COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Years Ended June 30, 2019 and 2018

KCERA

KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

A defined benefit pension plan in Kern County, California

Kern County Employees' Retirement Association

A defined benefit public pension plan (California)

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Years Ended June 30 ,2019 and 2018

ISSUED BY:

Dominic Brown, Executive Director

Matthew Henry, Assistant Executive Director

Angela Kruger, Financial Officer

Kern County Employees' Retirement Association (KCERA)

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Ph. (661) 381-7700 / www.kcera.org

INTRODUCTORY SECTION

KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

KCERA

PRUDENT INVESTMENT • QUALITY SERVICE

December 03, 2019

Dominic D. Brown

Executive Director

Dear Board Members:

As Executive Director of the Kern County Employees' Retirement Association (KCERA), I am pleased to present the Comprehensive Annual Financial Report (CAFR) for the fiscal years ended June 30, 2019 and 2018. This Letter of Transmittal is presented as a narrative introduction, overview and analysis in conjunction with the Management's Discussion and Analysis included in the Financial Section of the Comprehensive Annual Financial Report.

KCERA is public employee retirement system that was established on January 1, 1945 by the County of Kern. The KCERA Plan provides retirement, disability, death, beneficiary, cost-of-living and supplemental retirement benefits. As of June 30, 2019, KCERA had 10,715 active and deferred-vested members and paid retirement benefits to 8,496 retirees and their beneficiaries.

KCERA AND ITS SERVICES

KCERA was established on January 1, 1945 to provide retirement allowances and other benefits to all permanent general and safety employees of the County of Kern and of participating special districts. As of June 30, 2019, fourteen districts participated in the retirement plan: Berrenda Mesa Water District, Buttonwillow Recreation and Park District, East Kern Cemetery District, Inyokern Community Services District, Kern County Hospital Authority, Kern County Superior Court, Kern County Water Agency, Kern Mosquito and Vector Control District, North of the River Sanitation District, San Joaquin Valley Air Pollution Control District, Shafter Recreation and Park District, West Side Cemetery District, West Side Mosquito and Vector Control District, and West Side Recreation and Park District.

The Plan is administered by the Kern County Board of Retirement (Board), which consists of nine members and two alternate members. The Board is responsible for establishing policies governing the administration of the retirement plan, determining benefit allowances and managing the investments of KCERA's assets. The Board oversees the Executive Director and the KCERA staff in the performance of their duties in accordance with the County Employees' Retirement Law of 1937 and the regulations, procedures and policies adopted by the KCERA Board.

MAJOR INITIATIVES

KCERA Reorganization and Recruitments

KCERA management engaged in a full-scale reorganization to better accomplish the mission of the organization. The multi-phase plan was developed with County Human Resources and approved by the County of Kern Board of Supervisors. As a result, KCERA has been able to increase the number of positions in the member benefits section to service the members and add a second Retirement Investment Officer to assist in the management of the $4.3 billion fund.

KCERA Lean Six Sigma Initiatives

KCERA is actively participating in Kern County's Launch Kern program. Launch Kern is the application of Lean Six Sigma methods and tools to make county government faster, better, and stronger. KCERA conducted in-house training to educate staff in the identification and elimination of waste (Lean), as well as, process improvement (Six Sigma). Staff completed a total of fifteen "Quick-Win" projects, third most amongst Kern County Departments. Notable projects include introducing a Helpdesk IT ticketing system, implementing a phone auto attendant, and posting monthly statements on the KCERA Portal instead of mailing.

FUNDING

KCERA's funding objective is to meet long-term benefit obligations through level contributions to the Plan and the accrual and compounding of investment income. As of June 30, 2018, the funded ratio of the Plan was 65.1% using actuarial assets and actuarial liabilities of $4,163,476,000 and $6,398,814,000, respectively. The funded percentage increased 1.9% from June 30, 2017 due primarily to lower than expected individual salary increases.

Pursuant to provisions in the County Employees' Retirement Law of 1937, KCERA engages an independent actuarial consulting firm, Segal Consulting, to conduct annual actuarial valuations. Every three years, an experience study is performed to review all economic and demographic assumptions. The economic and demographic assumptions are updated at the time each triennial valuation is performed. Triennial valuations serve as the basis for changes in member and employer contribution rates necessary to properly fund the Plan. The last triennial analysis was performed as of June 30, 2016.

The triennial analysis covered several changes to economic and non-economic assumptions that were adopted by the Board of Retirement on July 12, 2017 for the June 30, 2017 actuarial valuation. The actuary recommended changes in the assumptions for inflation, investment return, promotional and merit salary increases, retirement from active employment, percent married, spousal age difference, mortality, termination, disability incidence, percent of members assumed to work under a reciprocal system, and reciprocal salary increases. The major changes included lowering the inflation assumption from 3.25% to 3.0%, lowering the investment return assumption from 7.5% to 7.25%, and changing the mortality tables to a headcount-weighted generational approach.

FINANCIAL INFORMATION

The Comprehensive Annual Financial Report (CAFR) for the fiscal years June 30, 2019 and 2018 was prepared by KCERA's management, which is responsible for the accuracy, completeness, fair presentation of information and all disclosures in this report. The report has been prepared in accordance with accounting principles generally accepted in the United States of America as promulgated by the Governmental Accounting Standards Board (GASB).

KCERA maintains an internal control system to provide reasonable assurance that assets are properly safeguarded from loss, theft or misuse, and the fair presentation of the financial statements and supporting schedules. Further, it should be recognized that there are inherent limitations in the effectiveness of any system of internal controls due to changes in conditions. Moreover, the concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits to be derived. The Board of Retirement has established a finance committee to oversee the financial reporting process and to review the scope and results of independent audits. The independent auditors have unrestricted access to the finance committee to discuss their related findings as to the integrity of the financial reporting and adequacy of internal controls.

KCERA's external auditor, CliftonLarsonAllen, LLP, has conducted an audit of the basic financial statements in accordance with auditing standards generally accepted in the United States of America, performing such tests and other procedures as they deem necessary to express an opinion in their report to the Board of Retirement. The financial audit ensures that KCERA's financial statements are presented in conformity with accounting principles generally accepted in the United States of America and are free of material misstatements. Their opinion is that KCERA's financial statements present fairly, in all material respects, the Fiduciary Net Position of KCERA as of June 30, 2019 and 2018 and its Changes in Fiduciary Net Position for the years then ended in conformity with accounting principles generally accepted in the United States of America.

INVESTMENTS

The Board of Retirement has exclusive control of all investments of KCERA and is responsible for establishing investment policies, objectives and strategies. The Board is authorized to invest in any form or type of investment deemed "prudent" in the informed opinion of the Board. The members of the Board serve as fiduciaries for the members and beneficiaries of the retirement association and are held to a high standard of care in all transactions.

The Board operates under a standard of care in California commonly known as the "prudent person" rule, which allows the Board to invest or delegate the authority to invest the assets of the Plan when prudent in the informed opinion of the Board. In addition, the rule requires the Board to diversify the investments of the Plan, unless it is clearly prudent not to do so under the circumstances. The Board therefore makes basic policy decisions with respect to the Plan, including, but not limited to, the allocation of assets to various investment classes. The Board delegates much discretion to professional investment advisors to execute investment policy subject only to policy and guidelines provided by the Board.

KCERA's assets are managed exclusively by external, professional investment managers. KCERA staff monitors the activity of these managers and assists the Board with the development and implementation of investment policies and long-term investment strategies. These policies and guidelines are outlined in KCERA's Investment Policy Statement, which states the investment philosophy, investment guidelines, performance objectives and asset allocation of the Plan. The Board employs the services of independent investment consultants Verus Investments and Albourne America to assist the Board in formulating policies, setting goals and manager guidelines, and selecting and monitoring the performance of the money managers.

For fiscal year 2019, the investments of the Plan returned 5.3%* (net of fees). KCERA's annualized rate of return, net of fees, was 7.8% in the past three years, 5.0% in the past five years, and 8.3% in the past ten years. The investment expenses of the fund are linked to the performance of the investment portfolio and other factors and therefore vary year to year.

PROFESSIONAL SERVICES

The Board retains professional consultants and investment managers to provide professional services essential to the effective and efficient operation of KCERA. These entities are included in the Schedule of Investment Fees on pages 73-75.

Opinions from the certified public accountant and the actuary for the Plan are included in this report. The consultants and investment managers retained by the Board are listed on page 70 of this report.

CERTIFICATE OF ACHIEVEMENTS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to KCERA for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2018. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports.

In order to be awarded the Certificate of Achievement, a government unit must publish an easily readable and well-organized comprehensive annual financial report. This report must satisfy both accounting principles generally accepted in the United States of America and applicable legal requirements.

The Certificate of Achievement is valid for a period of one year only. We believe that our current Comprehensive Annual Financial Report continues to meet the Certificate of Achievement Program's requirements, and we will again submit it to the GFOA for appraisal.

* References in this document to KCERA's investment rate of return assume a time-weighted rate of return unless otherwise specified as a money-weighted rate of return, per GASB 67 guidelines.

