$ 4,762,253	\$ 4,814,002

Other Supplementary Information continued

Administrative Budget Analysis

For the Fiscal Year Ended June 30, 2017

	Approved Budget	Final Budget	Fiscal Year Expenses	Percentage Expended
Personnel Services				
Salaries	\$ 1,671,200	\$ 1,671,200	\$ 1,555,751	93.09%
Benefits	1,176,400	1,176,400	1,126,370	95.75%
Total Personnel Services	2,847,600	2,847,600	2,682,121	94.19%
Professional Services				
Actuarial ¹	200,000	200,000	57,315	28.66%
Legal Counsel	260,000	260,000	119,571	45.99%
Professional Services - Disability	215,000	215,000	208,291	96.88%
Other Professional Services	897,000	768,500	331,299	43.11%
Total Professional Services	1,572,000	1,443,500	716,476	49.63%
Travel, Transportation, and Education				
Transportation, Travel, and Education - Board	84,000	84,000	64,655	76.97%
Transportation, Travel, and Education - Staff	68,800	68,800	66,573	96.76%
Total Travel, Transportation, and Education	152,800	152,800	131,228	85.88%
Other				
Data Processing	147,000	147,000	175,564	119.43%
Depreciation	700,000	700,000	732,687	104.67%
Insurance	134,000	134,000	130,759	97.58%
Maintenance	48,000	48,000	42,864	89.30%
Office Supplies and Miscellaneous Admin.	230,200	205,200	150,554	73.37%
Total Other	1,259,200	1,234,200	1,232,428	99.86%
Capital Assets ^{2, 3}	-	-	-	N/A
Total Administrative Expenses ⁴	\$ 5,831,600	\$ 5,678,100	\$ 4,762,253	83.87%

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, 2017, with Comparative Totals

	2017	2016
Property and Equipment	\$ 847	\$ 16,013
Pension System Maintenance	76,287	44,828
Subtotal Excluded IT Expenses ¹	77,134	60,841
IT Infrastructure ²	370,882	761,884
Total Information Technology Expenses	\$ 448,016	\$ 822,725

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, 2017, with Comparative Totals

	2017	2016
Investment Manager Fees	\$ 23,698,473	\$ 16,908,492
Custodian Service Fees ²	117,250	115,000
Actuarial Valuation Fees ^{1, 2}	68,000	109,000
Due Diligence Travel	17,516	5,153
Investment Legal Fees ²	306,938	239,179
Investment Consultant Fees ²	399,925	389,173
Subtotal Investment Expenses²	24,608,102	17,765,997
Securities Lending Expenses	198,670	300,248
Total Investment and Security Lending Expenses	\$ 24,806,772	\$ 18,066,245

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, 2017, with Comparative Totals

	2017	2016
Disability Attorney Fees	\$ 77,433	\$ 69,704
Retirement Board Attorney Fees	119,571	203,826
Disability Medical, Investigation, and Copying Fees	130,858	227,202
Other Professional Expenses	95,361	220,352
Audit Fees	60,374	59,799
Actuarial Consulting Fees (non-actuary study costs)	57,315	74,654
Actuarial Valuation Fees ¹	68,000	109,000
Investment Legal Fees ¹	306,938	239,179
Custodian Service Fees ¹	117,250	115,000
Investment Consultant Fees ¹	399,925	389,173
Data Processing Fees	175,564	152,315
Total Payments to Consultants	\$ 1,608,589	\$ 1,860,204

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

September 27, 2017

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, an update on performance, and a summary of recent developments for the fiscal year ended June 30, 2017.

Investment Landscape

To begin the fiscal year, debate surrounding the potential implementation of Brexit led to the first rate cut by the Bank of England since 2009 and a significant drawdown in the Pound Sterling. The currency hit a new 31-year low relative to the U.S. dollar. Global interest rates remained near all-time lows, and negative yielding sovereign and corporate debt totaled \$11.6 trillion by the end of the third quarter. U.S. equity markets rallied with small cap stocks leading the way; the Russell 2000 Index finished up 9.0%. Information technology, up 12.9%, was the best performing sector in the S&P 500 by a large margin. Emerging market equities experienced a rebound, returning 9.0% for the quarter.

In the fourth quarter of 2016, economies around the globe experienced a pickup in headline inflation as energy prices increased. Strong performance from companies in the energy and financial sectors led to value equities outperforming growth. The Russell 1000 Value Index and Russell 1000 Growth Index returned 6.7% and 1.0%, respectively. The Federal Reserve raised interest rates at its December meeting, increasing the target federal funds rate to a range of 0.50%-0.75%. The U.S. dollar rose 6.4% on a trade-weighted basis, creating a large return gap between hedged and unhedged international exposures. The MSCI EAFE Index returned -0.7% on an unhedged basis and 7.3% hedged.

During the first quarter of 2017, the global economy exhibited a coordinated pickup in economic activity. In March, the Federal Reserve increased the target federal funds rate by 0.25%. The move resulted in the U.S. Treasury curve flattening moderately as short-term interest rates increased and long-term rates remained materially unchanged. Growth equities rebounded relative to value. The Russell 1000 Growth Index returned 8.9%, while the Russell 1000 Value Index returned 3.3%. The U.S. dollar fell 3.6% on a trade weighted basis providing a boost to unhedged international equity exposures. The MSCI EAFE Index was up 7.2% for the quarter. In emerging markets, investors benefited from stabilizing currencies and commodity prices as well as higher growth outlooks. The MSCI EM Index finished the quarter up 11.4%.

Risk assets continued to move higher over the second quarter of 2017, finishing broadly up for the fiscal year. U.S. equities benefited from strong earnings growth; the blended year-over-year growth rate for Q1 earnings of S&P 500 companies was 9.3%. In June, the Federal Reserve raised the target federal funds rate to a range of 1.00%-1.25%, and FOMC minutes revealed the committee could start unwinding the \$4.5 trillion balance sheet by the end of the calendar year. In Europe, ECB President Mario Draghi surprised markets with comments perceived as relatively

hawkish. Subsequently, the Euro appreciated 2.3% against the U.S. dollar, and developed global rates moved upward. International equities outperformed domestic equities over the quarter, with the MSCI ACWI ex U.S. Index returning 5.8% relative to 3.1% for the S&P 500 Index.

Plan Performance

The FCERA investment portfolio (“the Portfolio”) earned a 10.2% return net of fees for the fiscal year ending June 30, 2017. This return outperformed the policy index return by 220 basis points. Portfolio risk as measured by standard deviation has fallen over the last several years. For the trailing ten and seven-year periods, the Portfolio’s standard deviation was 10.8% and 8.0% respectively. However, the Portfolio’s standard deviation dropped to 5.4% over the five-year period and 5.2% over the three-year period.

The steady global upswing that occurred over the fiscal year led to strong performance from the Portfolio’s domestic and international equity, real estate, infrastructure, hedge fund, and private market assets on an absolute basis. The domestic equity portfolio returned 18.0%, however, the composite benchmark, the Russell 3000 Index, finished up 18.5%. The slight underperformance can be attributed to the underlying large cap core and small cap growth managers. In similar fashion, international equity assets returned 17.8%, underperforming the benchmark by 3.2%. The Portfolio’s international growth, international small cap, and emerging markets mandates each contributed to the underperformance. Private equity and credit produced net returns of 9.4% and 7.2% for the year, but lagged their public market benchmarks considerably; the Portfolio’s private market strategies are still experiencing “J-Curve” effects due to each portfolio’s relatively young vintage.