ACKNOWLEDGMENTS

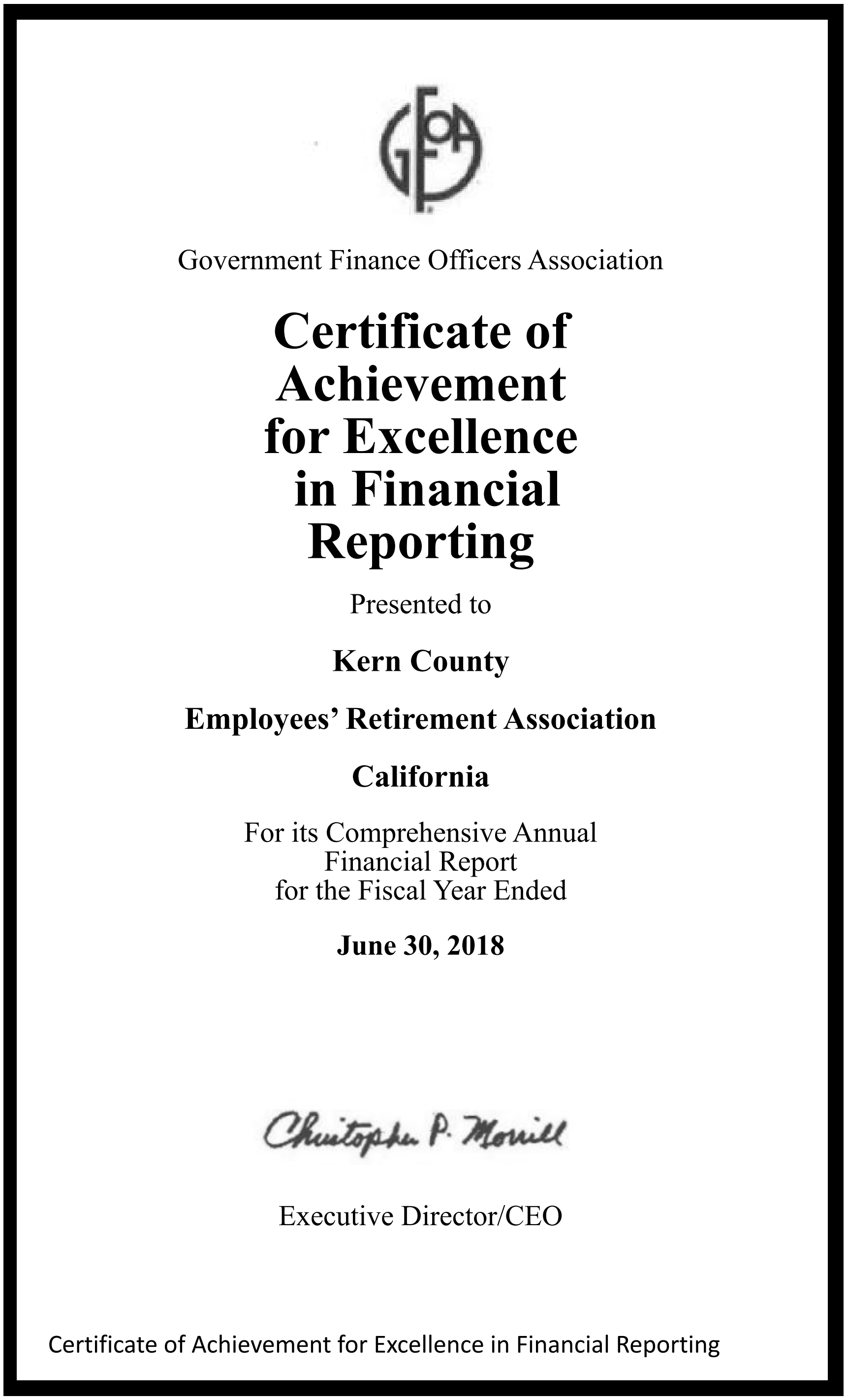
The compilation of this report reflects the combined effort of the KCERA staff. This report is intended to provide complete information as a basis for management decisions, as a means for establishing compliance with legal requirements, and as a means for determining the responsible stewardship of the KCERA fund.

I wish to take this opportunity to thank the members of KCERA for their confidence in KCERA and to express my gratitude to the Board of Retirement for your support of the KCERA administration and the best interests of the beneficiaries of the Plan throughout the fiscal year. I also wish to thank the consultants and staff for their continued commitment to KCERA and their diligent work to ensure the successful administration of the Plan.

Respectfully submitted,

Dominic D Brown

Dominic D. Brown
Executive Director



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kern County

Employees' Retirement Association

California

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO

Certificate of Achievement for Excellence in Financial Reporting

Each year, a Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose Comprehensive Annual Financial Reports (CAFRs) achieve the highest standards in government accounting and reporting.

CAFRs must satisfy Generally Accepted Accounting Principles (GAAP) and applicable legal requirements.

KCERA has earned this prestigious award yet again, this time for its 2018 Comprehensive Annual Financial Report.

KCERA believes its Fiscal Year 2019 CAFR continues to meet the Certificate of Achievement Program's requirements and will submit it to the Government Finance Officers Association to determine its eligibility for another certificate.

Jordan Kaufman
Chairman of the Board
County Treasurer-Tax Collector Ex-Officio Memeber

Bob Jefferson
Elected by General Members
Present term expires 12/31/2019

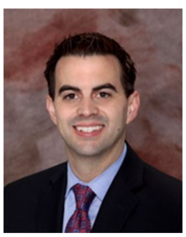
Rick Kratt
Elected by Safety Members
Present term expires 12/31/2021

Photo coming soon

John DeMario, *Alternate*
Elected by Retired Members
Present term expires 12/31/2019

David Couch
Appointed by Board of Supervisors
Present term expires 12/31/2021

Lauren Skidmore
Appointed by Board of Supervisors
Present term expires 12/31/2021

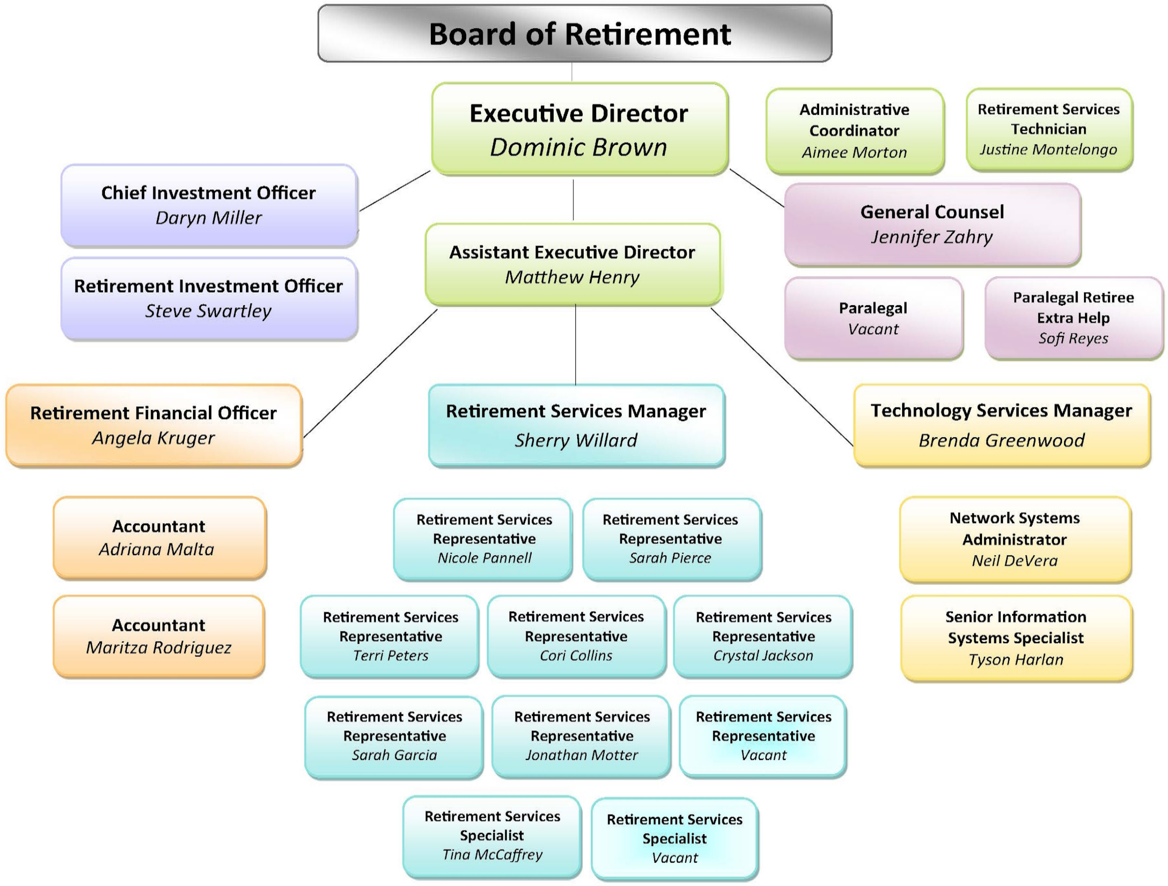


Dustin Dodgin
Appointed by Board of Supervisors
Present term expires 12/31/2019

Phil Franey
Elected by Retired Members
Present term expires 12/31/2019

Juan Gonzalez
Elected by General Members
Present term expires 12/31/2021

As of June 30, 2019



As of June 30, 2019

Actuary
The Segal Company, Inc.

Auditor
CliftonLarsonAllen, LLP

Custodian
The Northern Trust Company

Investment Consultants
Verus Investments
Albourne America LLC

Legal
Foley & Lardner, LLP
Hanson Bridgett, LLP
Ice Miller, LLP
Nossaman, LLP
Reed Smith, LLP

Other Specialized Services
Agility Recovery Solutions
Cortex Applied Research, Inc.
Glass, Lewis & Co., LLC
Deutsche Bank

Refer to the Investment Section for a list of Investment Managers and the Schedule of Investment Management Fees.

FINANCIAL SECTION

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

Board of Retirement and the Finance Committee
Kern County Employees' Retirement Association
Bakersfield, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Kern County Employees' Retirement Association, which comprise the statement of fiduciary net position and statement of changes in fiduciary net position, as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Kern County Employees' Retirement System'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.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

A member of Nexia International

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Kern County Employees' Retirement Association as of June 30, 2019 and 2018, and the respective changes in financial position for the years 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 schedules of changes in the net pension liability and related ratios, employer contributions, and money-weighted rate of return and the related notes to 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 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 opinions on the financial statements that collectively comprise the Kern County Employees' Retirement Association's basic financial statements. The other supplemental information, as listed in the table of contents, is presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

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

Board of Retirement and the Finance Committee
Kern County Employees' Retirement Association

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 9, 2019, on our consideration of the Kern County Employees' Retirement Association's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the result of that testing, and not to provide an opinion on the effectiveness of Kern County Employees' Retirement Association's 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 Kern County Employees' Retirement Association's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Denver, Colorado
December 9, 2019

This section presents management's discussion and analysis of the Kern County Employees' Retirement Association's (KCERA) financial statements and the significant events and conditions that affected the operations and performance during the years ended June 30, 2019 and 2018. It is presented as a narrative overview and analysis in conjunction with the Executive Director's *Letter of Transmittal* included in the Introductory Section of the Comprehensive Annual Financial Report.

FINANCIAL HIGHLIGHTS

- KCERA's net position decreased by $146.9 million during the fiscal year ended June 30, 2019, a 3.5% increase from the last fiscal year. The increase was principally due to financial markets, notably KCERA's debt securities and bonds allocations.

- Member contributions decreased by $2.4 million, or 4.5%, mainly as a result of scheduled member contribution rate changes and other demographic changes. Employer contributions decreased by $13.4 million, or 5.5%, the decrease in 2019 employer contributions was primarily due to having 27 pay-periods in the prior fiscal year compared to 26 in the current year. The average employer contribution rate decreased from 47.69% of payroll for fiscal year 2017-18 to 46.72% for fiscal year 2018-19.

- The total fund's investment performance did not meet the actuarial assumed rate of return for the fiscal year. The investment portfolio reported a total return of 5.3% (net of fees)* versus the actuarial assumed rate of return of 7.25% for the fiscal year ended June 30, 2019. The primary cause of the shortfall was the plan's overweight to fixed income in a strong equity market environment, as well as benchmark-relative underperformance by the hedge fund portfolio.

- Vested pension benefits increased by $19.3 million, or 6.1%, over the prior year. The increase is attributable to a 2.4% increase in retired members and beneficiaries receiving pension benefits, and a 3.0% increase in the average monthly benefit, which rose by $1,343 in the fiscal year. In 2018 the rate of inflation picked up and all pensioners received the maximum COLA of 2.5% in April 2019.

- As of June 30, 2018, the date of the most recent actuarial valuation, the funded ratio for KCERA was 65.1% compared to the funded ratio of 63.2% as of June 30, 2017. The increase in the ratio is mainly due to actuarial gain from lower than expected individual salary increases.

OVERVIEW OF BASIC FINANCIAL STATEMENTS AND ACCOMPAYING INFORMATION

1) **The Statement of Fiduciary Net Position** is the basic statement of position for a defined benefit pension plan. This statement presents asset and liability account balances at fiscal year-end. The difference between assets and liabilities represents the net position available for future payments to retirees and their beneficiaries. Assets and current liabilities of the Plan reflect full accruals. The statement reflects investments at fair value and accounting liabilities as distinct from actuarial liabilities.

2) **The Statement of Changes in Fiduciary Net Position** is the basic operating statement for a defined benefit pension plan. Changes in plan net position are recorded as additions or deductions from the Plan. All additions and deductions are reported on a full accrual basis.

3) **Notes to the Basic Financial Statements** are an integral part of the financial statements and provide important additional information.

4) **Required Supplementary Information** consists of three required schedules and their related notes: Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and Schedule of Money-Weighted Rates of Return.

** References in this document to KCERA's investment rate of return assume a time-weighted rate of return unless otherwise specified as a money-weighted rate of return, per GASB 67 guidelines.*

OVERVIEW OF BASIC FINANCIAL STATEMENTS AND ACCOMPAYING INFORMATION (cont)

5) **Other Supplemental Information** includes schedules of administrative expenses, investment manager fees, other investment expenses, and payments to consultants.

The required financial statements and disclosures have been prepared in accordance with accounting principles generally accepted in the United States of America and are in compliance with Governmental Accounting Standards Board (GASB) Statements.

FINANCIAL ANALYSIS

FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS

KCERA provides pension benefits to the employees and their beneficiaries of the County of Kern and other public agencies. KCERA's benefits are funded by member and employer contributions, and by investment income. KCERA's fiduciary net position restricted for pension benefits at June 30, 2019 was $4.3 billion, an increase of $146.9 million, or 3.5%, from June 30, 2018. KCERA's fiduciary net position-restricted for pension benefits at June 30, 2018 was $4.2 billion, an increase of $236.0 million, or 6.0%, from June 30, 2017. Key elements of the increase in net position are described below and in Tables 1 and 2 on pages 17 & 18.

CONTRIBUTIONS AND INVESTMENT INCOME

Additions to fiduciary net position include member and employer contributions and investment income. Member contributions were approximately $50.1 million, $52.5 million and $51.4 million for the years ended June 30, 2019, 2018 and 2017, respectively.

Member contributions decreased by $2.4 million 4.5% in 2019 and increased by $1.1 million 2.1% in 2018. The decrease in members contributions in 2019 was a result of 2018 containing 27 pay-periods versus a normal 26 pay-periods. Member contributions fluctuations were also a result of scheduled member contribution rate changes, and other demographic changes.

Employer contributions were $229.1 million, $242.5 million and $224.4 million for the years ended June 30, 2019, 2018 and 2017, respectively. Employer contributions decreased approximately $13.4 million 5.5% in 2019 and increased approximately $18.2 million 8.1% in 2018. The decrease in 2019 and the increase in 2018 employer contributions was primarily due to 2018 containing 27 pay-periods versus a normal 26 pay-period in a fiscal year.

Net investment and securities lending income was $214.2 million, $267.7 million and $426.6 million for the years ended June 30, 2019, 2018 and 2017, respectively.

For the fiscal years ended June 30, 2019, 2018 and 2017, the KCERA portfolio returned (net of fees) 5.3%, 6.5% and 11.8%, respectively. More information on KCERA's investment portfolio is contained in the investment section of this report.

BENEFITS, REFUNDS AND EXPENSES

Deductions to plan fiduciary net position include pension benefits, lump sum payments, supplemental benefits, refunds of member contributions, and administrative expenses. The pension benefits (annuity, pension and cost-of- living allowances) were $320.9 million, $304.8 million and $288.8 million for the years ended June 30, 2019, 2018 and 2017, respectively. Pension benefits increased by approximately $16.1 million (5.3%) in 2019 and $16.0 million (5.6%) in 2018.

These increases were mainly due to a consistently growing population of retired members and beneficiaries receiving pension benefits and an increase in the average monthly benefit, attributable to higher final average compensations and the maximum 2.5% cost-of-living adjustment. Retired members and beneficiaries increased by 2.6% in 2019 and by 3.1% in 2018.

FINANCIAL ANALYSIS (cont)

BENEFITS, REFUNDS AND EXPENSES (cont)

KCERA previously adopted California Government Code Section 31618, which provides for the establishment of the Supplemental Retiree Benefit Reserve (SRBR). In fiscal year 2019, SRBR provides retirees with 82% purchasing power parity and a $5,000 death benefit. In addition to pension benefits, the supplemental retirement benefits paid were $16.1 million, $13.1 million and $13.1 million for the years ended June 30, 2019, 2018 and 2017, respectively. Refunds of member contributions were $4.7 million, $3.7 million and $3.9 million for the years ended June 30, 2019, 2018 and 2017, respectively.

KCERA's administrative expenses were $4.8 million, $5.1 million and $5.2 million for the years ended June 30, 2019, 2018 and 2017, respectively.