The Portfolio’s fixed income, real estate, infrastructure, and hedge fund assets exceeded their respective composite benchmarks over the fiscal year. The fixed income portfolio returned 4.4%, outperforming the benchmark by 6.6%. This was predominantly due to a strategic overweight to credit. The real estate composite finished up 7.7%, outperforming the benchmark by 0.8%. The infrastructure portfolio was up 12.4%, 5.5% above the benchmark. Hedge fund assets generated a return of 8.1%, beating the benchmark by 1.7%. Commodities was the only negative returning asset class in the Portfolio, down 8.7% over the fiscal year.

On an annualized basis, the Portfolio has performed well relative to the policy index. For the three-years ending June 30, 2017, the Portfolio returned 3.2%, outperforming the policy index by 0.4%. Over the five-year period, the Portfolio returned 7.6%, also outperforming the policy index by 0.4%. For the trailing ten-year period, the Portfolio returned 4.9%, while the policy index returned 4.2%. 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 2017 fiscal year, Verus worked with FCERA on a number of strategic initiatives. After a very comprehensive review process, FCERA retained two industry-leading firms to assume management of the private equity and private credit allocations. These partnerships will enable FCERA to reach the desired portfolio exposure to leading private market investments in a cost-effective and efficient manner; capital will be deployed consistently over the next three to four years. Verus worked with FCERA to hire an independent Transaction Cost Analysis provider to assist FCERA in fulfilling its fiduciary obligations to measure and monitor the trading practices of Plan investment managers. FCERA implemented a new rebalancing policy that provides a cost-effective way to keep portfolio exposures in-line with portfolio targets and aligns with rebalancing

best practices. Additionally, Verus and FCERA performed a thorough review of the Investment Policy Statement. In conjunction with members of the FCERA staff and Board, our research team continued ongoing research and due-diligence efforts by visiting with the Plan's investment managers; since the beginning of 2015, Verus has conducted 21 due-diligence visits. Lastly, Verus and FCERA reviewed the 2013 Asset-Liability Study in order to better understand the process undertaken, analysis reviewed, and conclusions made; the objective of this exercise was to prepare for the next Asset-Liability Study, which we will conduct during the 2018 fiscal year.

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, and 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 a long horizontal stroke at the end.

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.

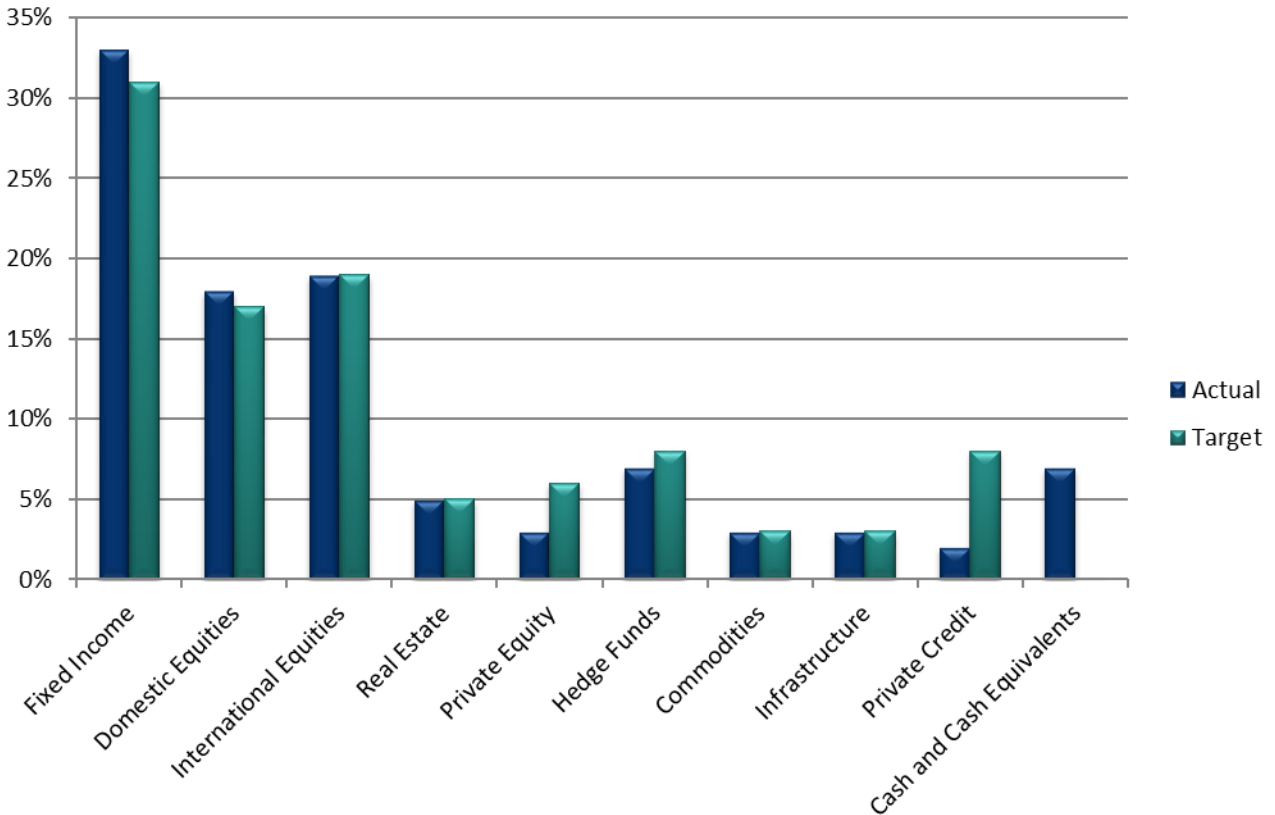
Over time, the Board implements the asset allocation plan by hiring investment managers to invest assets on behalf of the Plan, subject to investment guidelines incorporated into each firm's investment management contract.