Average aggregate monthly defined benefit payments, excluding SRBR benefits, AND total number of retirees and beneficiaries:

June 2019	June 2018	June 2017
$26.7 million	$25.4 million	$24.1 million
8,496	8,296	8,092

STATEMENT OF FIDUCIARY NET POSITION

Table 1 (in thousands)

	2019	Increase (Decrease) Amount	2018	Increase (Decrease) Amount	2017
Assets					
Current Assets	$ 430,284	$ 176,032	$ 254,252	$ 6,451	$ 247,801
Investments	4,509,181	271,885	4,237,296	236,812	4,000,484
Securities Lending Collateral	97,935	(42,146)	140,081	16,927	123,154
Capital Assets	2,793	(387)	3,180	(625)	3,805
Total Assets	**5,040,193**	**405,384**	**4,634,809**	**259,565**	**4,375,244**
Liabilities					
Current Liabilities	596,478	300,612	295,866	6,671	289,195
Liabilities for Security Lending	97,935	(42,146)	140,081	16,927	123,154
Total Liabilities	**694,413**	**258,466**	**435,947**	**23,598**	**412,349**
Fiduciary Net Position - Restricted for Pension Benefits	**$ 4,345,780**	**$ 146,918**	**$ 4,198,862**	**$ 235,967**	**$ 3,962,895**

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Table 2 (in thousands)

	2019	Increase (Decrease) Amount	2018	Increase (Decrease) Amount	2017
Additions					
Employer Contributions*	$ 229,120	$ (13,414)	$ 242,534	$ 18,183	$ 224,351
Member Contributions*	50,132	(2,371)	52,503	1,093	51,410
Net Investment Income	214,244	(53,415)	267,659	(158,948)	426,607
Total Additions	**493,496**	**(69,200)**	**562,696**	**(139,672)**	**702,368**
Deductions					
Pension Benefits	320,895	16,111	304,784	16,034	288,750
Supplemental Retirement Benefits	16,142	3,003	13,139	(4)	13,143
Refunds of Member Contributions	4,737	1,047	3,690	(234)	3,924
Administrative Expenses	4,804	(312)	5,116	(127)	5,243
Total Deductions	**346,578**	**19,849**	**326,729**	**15,669**	**311,060**
Increase (Decrease) in Net Position	**$ 146,918**	**$ (89,049)**	**$ 235,967**	**$ (155,341)**	**$ 391,308**
Fiduciary Net Position - Restricted for Pension Benefits					
At Beginning of Year	**$ 4,198,862**	**$ 235,967**	**$ 3,962,895**	**$ 391,308**	**$ 3,571,587**
At End of Year	**$ 4,345,780**	**$ 146,918**	**$ 4,198,862**	**$ 235,967**	**$ 3,962,895**

**Employer paid member contributions were reclassified as member contributions.*

RESERVES

KCERA's reserves are established for the purpose of managing benefit operations in accordance with the County Employees Retirement Law of 1937 (CERL). The total amount of reserves equals KCERA's Fiduciary Net Position – Restricted for Pension Benefits at the end of the year.

Investments are stated at fair value instead of at cost and include the recognition of unrealized gains and losses. Unrealized gains and losses effect the reserves indirectly through an actuarial asset "smoothing" process and are held in the Market Stabilization Reserve with a portion allocated to all other reserves. KCERA uses a five-year smoothing methodology to recognize unrealized gains and losses. The five-year smoothing is calculated by subtracting the expected return of the actuarial assumed interest rate of 7.25% from the total Fund's actual return on net position. The Market Stabilization Reserve was $(72.3) million, $(92.3) million and $(74.4) million for the years ended June 30, 2019, 2018 and 2017, respectively.

Interest at the actuarial rate of 7.25%, or at the highest rate possible if net earnings are not sufficient to credit the full actuarial rate, is credited semiannually on December 31 and June 30. Interest is credited to all reserves, except the contingency reserve. KCERA credited the reserves 4.38% in fiscal year 2019 and 6.82% in fiscal year 2018. In addition, in fiscal year 2019, no funds were credited to reduce the negative contingency reserve, in accordance with the Board of Retirement's Interest Crediting Policy. As investment returns improve, resulting in positive changes in net position, the Contingency and Market Stabilization Reserves will turn to a positive position.

RESERVES (cont)

KCERA Reserves			
	2019	2018	2017
Member Reserve	414,083	387,376	351,592
Employer Reserve	944,125	888,042	786,356
Cost of Living Reserve	1,345,986	1,278,088	1,178,952
Retired Member Reserve	1,561,743	1,576,955	1,558,678
Supplemental Retiree Benefit Reserve	168,536	177,089	178,079
Contingency Reserve	(16,355)	(16,355)	(16,355)
Market Stabilization Reserve	(72,338)	(92,333)	(74,407)
Total	**$ 4,345,780**	**$ 4,198,862**	**$ 3,962,895**

FIDUCARY RESPONSIBILITIES

The Board of Retirement and management staff are fiduciaries of the pension trust fund. Under the California Pension Protection Act of 1992, the Board of Retirement has plenary authority and fiduciary responsibility for the investment of monies and for the administration of KCERA. The Board of Retirement has the sole and exclusive fiduciary responsibility over the assets of the Plan. The assets are held for the exclusive purpose of providing benefits to KCERA members and their survivors, as mandated.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of KCERA's finances and accountability for the plan sponsors and members. Questions concerning any of the information provided in this report or requests for additional information should be directed to Angela Kruger, KCERA's financial officer, at angela.kruger@kcera.org or (661) 381-7700.

As of June 30, 2019 and 2018

(In thousands)

	2019	2018
Assets		
Cash in County Pool	$ 771	$ 12,314
Short-Term Investment Funds	105,541	91,408
Total Cash and Short-Term Investment Funds	106,312	103,722
Receivables:		
Investments Sold	313,517	123,709
Interest and Dividends	8,592	8,592
Contributions and Other Receivables	1,863	18,204
Total Receivables	323,972	150,505
Investments at Fair Value:		
Domestic Fixed Income	1,393,564	1,270,324
International Fixed Income	276,073	266,375
Domestic Equities	917,714	909,836
International Equities	829,572	806,215
Real Estate Investments	284,166	242,065
Alternative Investments	590,989	561,410
Commodities	228,366	175,300
Swaps/Options	(11,263)	5,771
Collateral Held for Securities Lending	97,935	140,081
Total Investments	4,607,116	4,377,377
Capital Assets:		
Computer Software	6,298	6,298
Equipment/Computers	609	609
Accumulated Depreciation	(4,114)	(3,727)
Total Capital Assets	2,793	3,180
Prepaid Expenses	—	25
Total Assets	5,040,193	4,634,809
Liabilities		
Securities Purchased	593,501	289,417
Collateral Held for Securities Lent	97,935	140,081
Other Liabilities	2,977	6,449
Total Liabilities	694,413	435,947
Fiduciary Net Position - Restricted for Pension Benefits	**$ 4,345,780**	**$ 4,198,862**

See accompanying notes to the financial statements.

KCERA 2019 - Statement of Changes in Fiduciary Net Position

for the years ended June 30, 2019 and 2018

(In thousands)

	2019	2018
Additions		
Contributions:		
Employer	$ 229,120	$ 242,534
Member	50,132	52,503
Total Contributions	**279,252**	**295,037**
Investment Income:		
Net Appreciation in Fair Value of Investments	146,316	252,139
Interest	40,474	33,734
Dividends	44,538	13,681
Real Estate Investments	10,189	(1,332)
Total Investment Income	241,517	298,222
Less: Investment Expenses	27,826	31,322
Net Investment Income	213,691	266,900
Securities Lending Activity:		
Securities Lending Income	614	843
Less: Rebates & Bank Fees	61	84
Net Securities Lending Income	553	759
Total Additions	**493,496**	**562,696**
Deductions		
Retirement and Survivor Benefits	320,895	304,784
Supplemental Retirement Benefits	16,142	13,139
Refunds of Member Contributions	4,737	3,690
Administrative Expenses	4,804	5,116
Total Deductions	**346,578**	**326,729**
Net Increase	**146,918**	**235,967**
Fiduciary Net Position - Restricted for Pension At Beginning of Year	**4,198,862**	**3,962,895**
Fiduciary Net Position - Restricted for Pension At End of Year	**$ 4,345,780**	**$ 4,198,862**

See accompanying notes to the financial statements.

NOTE 1 – DESCRIPTION OF PLAN

The Kern County Employees' Retirement Association (KCERA) was established on January 1, 1945 by the County of Kern Board of Supervisors under the provisions of the County Employees' Retirement Law of 1937 (CERL). KCERA is a cost-sharing, multiple-employer defined benefit plan (the Plan) covering all permanent employees of the County of Kern, Berrenda Mesa Water District, Button- willow Recreation and Park District, East Kern Cemetery District, Inyokern Community Services District, Kern County Hospital Authority, Kern County Superior Court, Kern County Water Agency, Kern Mosquito and Vector Control District, North of the River Sanitation District, San Joaquin Valley Air Pollution Control District, Shafter Recreation and Park District, West Side Cemetery District, West Side Mosquito and Vector Control District, and West Side Recreation and Park District. The Plan is administered by the Kern County Board of Retirement, which consists of nine members and two alternate members.