The information provided 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

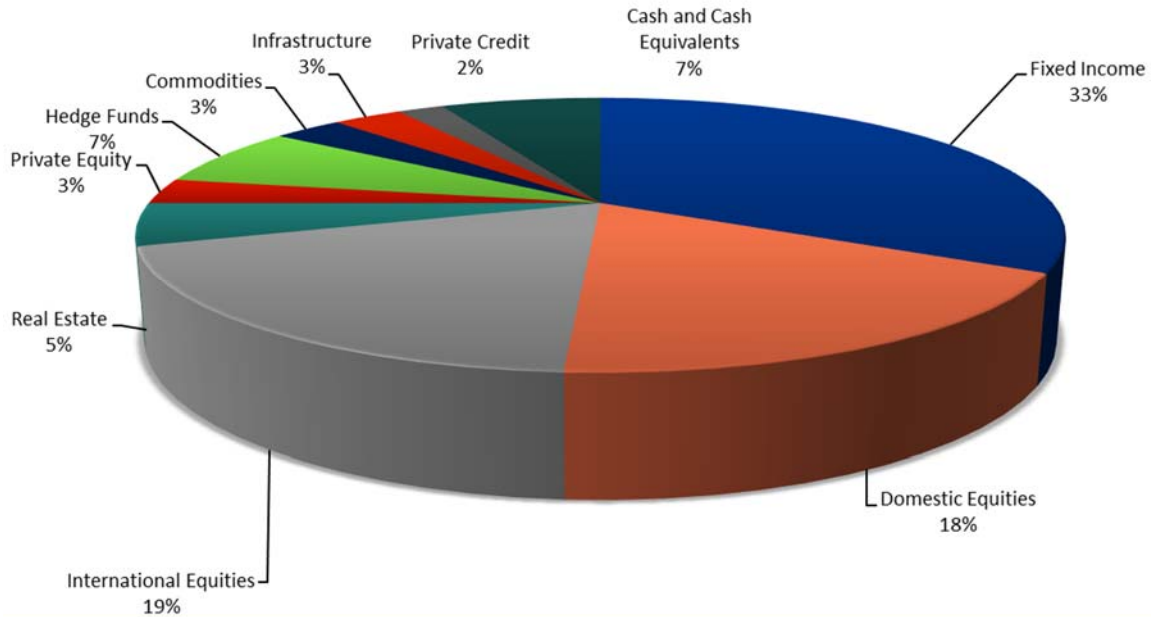
For example, the investment consultant reports cash held with investment managers as part of the investment manager's investment portfolio not as cash and cash equivalents as reported on the Investment Summary. Also, the target asset allocation calls for all cash requirements of the Plan to be classified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

The 2016 – 2017 target and actual asset allocations are presented in the following graphs and charts.

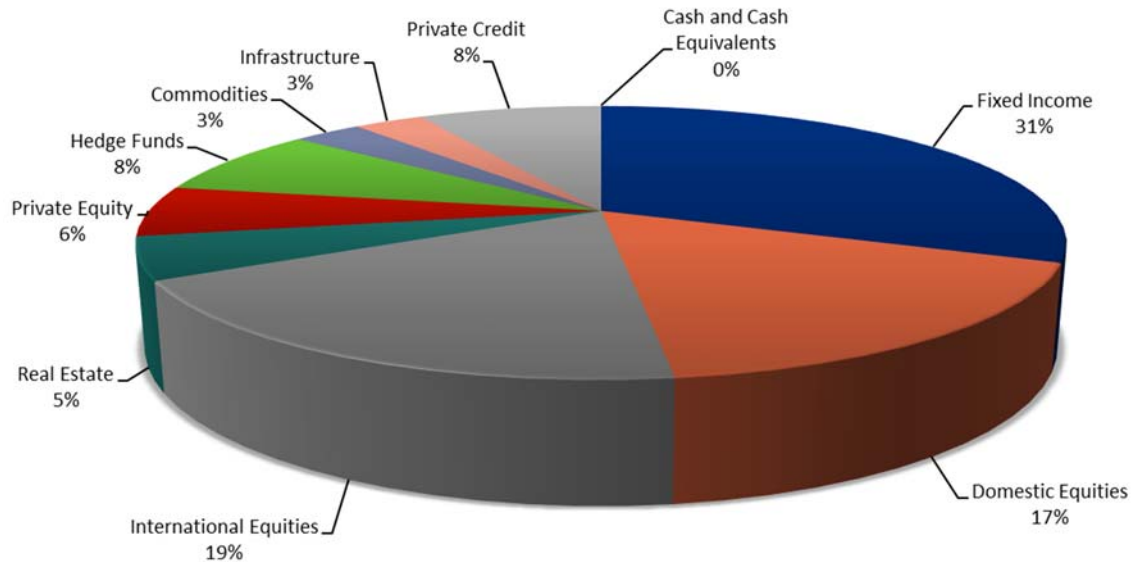


Target and Actual Asset Allocations continued

Actual Percentage



Target Percentage



Investment Results

Investment Results

As of June 30, 2017

Investments	Current Year	3-Year Return	5-Year Return
Fixed Income			
Investment Grade Credit	3.20%	0.00% ¹	0.00% ¹
Benchmark : BBgBarc US Credit TR	1.80%	0.00%	0.00%
Domestic High Yield	10.90%	0.00% ¹	0.00% ¹
Benchmark : BBgBarc US High Yield TR	12.70%	0.00%	0.00%
Domestic Senior Loan	7.30%	0.00% ¹	0.00% ¹
Benchmark : Leveraged Loan Index	7.40%	0.00%	0.00%
TIPS Index Fund	-0.70%	0.60%	0.20%
Benchmark : BBgBarc US TIPS TR	-0.60%	0.60%	0.30%
Domestic	-0.40%	2.50%	0.00% ¹
Benchmark : BC Aggregate Index	-0.30%	2.50%	0.00%
Global Sovereign	3.60%	0.00% ¹	0.00% ¹
Benchmark : Citi WGBI	-4.10%	0.00%	0.00%
Emerging Markets Debt	7.20%	-3.10%	0.00% ¹
Benchmark : JP Morgan GBI EM Diversified	6.40%	-2.80%	0.00%
Equities			
Domestic Large Capital Value	18.40%	5.50%	13.10%
Benchmark: Russell 1000 Value	15.50%	7.40%	13.90%
Domestic Large Capital	17.90%	9.60%	14.60%
Benchmark: S&P 500 Index	17.90%	9.60%	14.60%
Domestic Large Capital Growth	19.50%	9.50%	14.80%
Benchmark: Russell 1000 Growth	20.40%	11.10%	15.30%
Domestic Small/Mid Capital Value	19.60%	5.00%	13.50%
Benchmark: Russell 2500 Value	18.40%	6.20%	13.70%
Emerging Markets Equity	16.00%	-1.20%	2.60%
Benchmark: MSCI Emerging Markets	23.70%	1.10%	4.00%
International Growth	14.60%	0.80%	0.00% ¹
Benchmark : MSCI EAFE	20.30%	1.10%	0.00%
International Equity	23.80%	0.80%	10.20%
Benchmark : MSCI EAFE	20.30%	1.10%	8.70%
International Equity Small Cap	18.30%	3.50%	9.40%
Benchmark : S&P Developed ex U.S. SC Index	21.80%	4.90%	12.20%
Private Markets			
Real Estate	7.60%	10.90%	11.10%
Benchmark : NCREIF Classic Property	6.90%	10.30%	10.80%
Infrastructure	12.40%	0.00% ¹	0.00% ¹
Benchmark : NCREIF ODCE	6.90%	0.00%	0.00%
Hedge Funds	7.60%	1.80%	5.60%
Benchmark : HFRI FOF Composite Index	6.40%	1.50%	3.90%
Private Equity	9.40%	5.00%	0.00% ¹
Benchmark : Russell 2000	21.60%	6.50%	0.00%
Commodities	-8.70%	-10.40%	-6.40%
Benchmark : Bloomberg Commodity Index TR	-6.50%	-14.80%	-9.20%
Private Credit	7.20%	2.50%	0.00% ¹
Benchmark: BBgBarc US Corp High Yield	10.30%	3.70%	0.00%
Cash, Custodial, and Investment Pool			
Cash	0.20%	0.20%	0.20%
Benchmark: 90-Day Treasury Bill	0.50%	0.20%	0.20%
Total Fund	10.20%	3.20%	7.60%

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, 2017

(Dollars in Thousands)

Investments	Fair Value	Actual Percentages ²	Target Percentages
Fixed Income			
Domestic Fixed Income	\$ 656,095	14.99%	19.00%
Foreign Fixed Income	511,907	11.70%	12.00%
U.S. Government and Agencies ¹	267,301	6.11%	0.00%
Total Fixed Income	1,435,303	32.79%	31.00%
Equities			
Domestic Equities	779,857	17.82%	17.00%
International Equities	837,200	19.13%	19.00%
Real Estate Investment Trusts	14,615	0.33%	0.00%
Total Equities	1,631,672	37.28%	36.00%
Private Markets and Alternatives			
Real Estate	211,086	4.82%	5.00%
Private Equity	122,358	2.80%	6.00%
Hedge Funds	315,964	7.22%	8.00%
Commodities	110,839	2.53%	3.00%
Infrastructure	142,126	3.25%	3.00%
Private Credit	88,495	2.02%	8.00%
Total Private Markets and Alternatives	990,868	22.64%	33.00%
Derivatives	2,146	0.05%	0.00%
Total Investments	4,059,989	92.76%	100.00%
Cash and Cash Equivalents			
Cash Held in County Investment Pool	104,105	2.38%	0.00%
Short - Term Investment with Fiscal Agent	212,634	4.86%	0.00%
Total Cash and Cash Equivalents	316,739	7.24%	0.00%
Total Investments, Cash and Cash Equivalents	\$ 4,376,728	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, 2017

Par	Name	Yield	Maturity Date	Fair Value
\$ 24,290,000	UNITED STATES TREAS NTS FLTG	1.0730	04/30/2019	\$ 24,284,948
21,535,000	UNITED STATES TREAS NTS FRN	1.1710	10/31/2018	21,573,031
96	FUT SEP 16 US 2YR T-NOTE	1.4000	09/29/2017	20,746,500
1,672,076	CF LOOMIS SAYLES FULL DISCRETION INST	-	N/A	19,061,664
17,308,508	UNITED KINGDOM (GOVERNMENT OF)	1.2380	07/22/2018	17,479,862
17,070,000	UNITED STATES TREAS NTS DTD	1.1750	07/31/2018	17,100,709
15,227	BRAZIL (FED REP OF) 10% T-NTS	0.0100	01/01/2025	15,616,241
146,190	MEXICO (UNITED MEXICAN STATES)	0.0730	11/13/2042	15,472,735
13,880,000	UNITED STATES TREAS BDS	2.8590	11/15/2046	13,956,451
12,452,000	UNITED STATES TREAS NTS FLTG RT	1.1410	01/31/2019	12,468,785
\$ 108,369,097	Total			\$ 177,760,926

Largest Equity Holdings (By Fair Value)

As of June 30, 2017

Shares	Name	Fair Value
182,129	MICROSOFT CORP	12,554,152
12,694	AMAZON.COM INC	12,287,792
92,972	PHILIP MORRIS INTL COM STK NPV	10,919,561
76,420	LAM RESH CORP COM	10,808,081
80,150	MASTERCARD INC CL A	9,734,218
60,400	HOME DEPOT INC COM	9,265,360
60,450	FACEBOOK INC CL A CL A	9,126,741
84,886	DEUTSCHE BOERSE AG NPV (REGD)	8,947,802
68,184	CELGENE CORP COM	8,855,056
46,503	LINDE AG NPV	8,793,865
764,788	Total	101,292,628

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, L.P.
Kalmar Investments (Terminated as of April 2017)
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
TSSP Adjacent Opportunities

Private Equity

Blackstone IV
Hamilton Lane VI
Hamilton Lane IX
Horsley Bridge XI
Invesco Commodity Trust
Landmark Equity, XIV, L.P.
New Mountain Partners III
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

FCERA Realty Group, LLC.
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
GCM Better Futures Fund

Cash Overlay

Parametric

Schedule of Fees

Schedule of Fees

For the Fiscal Year Ended June 30, 2017, with Comparative Totals

	2017	2016
Investment Managers' Fees		
Domestic Equity Managers:		
Kalmar Management	\$ 402,887	\$ 513,571
State Street Global Advisors	67,426	60,363
Systematic Financial Management	228,222	265,381
Waddell & Reed Investment Management	530,600	642,681
Total Domestic Equity Managers	1,229,135	1,481,996
International Equity Managers:		
Artisan International	620,846	1,117,206
Mondrian Investment Partners	2,638,538	2,259,663
Research Affiliates	413,599	238,629
Total International Equity Managers	3,672,983	3,615,498
Domestic Fixed Income Managers:		
Barclays U.S. AGG Bond	46,859	74,759
Brandywine Global	284,562	281,378
Eaton Vance	1,155,552	1,108,462
Loomis Sayles	532,943	614,706
Pimco EMD	985,123	759,842
State Street TIPS Index Fund	64,268	62,797
Western Asset Management Company	703,286	367,607
Total Domestic Fixed Income Managers	3,772,593	3,269,551
Private Market Managers:		
Private Equity	2,547,292	1,468,902
Real Estate	2,681,217	2,367,501
Hedge Funds	4,358,612	1,237,638
Commodities	907,865	864,757
Infrastructure	2,501,749	1,148,747
Private Credit	1,928,557	1,453,902
Total Private Market Managers	14,925,292	8,541,447
Total Investment Managers' Fees	23,600,003	16,908,492
Cash Overlay Manager:		
Parametric	98,470	-
Total Cash Overlay Managers	98,470	-
Other Investment Expenses		
Securities Lending	167,484	300,248
Due Diligence Travel	17,516	5,153
Custodian Service Fees	117,250	115,000
Actuarial Valuation Fees	68,000	109,000
Consulting and Legal Fees	706,863	628,352
Total Other Investment Expenses	\$ 1,077,113	\$ 1,157,753

Schedule of Commissions

Schedule of Commissions

As of June 30, 2017

Brokerage Firm	Rank	Number of Shares Traded	Total Commissions	Commissions Per Share	Percentage of Commissions
BROADCORT CAPITAL (THRU ML)	1	2,230,962	\$70,459	\$ 0.03158	11.26%
MORGAN STANLEY AND CO., LLC	2	49,784,176	66,079	0.00133	10.56%
CONVERGEX EXECUTION SOLUTION	3	1,352,708	39,121	0.02892	6.25%
LIQUIDNET INC	4	2,447,019	30,834	0.01260	4.93%
INSTINET INVESTMENT SERVICES LIMITE	5	2,902,784	24,681	0.00850	3.95%
GOLDMAN, SACHS AND CO.	6	122,632,774	24,015	0.00020	3.84%
INVESTMENT TECHNOLOGY GROUP INC.	7	1,910,938	23,670	0.01239	3.78%
J.P. MORGAN SECURITIES LLC	8	34,435,975	18,337	0.00053	2.93%
NORTHERN TRUST COMPANY, THE	9	2,034,433	17,286	0.00850	2.76%
DEUTSCHE BANK SECURITIES INC.	10	49,929,867	15,091	0.00030	2.41%
MERRILL LYNCH INTERNATIONAL LIMITED	11	765,881,196	12,864	0.00002	2.06%
J.P. MORGAN SECURITIES PLC	12	14,214,117,982	12,502	0.00000	2.00%
CREDIT SUISSE SECURITIES(EUROPE)LTD	13	322,202	11,867	0.03683	1.90%
SOCIETE GENERALE LONDON BRANCH	14	1,517,278	10,728	0.00707	1.72%
INSTINET EUROPE LIMITED	15	1,822,634	10,593	0.00581	1.69%
CITIGROUP GLOBAL MARKETS INC.	16	6,510,632,213	10,297	0.00000	1.65%
UBS LIMITED	17	456,578	9,942	0.02178	1.59%
GUZMAN AND COMPANY	18	1,023,251	9,397	0.00918	1.50%
SG AMERICAS SECURITIES LLC	19	1,727,931	9,079	0.00525	1.45%
JEFFERIES LLC.	20	12,173,062	8,323	0.00068	1.33%
Top 20 Firms by Commission Dollars		21,779,335,963	\$435,165	\$ 0.19148	69.56%
All other Brokerage Firms		94,399,749,808	190,439	0.00000	30.44%
Total Brokerage Commissions		116,179,085,771	\$625,604	\$ 0.19148	100.00%