As of June 30, 2019, employee membership data related to the pension plan was as follows:

	General	Safety	Total
Active – Vested	4,184	1,435	5,619
Active – Non-Vested	3,308	338	3,646
Total Active Members	**7,492**	**1,773**	**9,265**
Terminated – Deferred Vested	1,196	254	1,450
Retirees and Beneficiaries	6,509	1,987	8,496
Total Members	**15,197**	**4,014**	**19,211**

As of June 30, 2018, employee membership data related to the pension plan was as follows:

	General	Safety	Total
Active – Vested	4,159	1,434	5,593
Active – Non-Vested	2,992	337	3,329
Total Active Members	**7,151**	**1,771**	**8,922**
Terminated – Deferred Vested	1,132	227	1,359
Retirees and Beneficiaries	6,349	1,947	8,296
Total Members	**14,632**	**3,945**	**18,577**

BENEFIT PROVISIONS

KCERA provides service retirement, disability, death, survivor and supplemental benefits to eligible employees. All regular full-time employees of the County of Kern or contracting districts who work 50% or more of the regular standard hours required become members of KCERA effective on the first day of the payroll period following the date of hire. Safety membership includes those in active law enforcement, fire suppression, criminal investigation and probation officers. General members (excluding Tier III) are eligible to retire at age 70 regardless of service or at age 50 with 10 or more years of retirement service credit. A member with 30 years of service is eligible to retire regardless of age. General Tier III members are eligible to retire at age 70 regardless of service or at age 52 with five or more years of retirement service credit.

NOTE 1 – DESCRIPTION OF PLAN (CONT.)

BENEFIT PROVISIONS (CONT.)

Safety members are eligible to retire at age 70 regardless of service or at age 50 with 10 or more years of retirement service credit. A member with 20 years of service is eligible to retire regardless of age.

The retirement benefit the member will receive is based on age at retirement, final average compensation (FAC), years of retirement service credit and retirement benefit tier.

General member benefits for Tier I and Tier II are calculated pursuant to California Gov. Code Sections 31676.17 and 31676.01, respectively. The monthly allowance is equal to 1/50th of FAC times years of accrued retirement service credit times age factor from Section 31676.17 (Tier I) or 1/90th of FAC times years of accrued retirement service credit times age factor from Section 31676.01 (Tier II). General Tier III member benefits are calculated pursuant to the provisions found in California Government Code Section 7522.20(a).

The monthly allowance is equal to the FAC multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.20(a).

Safety member benefits for Tier I and Tier II are calculated pursuant to California Gov. Code Sections 31664.1 and 31664, respectively. The monthly allowance is equal to 3% of FAC times years of accrued retirement service credit times age factor from Section 31664.1 (Tier I) or 1/50th (2%) of FAC times years of accrued retirement service credit times age factor from Section 31664 (Tier II).

For members in Tier I or Tier II, the maximum monthly retirement allowance is 100% of FAC. There is no FAC limit on the maximum retirement benefit for General Tier III members.

The maximum amount of compensation earnable that can be taken into account for 2019 for members with membership dates on or after July 1, 1996 but before January 1, 2013 is $280,000. The maximum amount of compensation earnable that was taken into account for 2018 was $275,000. For General Tier III members enrolled in Social Security who joined on or after January 1, 2013, the maximum pensionable compensation for 2019 is $124,180. The maximum pensionable compensation for 2018 was $121,388. These limits are adjusted on an annual basis. Members are exempt from paying member contributions and employers are exempt from paying employer contributions on compensation in excess of the annual cap.

FAC consists of the highest 12 consecutive months of pay for a General Tier I or Tier IIA member or a Safety Tier I or Tier IIA member, and the highest 36 consecutive months of pay for a General Tier IIB or Tier III member or a Safety Tier IIB member.

The member may elect an unmodified retirement allowance or an optional retirement allowance. The unmodified option provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse or domestic partner. An eligible spouse or partner is one married to or registered with the member for at least one year prior to the effective retirement date. Certain surviving spouses or partners may also be eligible if marriage or partnership occurred at least two years prior to the date of death and the surviving spouse or partner is age 55 as of the date of death. There are also four optional retirement allowances the member may choose. Each option requires a reduction in the unmodified allowance to grant the member the ability to provide certain benefits to a surviving spouse, domestic partner or named beneficiary having an insurable interest in the life of the member.

NOTE 1 – DESCRIPTION OF PLAN (CONT.)

BENEFIT PROVISIONS (CONT.)

DEATH BENEFITS:

Death Before Retirement

An active member's beneficiary is entitled to receive death benefits, which consist of accumulated contributions and interest and one month of salary for each full year of service, up to a maximum of six months' salary.

If a member is vested and his/her death is not the result of job-caused injury or disease, the spouse or registered domestic partner will be entitled to receive, for life, a monthly allowance equal to 60% of the retirement allowance they would have been entitled to receive if they had retired for a non- service-connected disability on the date of their death. This same choice is given to their minor children under the age of 18 (continuing to age 22 if enrolled full time in an accredited school).

If a member dies in the performance of duty, his/her spouse or registered domestic partner receives, for life, a monthly allowance equal to at least 50% of the member's final average salary. This can also apply to minor children under age 18 (continuing to age 22 if enrolled full time in an accredited school).

Death After Retirement

If a member dies after retirement, a death benefit of $5,000 is payable to his/her designated beneficiary or estate. If the retirement was for a nonservice-connected disability and the member chose the unmodified allowance option, the surviving spouse, registered domestic partner or minor children will receive a monthly continuance equal to 60% of the benefit. If the retirement was for a service-connected disability, the spouse, registered domestic partner or minor children will receive a 100% continuance of the member's benefit.

NOTE 1 – DESCRIPTION OF PLAN (CONT.)

BENEFIT PROVISIONS (CONT.)

DISABILITY BENEFIT:

A member with five years of service, regardless of age, who becomes permanently incapacitated for the performance of duty will be eligible for a nonservice-connected disability retirement. Any member who becomes permanently incapacitated for the performance of duty as a result of injury or disease arising out of and in the course of employment, is eligible for a service-connected disability, regardless of service length or age.

COST-OF-LIVING ADJUSTMENT:

An annual cost-of-living adjustment (COLA) of up to 2.0% was adopted for all retirees and continuance beneficiaries as of April 1, 1973. An additional 0.5% COLA was granted by the Ventura Settlement in April 1, 2002, resulting in a maximum COLA of 2.5%, depending on the rate of inflation.

SUPPLEMENTAL BENEFITS:

The Board of Retirement and the Board of Supervisors adopted Government Code Section 31618 on April 23, 1984, which provides for the establishment of the Supplemental Retiree Benefit Reserve (SRBR). The SRBR is used only for the benefit of future and current retired members and their beneficiaries. The supplemental benefit is not a guaranteed benefit. The distribution of the SRBR is determined by the Board of Retirement. In fiscal year 2019, SRBR provided for 80% purchasing power protection and a $5,000 death benefit.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

REPORTING ENTITY

KCERA, with its own governing board, is an independent governmental entity separate and distinct from the County of Kern.

BASIS OF ACCOUNTING

KCERA follows Governmental Accounting Standards Board (GASB) accounting principles and reporting guidelines. The financial statements are prepared using the accrual basis of accounting and reflect the overall operations of KCERA. Employer and member contributions are recognized in the period in which the contributions are due, and benefits and refunds of prior contributions are recognized when due and payable in accordance with the terms of the Plan. Investment income is recognized as revenue when earned. The net appreciation (depreciation) in the fair value of investments is recorded as an increase (decrease) to investment income based on investment valuations, which includes both realized and unrealized gains and losses on investments.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT.)

ADMINISTRATIVE EXPENSES

KCERA's board annually adopts the operating budget for the administration of KCERA. Costs of administering the Plan are charged against the Plan's earnings. KCERA's administrative budget is calculated pursuant to Government Code Section 31580.2(a), which provides that the administrative expenses incurred in any year may not exceed the greater of either twenty-one hundredths of 1 percent (0.21%) of the actuarial accrued liability of the system or $2,000,000, as adjusted annually by the amount of the annual cost-of-living adjustment computed in accordance with Article 16.5. Government Code Section 31580.2(b) provides that expenditures for computer software, hardware and computer technology consulting services in support of the computer products shall not be considered a cost of administrative expenses in the calculation.

CASH EQUIVALENTS

Cash equivalents are assets that are readily convertible into cash, such as short-term government bonds or Treasury bills and commercial paper. Cash equivalents are distinguished from other investments through their short-term existence; they mature within three months. A cash equivalent must also be an investment with an insignificant risk of change in value.