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Actuarial Section



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

October 23, 2017

Board of Retirement
Fresno County Employees' Retirement Association
7772 N Palm Ave
Fresno, CA 93711

**Re: June 30, 2016 Actuarial Valuation for the Fresno County Employees'
Retirement Association**

Dear Members of the Board:

Segal Consulting (Segal) prepared the June 30, 2016 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 last reviewed and reaffirmed by the Board in 2015. 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, 2016. 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, 2016 actuarial valuation is based on the plan of benefits verified by FCERA and on participant 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 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. The deferred gains and losses 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 contribution 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 17 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, 2016 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, 2016 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, 2016 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, 2015 Experience Analysis or in conjunction with the June 30, 2016 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.¹ It is our opinion that the assumptions used in the June 30, 2016 valuation produce results, which, in aggregate, reflect the future experience of the Plan. An experience analysis is performed every

¹ Under the Board's interest crediting policy, the balance of \$800.8 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.

three years and the next experience analysis is due to be performed as of June 30, 2018 and any changes in assumption that result will be reflected in the June 30, 2019 valuation.

In the June 30, 2016 valuation, the ratio of the valuation assets to actuarial accrued liabilities (funded percentage) decreased from 80.7% to 78.2%. The aggregate employer rate has increased from 51.36% of payroll to 56.74% of payroll before reflecting the three-year phase-in as discussed below, while the aggregate member rate has increased from 9.33% to 9.62% of payroll.

The Board adopted a three-year phase-in of the impact on the employer's contribution rates due to the changes in actuarial assumptions in this year's valuation. After reflecting the three-year phase-in, the aggregate employer rate for the June 30, 2016 valuation is reduced from 56.74% to 53.05% of payroll.

Under the actuarial value of assets method, the total unrecognized investment losses as of June 30, 2016 are \$268.7 million. These 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, 2016. If the Association earns the assumed net rate of investment return of 7.00% per year on a market value basis, that will result in investment losses on the valuation value of assets in the next few years. This means that, if the actual market return is equal to the assumed 7.00% rate and all other actuarial assumptions are met, the contribution requirements would increase in the next few years.

The current unrecognized investment losses represent about 6.7% of the market value of assets. Unless offset by future investments gains or other favorable experience, the recognition of the \$268.7 million in past market losses is expected to have an impact on the Association's future funded ratio and the aggregate employer contributions. This potential impact may be illustrated as follows:

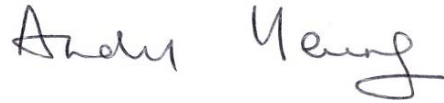
- If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 78.2% to 73.3%.
- If the deferred losses were recognized immediately in the actuarial value of assets, the aggregate employer contribution rate would increase from 56.7% of payroll to 62.5% of payroll before reflecting the three-year phase-in.

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

AW/bqb
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 17 years remaining as of June 30, 2016. 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, 2016, was approved and adopted by the Fresno County Employees' Retirement Association (FCERA) Board of Retirement (the Board) on December 21, 2016.

- | | | |
|----|--|--|
| 1. | Investment Rate of Return | 7.00% per annum |
| 2. | Interest Credited to Employee Accounts | Nominal rate of 3.00% per annum, compounded semiannually |
| 3. | Inflation | 3.00% per annum |
| 4. | Salary Scale: | |
| | <ul style="list-style-type: none"> • General Members | Salary increases range from 4.50% to 11.50% based on years of service (merit ranges from 1.00% to 8.00%; plus 3.00% inflation plus 0.50% "across the board" salary increase) |
| | <ul style="list-style-type: none"> • Safety Members | Salary increases range from 4.90% to 11.50% based on years of service (merit ranges from 1.40% to 8.00%; plus 3.00% 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 50% 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: | |
| | <ul style="list-style-type: none"> • General Members: | RP-2014 Healthy Annuitant Mortality Table with two-dimensional scale MP2015D set forward one year for females |

Summary of Actuarial Assumptions and Methods continued

	<ul style="list-style-type: none"> Safety Members: 	RP-2014 Healthy Annuitant Mortality Table with two-dimensional scale MP2015D set back two years
9.	Years of Life Expectancy After Disability:	RP-2014 Healthy Annuitant Mortality Table with two-dimensional scale MP2015D set forward eight years for General members, and forward seven years for Safety members
10.	Life Expectancy After Retirement for Employee Contribution Rate Purposes:	
	<ul style="list-style-type: none"> General Members: 	RP-2014 Healthy Annuitant Mortality Table with two-dimensional scale MP2015D, set forward one year for females and two years for males, 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-2014 Healthy Annuitant Mortality Table with two-dimensional scale MP2015D, set back two years weighted 80% male and 20% female
11.	Reciprocity Assumption	20% of General and 30% of Safety members who terminate with less than 5 years of service and 35% of General and 55% of Safety members who terminate with 5 or more years of service 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	17 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, 2016. Please refer to page 34 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
6/30/2007	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 ¹	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 ²	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 ³	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%
6/30/2016	General	6,377	\$ 335,815	4,388	0.5%
	Safety	920	66,719	6,043	0.0%
	Total	7,297	\$ 402,534	4,597	0.6%

¹ New benefit tier effective December 2007.

² New benefit tier effective June 2012.

³ New benefit tier effective January 2013.

Please see Note 1 Description of the Plan-Benefit Provisions pages 27 to 28.

Source: Segal Consulting Actuarial Valuation Reports dated June 30, 2007 through 2016.

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
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	2132	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%
2016-17	7,035	373	7,394	168	2,213	7,240	246,649	3.66%	34	0.72%

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)
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%
2015-16	4,278,001	5,472,149	1,194,148	78.2%	402,535	296.7%

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	2016
1 Unfunded actuarial accrued liability at beginning of year	\$ 981,686
2 Total Normal Cost payable at middle of year ⁽¹⁾	109,353
3 Expected administrative expenses	4,224
4 Expected employer and member contributions ⁽²⁾	(235,761)
5 Interest (full year on (1) plus half year on (2)+(3)+(4))	68,180
6 Expected unfunded actuarial accrued liability at end of year	927,682
7 Actuarial (gain)/loss due to all changes:	
<u>Experience (gain)/loss</u>	
a. Loss from investment return on valuation value of assets (4.97%)	92,984
b. Loss from actual contributions less than expected ⁽³⁾	9,341
c. Gain from lower than expected salary increases	(8,130)
d. Gain from lower than expected COLA increases	(72,001)
e. Other experience losses	3,500
f. Subtotal	25,694
<u>Other changes</u>	
g. Change in actuarial assumptions	240,772
h. Subtotal	240,772
Actual unfunded actuarial accrued liability at end of year (6) + (7f) + (7h)	\$ 1,194,148

⁽¹⁾ Excludes administrative expense load.