VALUATION OF INVESTMENTS

Fair value for investments are derived by various methods as indicated in the following table:

Publicly traded stocks	Most recent exchange closing price. International securities reflect currency exchange rates in effect at June 30, 2019 and 2018.
Short-term investments and bonds	Institutional evaluations or priced at par.
OTC securities	Evaluations based on good faith opinion as to what a buyer in the marketplace would pay for a security.
Commingled funds	Net asset value provided by the investment manager.
Alternative investments	Net asset value provided by the Fund manager based on the underlying financial statements and fair value of the Fund.
Real estate investments	Estimated based on price that would be received to sell an asset in an orderly transaction between marketplace participants at the measurement date. Investments without a public market are valued based on assumptions made and multiple valuation techniques or appraisals used by the investment manager. The KCERA property is valued based on an annual appraisal.
Commodities Swaps/Options	Listed market prices are used to report the fair values for derivative instruments, if available. If listed market prices are not available for derivative instruments, the price used may be from a vendor, an investment manager or a counterparty.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT.)

RISKS AND UNCERTAINTIES

KCERA invests in various investment securities, which are exposed to various risks, including interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the Statement of Fiduciary Net Position.

CAPITAL ASSETS

Assets shall be recorded at historical cost or, if that amount is not practicably determined, at estimated historical cost. Accumulated depreciation shall be summarized and reflected on KCERA's annual financial statements. Capital assets shall be depreciated over their estimated useful lives using the straight-line depreciation method. Intangible assets with limited useful lives (e.g., by legal or contractual provisions) should be amortized over their estimated useful lives. Amortization of computer software should begin when the program is placed into service.

Capitalization Thresholds and Useful Life

Capital Asset	Thresholds	Useful Life
Furniture	$2,500	5-15 years
Equipment/Computers	$5,000	3-10 years
Internally generated computer	$1,000,000	5-12 years
Computer software	$100,000	3-10 years

INCOME TAXES

The Plan qualifies under Section 401(a) of the Internal Revenue Code and is therefore not subject to tax under present income tax laws. No provision for income taxes has been made in the accompanying financial statements, as the Plan is exempt from federal and state income taxes under the provisions of Internal Revenue Code, Section 501 and California Revenue and Taxation Code, Section 23701, respectively.

MANAGEMENT'S ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. These affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

NOTE 3 – DEPOSITS AND INVESTMENTS

The Board of Retirement (the Board) has the fiduciary responsibility and authority to oversee the investment portfolio. The Board is governed by the County Employees' Retirement Law of 1937. It is also governed by California Government Code Sections 31594 and 31595, which provide for prudent person governance of the Plan. Under this law, the type and amount of plan investments as well as the quality of securities are not specifically delineated; rather, the investments made are assumed to be in the best interest of the Plan such that others with similar information would acquire similar investments. The Board is required to diversify the investments of the Plan so as to minimize the risk of loss and to maximize the rate of return, unless it is clearly prudent not to do so. The investments shall be made for the exclusive purpose of providing benefits to the participants and their beneficiaries and defraying reasonable expenses to the Plan.

The Board maintains a formal Investment Policy Statement, which addresses guidelines for the investment process. The primary investment objectives for KCERA's assets shall be:

1. Funding benefits
2. Long-term growth of capital
3. Preservation of purchasing power

A specific investment objective for KCERA's assets is for the asset value, exclusive of contributions or withdrawals, to grow long term. Another objective is for the assets to earn, through a combination of investment income and capital appreciation, a rate of return (net of fees) in excess of the established benchmarks over a full market cycle (typically 3-5 years).

The Board retains a number of professional investment managers. Investment manager selection is an important decision involving complex due diligence. The Board's investment policy requires independent performance measurement of investment managers and establishes total return objectives for the total portfolio and major categories of investments.

The Board adopts investment guidelines for KCERA's investment managers which are included within their respective investment management agreements.

NOTE 3 - DEPOSITS AND INVESTMENTS (CONT.)

KCERA's policy regarding the allocation of invested assets is established and may be amended by the Board. It is the policy of the Board to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The following was the Board's adopted asset allocation as of June 30, 2019 and 2018:

Asset Class	Target
Domestic Equity	19%
International Equity	8%
Emerging Markets Equity	4%
Global Equity	6%
Domestic Fixed Income Core Plus	19%
Domestic Fixed Income High Yield	6%
Emerging Markets Fixed Income	4%
Real Estate	10%
Hedge Funds	10%
Private Equity	5%
Private Credit	5%
Commodities	4%

For the year ended June 30, 2019 and June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension investment expenses, was 5.6% and 6.8% respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

DEPOSITS

Cash and cash equivalents are carried at cost plus accrued interest, which approximates fair value. All cash and cash equivalents are held as follows: by the County of Kern as part of Kern County's treasury pool; by Wells Fargo Bank as cash for benefit payments and KCERA Property, Inc.; and by KCERA's master global custodian, The Northern Trust Company. The County Treasury Oversight Committee is responsible for regulatory oversight of the Kern County Treasury Pool. Substantially all of the cash held at The Northern Trust Company is swept daily into collective, short-term investment funds.

Below is a summary of cash, deposits and short- term investments as of As of June 30, 2019 and 2018:

	(In thousands)	
Held by	**2019**	**2018**
County of Kern	$ 771	$ 12,314
Wells Fargo	2,868	4,279
Northern Trust	101,458	85,778
Disbursements	1,215	1,351
Total	**$ 106,312**	**$ 103,722**

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT.)

DEPOSITS (CONT.)

Custodial Credit Risk - Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the Plan will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. KCERA does not have a formal policy for custodial credit risk but limits custodial credit risk for deposits by maintaining cash in an external investment pool managed by the County of Kern and cash and short-term investments managed by The Northern Trust Company. Deposits held at The Northern Trust Company that were uninsured and uncollateralized were $1.5 million and $1.8 million for the years ended June 30, 2019 and 2018, respectively.

INVESTMENTS

Investments of the Plan are reported at fair value. In fulfilling its responsibilities, the Board of Retirement has contracted with investment managers and a master global custodian. For the year ended June 30, 2019, The Northern Trust Company is the global custodian for the majority of the investments of the Plan.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to a debt investment will not fulfill its obligations. The KCERA investment policy's minimum average credit quality rating for fixed income, with the exception of high yield, shall be at least A- and the minimum issue quality shall be B-rated. The minimum overall average credit quality for high yield shall be at least B.

At June 30, 2019 and 2018, KCERA's assets consisted of securities with credit quality ratings issued by nationally recognized statistical rating organizations, as shown on the next page.

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT.)

INVESTMENTS (CONT.)

Standard & Poor's (S&P) Credit Quality by Investment Type

As of June 30, 2019 (In thousands)

	S&P Credit Quality								
Type of Investment	**AAA**	**AA**	**A**	**BBB-B**	**CCC-C**	**D**	**NR**	**Agency***	**Total**
Asset-Backed Securities	$ 2,288	$ 1,190	$ 331	$ 3,969	$ 1,536	$ —	$ 6,242	$ —	$ 15,556
Bank Loans	—	—	—	13,638	—	—	188	—	13,826
Commercial Mortgage - Backed Securities	1,684	406	—	3	—	—	10,478	—	12,571
Corporate Bonds	2,230	6,318	51,101	258,828	5,008	245	19,856	—	343,586
Corporate Convertible Bonds	—	—	—	3,968	411	—	1,507	—	5,886
Government Agencies	—	3,030	—	487	—	—	—	276	3,793
Government Bonds	—	1,553	11,562	35,618	—	253	35,376	226,051	310,413
Government Mortgage - Backed Securities	—	—	—	—	—	—	438	249,569	250,007
Government-Issued Commercial Mortgage - Backed Securities	314	—	—	—	—	—	—	1,194	1,508
Municipal / Provincial Bonds	—	479	3,381	508	—	—	—	—	4,368
Non - Government-Backed C.M.O.s	—	894	261	265	335	—	3,273	—	5,028
Collective / Commingled Funds	—	458,153	172,986	7,241	—	—	44,917	—	683,297
Total	**$ 6,516**	**$472,023**	**$239,622**	**$324,525**	**$ 7,290**	**$ 498**	**$122,275**	**$477,090**	**$ 1,649,839**
U.S. Treasuries & Notes									**$ 19,798**
Total Fixed Income									**$ 1,669,637**

* "Agency" refers to a position for which an issue is implicitly guaranteed by the U.S. Government.

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT.)

INVESTMENTS (CONT.)

Standard & Poor's (S&P) Credit Quality by Investment Type

As of June 30, 2018 (In thousands)

	S&P Credit Quality								
Type of Investment	**AAA**	**AA**	**A**	**BBB-B**	**CCC-C**	**D**	**NR**	**Agency***	**Total**
Asset-Backed Securities	$ 4,629	$ 4,726	$ 2,116	$ 1,619	$ 3,752	$ —	$ 4,813	$ —	**$ 21,655**
Bank Loans	—	—	—	12,919	1,401	—	1,519	—	**15,839**
Commercial Mortgage-Backed Securities	1,407	1,045	—	396	—	$ 102	10,026	—	**12,976**
Corporate Bonds	9,186	3,932	32,011	266,432	13,106	—	24,155	—	**348,822**
Corporate Convertible Bonds	—	—	—	1,732	599	—	2,357	—	**4,688**
Government Agencies	—	3,497	—	514	—	—		101	**4,112**
Government Bonds	—	2,329	8,747	28,956	652	—	10,640	—	**51,324**
Government Mortgage - Backed Securities	—	—	—	—	—	—	2,666	182,476	**185,142**
Government - Issued Commercial Mortgage - Backed Securities	—	—	—	—	—	—	—	321	**321**
Municipal / Provincial Bonds	—	1,130	1,842	1,178	—	—	325	—	**4,475**
Non-Government-Backed C.M.O.s	521	12	—	2,774	94	—	4,188	—	**7,589**
Collective / Commingled Funds	—	504,572	—	6,733	—	—	—	—	**724,415**
Total	**$ 15,743**	**$521,243**	**$184,543**	**$323,253**	**$ 19,604**	**$ 102**	**$ 60,689**	**$256,181**	**$ 1,381,358**
U.S. Treasuries & Notes									**$ 155,341**
Total Fixed Income									**$ 1,536,699**

* "Agency" refers to a position for which an issue is implicitly guaranteed by the U.S. Government.