⁽²⁾ Includes contributions toward administrative expenses.

⁽³⁾ Contribution loss from one-year delay in implementing higher contribution rates recommended in June 30, 2015 valuation offset somewhat by the contribution gains from payroll increase more than expected.

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)
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.

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, 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%
June 30, 2016	444,552	3,609,392	1,418,205	4,278,001	100%	100%	16%

(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	0.05750	0.00000	0.00010
30	0.05300	0.00030	0.00020
40	0.03920	0.00040	0.00120
50	0.03440	0.00110	0.00250
60	0.03100	0.00350	0.00680
General Members – Female			
20	0.05750	0.00000	0.00010
30	0.05300	0.00020	0.00020
40	0.03920	0.00030	0.00100
50	0.03440	0.00080	0.00170
60	0.03100	0.00190	0.00330
Safety Members – Male			
20	0.03500	0.00000	0.00050
30	0.02900	0.00030	0.00240
40	0.01850	0.00040	0.00560
50	0.01500	0.00110	0.00760
60	0.00600	0.00350	0.03200
Safety Members – Female			
20	0.03500	0.00000	0.00050
30	0.02900	0.00020	0.00240
40	0.01850	0.00030	0.00560
50	0.01500	0.00080	0.00760
60	0.00600	0.00190	0.03200

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

² 50% of General disabilities are assumed to be duty disabilities. The 50% 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, 2016. 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	0.05000
55	0.08000
60	0.25000
65	0.45000
70	0.50000
General Tier 1 - Female	
50	0.04000
55	0.09000
60	0.20000
65	0.35000
70	0.50000
General Tier 2 - Male and Female	
50	0.03000
55	0.08400
60	0.15000
65	0.35000
70	0.70000
General Tier 3 - Male and Female	
50	0.02400
55	0.06700
60	0.15400
65	0.34600
70	0.60000
General Tier 4 - Male and Female	
50	0.02000
55	0.04000
60	0.09000
65	0.23000
70	0.60000
General Tier 5 - Male and Female	
50	0.00000
55	0.03500
60	0.08500
65	0.22000
70	0.60000
Safety Tiers 1 and 2 - Male and Female	
50	0.05000
55	0.40000
60	0.40000
65	1.00000
Safety Tiers 4 and 5 - Male and Female	
50	0.04000
55	0.20000
60	0.45000
65	1.00000

Note: Information compiled from Actuarial Report prepared by Segal Consulting dated June 30, 2016.
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	60.00%	40.00%
1	60.00%	40.00%
2	60.00%	40.00%
3	60.00%	40.00%
4	60.00%	40.00%
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	25.00%	75.00%
11	25.00%	75.00%
12	25.00%	75.00%
13	25.00%	75.00%
14	25.00%	75.00%
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	10.00%	90.00%

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, 2016.

Probability of Occurrence continued

Years of Life Expectancy after Service Retirement

(Current Assumptions)

Age	Years of Life Expectancy
General Members - Male	
50	33.10
60	24.60
70	16.80
80	10.00
90	5.00
100	2.20
110	1.10
General Members - Female	
50	35.20
60	26.40
70	18.10
80	10.80
90	5.40
100	2.40
110	1.10
Safety Members - Male	
50	34.80
60	26.30
70	18.30
80	11.20
90	5.80
100	2.60
110	1.20
Safety Members - Female	
50	37.80
60	29.00
70	20.50
80	12.90
90	6.80
100	3.10
110	1.40

Probability of Occurrence continued

Years of Life Expectancy after Disability Retirement

(Current assumptions)

Age	Years of Life Expectancy	
General Members	Male	Female
20	51.40	54.70
30	43.30	46.40
40	34.80	37.80
50	26.30	29.00
60	18.30	20.50
70	11.20	12.90
80	5.80	6.80
90	2.60	3.10
100	1.20	1.40
110	0.80	0.80
Safety Members	Male	Female
20	52.20	55.60
30	44.10	47.30
40	35.70	38.70
50	27.10	29.90
60	19.10	21.30
70	11.90	13.60
80	6.20	7.30
90	2.90	3.30
100	1.30	1.50
110	0.90	0.90

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.

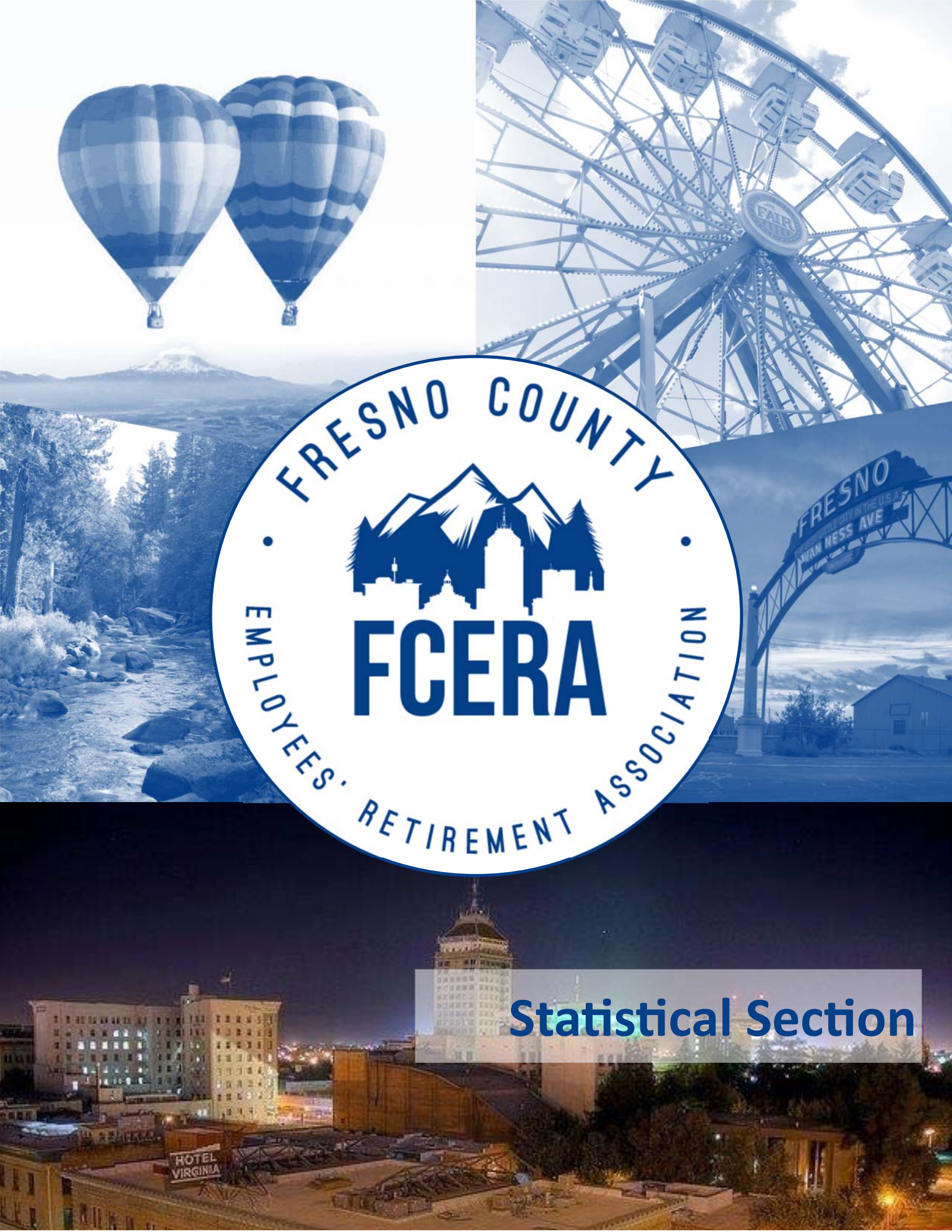
8. MEMBERS' CONTRIBUTIONS

- 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, 2016.