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT)

INVESTMENTS (CONT.)

CUSTODIAL CREDIT RISK - INVESTMENTS

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Plan will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. KCERA does not have a formal policy for limiting custodial credit risk. As of June 30, 2019 and 2018, there were no investment securities exposed to custodial credit risk.

CONCENTRATION OF CREDIT RISK

The KCERA investment policy limits exposure to any single investment manager or product. The maximum allocation to a single active manager is up to 12% of the aggregate fair value of the Plan. The maximum allocation to a single active management product is 8%. This limitation applies to any non-index investment vehicle. With the exception of any sovereign entity (both U.S. and non-U.S.) U.S. agency-backed and U.S. agency issued mortgages, portfolios may not invest more than 5% per investment-grade issuer. Securities of a single noninvestment-grade issuer should not represent more than 2% of the fair value of the portfolio. KCERA's investment portfolio contained no investments in any one single investment-grade issuer greater than 5% of fiduciary net position As of June 30, 2019 and 2018 (other than the exceptions listed above).

INTEREST RATE RISK

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. KCERA's investment policy requires active managers to be within 20% of their benchmark. The overall Fund duration is expected to be within 20% of the Fund's benchmark duration. At June 30, 2019 and 2018, the segmented time distribution of the fixed income portfolio, by investment type, was as follows:

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT)

INVESTMENTS (CONT)

(In thousands)

Investment Type	Fair Value	Investment Maturities (in years) as of June 30, 2019 Less Than 1	1-5	6-10	More Than 10	Maturity Not Determined
Asset-Backed Securities	$ 15,556	$ —	$ 999	$ 3,802	$ 10,755	$ —
Bank Loans	13,826	20	8,020	5,786	—	—
Commercial Mortgage-Backed Securities	12,571	—	—	278	12,293	—
Corporate Bonds	343,586	4,772	152,859	127,684	57,034	1,237
Corporate Convertible Bonds	5,886	—	868	248	4,770	—
Government Agencies	3,793	2,515	—	295	983	—
Government Bonds	310,413	1,406	94,166	139,177	75,664	—
Government Mortgage Backed Securities	250,007	154,591	959	2,440	92,017	—
Government-Issued Commercial Mortgage Backed Securities	1,508	4	74	1,044	386	—
US Treasuries & Notes	19,798	—	—	—	—	19,798
Municipal / Provincial Bonds	4,368	171	1,097	508	2,592	—
Non-Government-Backed C.M.O.s	5,028	—	510	419	4,099	—
Collective / Commingled Funds	683,297	44,917	—	—	—	638,380
Total	**$ 1,669,637**	**$ 208,396**	**$ 259,552**	**$ 281,681**	**$ 260,593**	**$ 659,415**

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT)

INVESTMENTS (CONT)

(In thousands)

Investment Type	Fair Value	Investment Maturities (in years) as of June 30, 2018 Less than 1	1-5	6-10	More than 10	Maturity Not Determined
Asset-Backed Securities	$21,655	$ —	$ 1,990	$ 5,935	$ 13,730	$ —
Bank Loans	15,839	—	11,247	4,592	—	—
Commercial Mortgage-Backed Securities	12,976	—	—	—	12,976	—
Corporate Bonds	348,822	14,283	134,549	147,148	49,986	2,856
Corporate Convertible Bonds	4,688	—	1,171	982	2,535	—
Government Agencies	4,112	—	2,452	800	860	—
Government Bonds	199,500	700	61,477	69,802	67,521	—
Government Mortgage Backed Securities	185,142	89	603	1,651	56,017	126,782
Government-Issued Commercial Mortgage Backed Securities	321	—	131	—	190	—
Index-Linked Government Bonds	7,165	—	1,609	4,302	1,254	—
Municipal / Provincial Bonds	4,475	—	1,205	1,178	2,092	—
Non-Government-Backed C.M.O.s	7,589	—	—	827	6,762	—
Collective / Commingled Funds	724,415	—	—	—	—	724,415
Total	**$1,536,699**	**$15,072**	**$216,434**	**$237,217**	**$213,923**	**$854,053**

FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of an investment.

The Board of Retirement considers the currency risk exposure when setting the asset allocation targets of the Plan. KCERA's investment policy permits an 18% allocation to non-U.S. equities and a 4% allocation to emerging market debt. In addition, the core fixed income and high yield managers invest in a diversified portfolio, which can include up to 10% in foreign currency exposure and 30% in non-dollar securities.

The direct holdings shown on the following page represent KCERA's foreign currency risk exposure As of June 30, 2019 and 2018.

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT)

As of June 30, 2019 (In thousands,USD)

	Foreign Currency		FairValue
Cash	Argentine Peso	$	110
	Brazilian Real		261
	British pound sterling		(826)
	Canadian dollar		(275)
	Columbian peso		226
	Danish krone		1
	Euro		(1,291)
	HK offshore Chinese		(35)
	Indian rupee		254
	Indonesian rupiah		259
	Japanese yen		(134)
	Mexican peso		(454)
	New Zealand dollar		49
	Russian ruble		298
	South Korean won		24
	Swiss franc		5
Cash Collateral/ Variation Margin	British pound sterling		132
	Euro		847
	Japanese yen		361
	Mexican peso		69
Equities	Australian Dollar		3,810
	British pound sterling		10,143
	Canadian dollar		5,692
	Danish Krone		3,576
	Euro		23,506
	Hong Kong dollar		10,016
	Japanese yen		21,794
	New Israeli shekel		700
	New Zealand dollar		244
	Norwegian krone		871
	Singapore dollar		1,659
	South African rand		4,096
	South Korean won		2,908
	Swedish krona		1,594
	Swiss franc		9,310
Fixed Income	Argentine Peso		435
	Brazilian Real		6,669
	British pound sterling		1,341
	Canadian dollar		330
	Chilean peso		606
	Colombian peso		3,073
	Dominican peso		893
	Euro		1,314
	HK offshore Chinese		73
	Malaysian ringgit		5,478
	Mexican peso		8,405
	Peruvian nuevo sol		1,080
	Polish zloty		4,363
	Russian ruble		4,858
	South African rand		2,509
Swaps / Options	Brazilian real		368
	British pound sterling		(127)
	Euro		(1)
	Japanese yen		(286)
	Mexican peso		(51)
Total Foreign Cash & Investments		$	141,130

As of June 30,2018 *(In thousands,USD)*

	Foreign Currency		Value
Cash	Argentine Peso	$	100
	Brazilian Real		31
	Canadian Dollar		8,620
	Swiss Franc		5
	Chinese Yuan Renminbi		152
	Euro		149
	British Pound Sterling		354
	Hungarian Forint		115
	Japanese Yen		125
	Mexican Peso		360
	New Zealand Dollar		49
	Russian Ruble		45
	Singapore Dollar		6
	Turkish Lira		81
Cash Collateral/ Variation Margin	Canadian Dollar		15
	Euro		619
	British Pound Sterling		80
	Japanese Yen		94
	Mexican Peso		295
Equities	Australian Dollar		10,591
	Canadian Dollar		12,409
	Swiss Franc		11,574
	Danish Krone		4,642
	Euro		46,014
	British Pound Sterling		24,310
	Hong Kong Dollar		13,252
	New Israeli Shekel		2,095
	Japanese Yen		43,633
	South Korean Won		8,940
	Norwegian Krone		664
	Swedish Krona		2,892
	Singapore Dollar		2,355
	South African Rand		4,597
Fixed Income	Argentine Peso		1,462
	Brazilian Real		5,510
	Chilean Peso		319
	Chinese Yuan Renminbi		72
	Colombian Peso		963
	Danish Krone		7,109
	Dominican Peso		918
	Euro		1,413
	British Pound Sterling		1,396
	Mexican Peso		7,023
	Malaysian Ringgit		1,378
	Polish Zloty		2,606
	Russian Ruble		7,213
	South African Rant		1,668
Swaps / Options	Canadian Dollar		29
	Euro		9
	British Pound Sterling		(50)
	Japanese Yen		(98)
	Mexican Peso		(288)
Total Foreign Cash & Investments		$	237,915

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT)

INVESTMENTS (CONT)

HIGHLY SENSITIVE INVESTMENTS

KCERA utilizes investments that are highly sensitive to interest rate changes in its fixed income, separately managed investment accounts. Highly sensitive investments include mortgage-backed securities, asset-backed securities, collateralized mortgage obligations, and collateralized bond obligations (CBO). Mortgage-backed securities, collateralized mortgage obligations and asset-backed securities are created from pools of mortgages or other assets (receivables). A CBO is an investment-grade, asset-based security comprised of low-rated bonds that are transferred to a special purpose vehicle that manages the issue. Such securities are subject to credit and interest rate risks, including uncollectible mortgages or receivables backing a security, home mortgages that are prepaid at the option of the homeowner, and the duration and maturity of the issues.