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)

	2013	2014	2015	2016	2017
Additions					
Employer Contributions	\$ 158,572	\$ 165,309	\$ 184,213	\$ 191,529	\$ 198,472
Member Contributions	30,516	30,154	33,110	35,212	36,259
Net Investment Income/(Loss)	378,483	583,169	406	(4,258)	417,681
Total Additions	567,571	778,632	217,729	222,483	652,412
Deductions ¹					
Total Benefit Expenses	\$ 210,745	\$ 222,289	\$ 229,115	\$ 238,028	\$ 247,491
Refunds	2,211	2,103	2,282	2,203	2,356
Administrative Expenses	3,634 ²	3,542	4,297	4,814	4,762
Other	42 ²	21	45	61	77
Total Deductions	216,632	227,955	235,739	245,106	254,686
Change in Fiduciary Net Position	\$ 350,939	\$ 550,677	\$ (18,010)	\$ (22,623)	\$ 397,726

	2008	2009	2010	2011	2012
Additions					
Employer Contributions	\$ 97,305	\$ 113,959	\$ 126,138	\$ 130,290	\$ 157,869
Member Contributions	30,272	34,562	32,209	31,293	32,627
Net Investment Income/(Loss)	(186,911)	(451,499)	341,439	605,422	(10,242)
Total Additions	(59,334)	(302,978)	499,786	767,005	180,254
Deductions ¹					
Total Benefit Expenses	\$ 143,072	\$ 155,783	\$ 169,526	\$ 180,363	\$ 193,535
Refunds	6,072	2,077	1,915	2,044	1,786
Administrative Expenses	3,569	3,855	3,570	4,108	3,597
Other	N/A	N/A	N/A	N/A	N/A
Total Deductions	152,713	161,715	175,011	186,515	198,918
Change in Fiduciary Net Position	\$ (212,047)	\$ (464,693)	\$ 324,775	\$ 580,490	\$ (18,664)

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.

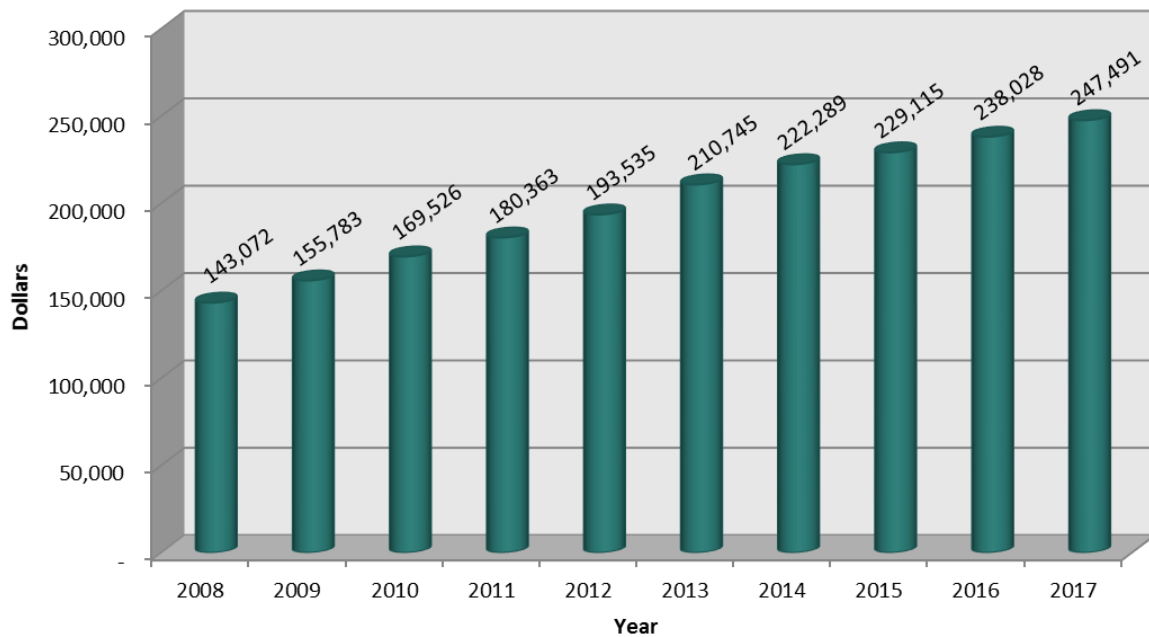
Retired Members

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	
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
2017	198,137	33,063	2,536	1,898	5,970	5,887	247,491



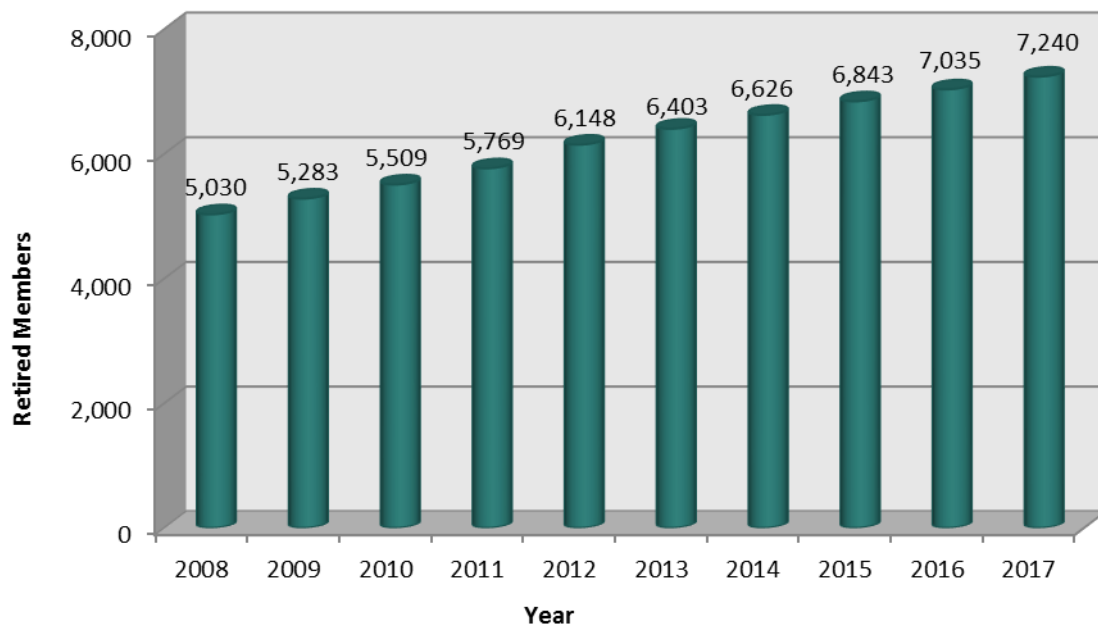
¹ Total Benefit Expenses are the actual expenses paid and will not equal Total Average Annual Benefits reported on page 96.

Retired Members continued

Schedule of Retired Members by Type of Retirement

Last Ten Fiscal Years

YEAR-END	GENERAL	SAFETY	SURVIVOR	TOTAL
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
2017	6,315	820	105	7,240



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 Benefits	Annual Average Benefits	Average Monthly Benefits	% Change in Average Benefits
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	2.0%
6/30/2016	General Tier 1	6,068	\$ 195,506,184	32,219	2,685	1.2%
	General Tier 2	16	391,296	24,456	2,038	-18.3%
	General Tier 3	15	655,668	43,711	3,643	236.6%
	Safety Tier 1	933	44,399,616	47,588	3,966	-0.2%
	Total	7,032	\$ 240,952,764	\$ 34,265	\$ 2,855	1.1%

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.

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

Retired Members continued

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 7/1/2015 to 6/30/2016							
Average monthly benefit	\$519	\$1,692	\$2,428	\$2,672	\$3,217	\$4,674	\$5,688
Average Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of retired members	15	42	71	48	46	49	28
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

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
6/30/2008	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
6/30/2017	General	3,976	2,443	6,419	1,373
	Safety	593	339	932	146
	Total	4,569	2,782	7,351	1,519

Participating Employers

Schedule of Principal Participating Employers

Current Year and Nine Years Ago

Participating Employers	2017			2008		
	Covered Employees	Rank	Percentage of Covered Employees	Covered Employees	Rank	Percentage of Covered Employees
County of Fresno	6,839	1	93.03%	6,681		86.92%
Superior Court of California-County of Fresno ¹	473	2	6.43%	957		12.45%
Fresno-Madera Area Agency on Aging	22	3	0.30%	33		0.43%
Clovis Veterans Memorial District	10	4	0.14%	8		0.10%
Fresno Mosquito and Vector Control District	7	5	0.10%	7		0.09%
Total	7,351		100.00%	7,686		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.

Participating Employers and Active Members

Schedule of Participating Employers and Active Members

Last Ten Fiscal Years

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
County of Fresno										
General Members	5,907	5,864	5,704	5,641	5,533	5,376	5,912	6,059	6,395	6,681
Safety Members	932	920	837	833	842	780	769	812	922	957
Total	6,839	6,784	6,541	6,474	6,375	6,156	6,681	6,871	7,317	7,638
Participating Agencies (General Members)										
Clovis Veterans Memorial District	10	10	9	7	9	8	8	8	9	8
Fresno Mosquito and Vector Control District	7	7	5	6	5	5	5	6	8	7
Fresno-Madera Area Agency on Aging	22	22	24	25	26	28	30	31	31	33
Superior Court of California-County of Fresno ¹	473	475	390	412	426	447	-	-	-	-
Total	512	514	428	450	466	488	43	45	48	48
Total Active Members										
General Members	6,419	6,378	6,131	6,091	5,999	5,864	5,955	6,104	6,443	6,729
Safety Members	932	920	838	833	842	780	769	812	922	957
Total	7,351	7,298	6,969	6,924	6,841	6,644	6,724	6,916	7,365	7,686

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, 2016	to	June 30, 2017	51.43%	47.74%	47.35%	38.73%	36.96%	75.93%	75.11%	60.38%	57.99%	6/30/2015
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

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, 2017

Monthly Benefit Amount	Members Receiving a Benefit	Type of Retirement ¹								Option Selected ²					
		1	2	3	4	5	6	7	8	U	1	2	3	4	D
\$1 - 500	419	336	2	3	66	3	0	0	9	295	16	88	9	9	2
501 - 1,000	854	669	20	6	108	15	1	1	34	661	34	131	15	6	7
1,001 - 1,500	1,014	812	35	24	111	8	0	1	23	815	52	115	27	3	2
1,501 - 2,000	834	693	24	23	73	7	5	1	8	659	62	94	16	2	1
2,001 - 3,000	1,401	1,131	16	98	123	8	11	5	9	1,152	100	112	30	6	1
3,001 - 4,000	963	779	2	89	72	1	13	3	4	806	68	65	15	7	2
4,001 - 5,000	596	552	0	21	18	0	1	2	2	494	29	50	17	4	2
5,001 - 6,000	443	419	0	5	16	0	2	1	0	382	23	33	2	3	0
Over 6,000	716	689	0	11	14	0	2	0	0	632	25	50	5	4	0
Totals	7,240	6,080	99	280	601	42	35	14	89	5,896	409	738	136	44	17

Notes:

¹ Type of Retirement

- 1 = Normal retirement
- 2 = Non-service connected disability
- 3 = Service connected disability
- 4 = Beneficiary - Normal retirement
- 5 = Beneficiary – Non-Service Disability
- 6 = Beneficiary – Service Disability
- 7 = Survivor – Service Death
- 8 = Survivor – Non-Service Death

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.

Note: Information compiled from Arrivos Pension Administration System for FY 16-17 and Type of Retirement categories may not match prior years.

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	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Service Benefits										
General	\$ 110,819	\$ 120,975	\$ 131,465	\$ 139,412	\$ 151,022	\$ 165,066	\$ 173,829	\$ 179,054	\$ 185,490	\$ 198,137
Safety	21,074	23,014	24,759	26,584	28,698	31,343	33,021	34,516	36,201	33,063
Service Connected Disability										
General	2,278	2,447	2,746	3,321	2,787	3,208	3,214	3,164	3,385	4,233
Safety	4,763	4,999	6,211	6,309	6,138	6,016	6,718	6,340	7,067	5,794
Non-Service Connected Disability										
General	2,210	2,324	2,269	2,334	2,096	2,033	2,197	2,150	1,845	1,737
Safety	156	156	148	152	154	114	107	167	110	93
Non-Service Connected Disability Continuance										
General	1,000	1,070	1,118	1,188	1,276	1,383	1,421	1,705	1,764	1,772
Safety	133	135	139	138	139	155	162	248	236	239
Service Connected Disability Continuance										
General	141	142	126	183	408	496	583	593	734	764
Safety	327	335	357	442	602	839	903	1,117	1,118	1,159
Active Death Benefits	171	186	188	300	215	92	134	61	78	500
Total Benefits	\$ 143,072	\$ 155,783	\$ 169,526	\$ 180,363	\$ 193,535	\$ 210,745	\$ 222,289	\$ 229,115	\$ 238,028	\$ 247,491
Type of Refund										
Death	\$ 345	\$ 304	\$ 338	\$ 339	\$ 425	\$ 135	\$ 134	\$ 133	\$ 111	\$ 174
Miscellaneous - UAAL ¹	4,140	13	1	-	-	-	-	-	-	-
Separation	1,587	1,760	1,576	1,705	1,361	2,076	1,969	2,149	2,092	2,182
Total refunds	\$ 6,072	\$ 2,077	\$ 1,915	\$ 2,044	\$ 1,786	\$ 2,211	\$ 2,103	\$ 2,282	\$ 2,203	\$ 2,356

¹ UAAL means Unfunded Actuarial Accrued Liability.