Such securities are subject to credit and interest rate risks, including uncollectible mortgages or receivables backing a security, home mortgages that are prepaid at the option of the homeowner, and the duration and maturity of the issues.

Fair Value (In thousands)

	June 30, 2019	June 30, 2018
Mortgage-Backed Securities	$ 264,086	$ 198,439
Asset-Backed Securities	15,556	21,655
Collateralized Mortgage Obligation Securities	5,028	7,589
Total	**$ 284,670**	**$ 227,683**

NOTE 4 – FAIR VALUE MEASUREMENT

KCERA's investments are measured and reported within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value:

- Level 1 – Investments reflect prices quoted in active markets.
- Level 2 – Investments reflect prices that are based on a similar observable asset, either directly or indirectly, which may include inputs in markets that are not considered to be active.
- Level 3 – Investments reflect prices based on unobservable sources.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

Debt, equities and investment derivatives classified in Level 1 of the fair value hierarchy are valued directly from a predetermined primary external pricing vendor. Assets classified in Level 2 are subject to pricing by an alternative pricing source due to lack of information available by the primary vendor. Assets classified in Level 3, due to lack of an independent pricing source, are valued using an internal fair value as provided by the investment manager.

NOTE 4 – FAIR VALUE MEASUREMENT (CONT)

Investments Measured at Fair Value

(In thousands)

	June 30, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value				
Debt Securities:	**$ 1,062,958**	**$ 338,614**	**$ 701,607**	**$ 22,737**
Asset-Backed Securities	284,565	—	266,974	17,591
Bank Loans	13,826	—	13,826	—
Bond Funds	97,523	—	5,351	—
Collateralized Debt Obligations	3,135	—	—	3,135
Corporate Debt Securities	349,471	—	347,460	2,011
Government Debt Securities	294,374	228,970	65,404	—
State & Local Government Debt	2,592	—	2,592	—
Structured Debt	18,577	18,577	—	—
Escrow	(1,105)	(1,105)	—	
Equity Investments:	**442,207**	**440,868**	**—**	**1,339**
Common Stock	303,647	302,353	—	1,294
Equity Funds	137,084	137,039	—	45
Preferred Stock	1,064	1,064	—	—
Stapled Securities	412	412	—	—
Real Assets:	**4,975**	—	—	**4,975**
Real Estate	4,975	—	—	4,975
Investments Measured at the Net Asset Value (NAV)	**3,010,304**	—	—	—
Real Estate Funds	279,191	—	—	—
Hedge Funds	407,309	—	—	—
Private Equity	183,680	—	—	—
Commingled Commodity Funds	228,366	—	—	—
Commingled Equity Funds	1,305,079	—	—	—
Commingled Bond Funds	606,679	—	—	—
Derivatives	**(11,263)**	**(283)**	**(10,756)**	**(224)**
Credit Contracts	(381)	—	(381)	—
Interest Rate Contracts	(10,783)	(283)	(10,498)	(2)
Other	(99)	—	123	(222)
Invested Securities Lending	**97,935**	—	**97,935**	—
Total	**$ 4,607,116**	**$ 779,199**	**$ 788,786**	**$ 28,827**

NOTE 4 – FAIR VALUE MEASUREMENT (CONT)

Investments Measured at Fair Value

(In thousands)

	June 30, 2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value				
Debt Securities:	**$ 930,763**	**$ 155,341**	**$ 761,316**	**$ 14,106**
Asset-Backed Securities	226,530	—	222,304	4,226
Bank Loans	15,839	—	15,839	—
Bond Funds	118,479	—	118,479	—
Collateralized Debt Obligations	4,650	—	—	4,650
Corporate Debt Securities	353,507	—	349,236	4,271
Government Debt Securities	202,499	148,176	54,323	—
State & Local Government Debt Secur.	2,092	—	1,135	—
Structured Debt	7,165	7,165	—	—
Escrow	2	—		2
Equity Investments:	**653,675**	**651,408**	**1,552**	**61**
Common Stock	472,088	471,373	—	61
Convertible Equity	1,552	—	1,552	—
Equity Funds	173,473	173,473	—	—
Preferred Stock	5,500	5,500	—	—
Stapled Securities	1,062	1,062	—	—
Real Assets:	**4,275**	—	**—**	**4,275**
Real Estate	4,275	—	—	4,275
Investments Measured at the Net Asset Value (NAV)	**2,642,812**	—	**—**	**—**
Real Estate Funds	237,790	—	—	—
Hedge Funds	387,203	—	—	—
Private Equity	174,207	—	—	—
Commingled Commodity Funds	175,300	—	—	—
Commingled Equity Funds	1,062,376	—	—	—
Commingled Bond Funds	605,936	—	—	—
Derivatives	**5,771**	**2,884**	**2,887**	**—**
Credit Contracts	(222)	—	(222)	—
Interest Rate Contracts	3,519	(32)	3,551	—
Other	2,474	2,916	(442)	—
Invested Securities Lending Collateral	**140,081**	**—**	**140,081**	**—**
Total	**$4,377,377**	**$ 809,633**	**$ 905,836**	**$ 19,096**

NOTE 4 – FAIR VALUE MEASUREMENT (CONT)

The valuation method for investments measured at the net asset value (NAV) per share, or equivalent, is presented in the table below.

(In thousands)

Investments Measured at Net Asset Value (NAV)	6/30/2019	Redemption Frequency	Redemption Notice Period	Unfunded Commitments
Commingled Bond Funds [1]	$ 606,679	Daily, Quarterly, None	2-30 Days	$ —
Commingled Commodity Funds [1]	228,366	Daily, Monthly	1-30 Days	—
Commingled Equity Fund Domestic [1]	728,397	Daily, Quarterly	1-60 Days	—
Commingled Equity Fund Non-US [1]	576,682	Daily, Monthly	1-15 Days	—
Hedge Funds:				
CTA [2]	22,039	Monthly	30 Days	—
Directional [3]	30,220	Monthly	30-60 Days	—
Equity Long/Short [4]	25,169	Quarterly	45 Days	—
Event-Driven [5]	58,011	Quarterly, Annually, 36 months	45-90 Days	—
Multi-Strategy [6]	128,843	Quarterly, Annually	60-90 Days	—
Relative Value [7]	98,410	Monthly, Quarterly, Semi-	45-120 Days	—
Structured Credit [8]	44,617	Monthly	N/A	—
Real Estate Funds [9]	279,191	Quarterly, None	30-45 Days	102,599
Private Asset Funds [9]	183,680	N/A	N/A	63,547
Total	**$ 3,010,304**			**$ 166,146**

[1] Commingled Bond Funds, Commodity Funds and Equity Funds: Four bond funds, three commodity funds and eight equity funds are considered to be commingled in nature. Each is valued at the net asset value (NAV) of units held at the end of the period based upon the fair value of the underlying investments.

[2] CTA: The objective of this fund is to provide consistent long-term appreciation of assets through implementation of a systematic trading model or portfolio of systematic trading models that trade in a number of debt, equity, foreign exchange and commodity instruments and derivative contracts. The fund is valued at NAV.

[3] Directional: The global macro fund utilizes this strategy seek to generate consistent long-term appreciation through active, direct and indirect, leveraged trading and investment on a global basis in multiple investment strategies. The fund is valued at NAV.

[4] Equity Long/Short Hedge Fund: Consisting of one fund utilizing both long and short strategies seeking risk-adjusted returns principally through investment in the Asian-Pacific region. The fund is valued at NAV.

[5] Event-Driven Hedge Funds: Consisting of five funds, this strategy seeks to gain an advantage from pricing inefficiencies that may occur in the onset or aftermath of a corporate action or related event. These investments are valued at NAV per share.

[6] Multi-Strategy Hedge Funds: The six funds that make up this group aim to pursue varying strategies in order to diversify risks and reduce volatility. These investments are valued at NAV per share.

[7] Relative Value Hedge Funds: Consisting of three funds, this strategy's main focus is to benefit from valuation discrepancies that may be present in related financial instruments by simultaneously purchasing or selling these instruments. All five funds are valued at NAV.

(8) The structured credit fund investments in collateral backed securities. Structured credit investors attempt to identify mispriced securities where the return is greater than warranted by the underlying risk. The fund is valued at NAV.

[9] Private Asset and Real Estate Funds: KCERA's Private Asset portfolio consists of eight private equity funds with exposure to funds investing in buyouts, venture capital and special situations and three private credit funds directly investing in distressed credit, special situations and real estate. The Real Estate portfolio, comprised of six funds, invests mainly in U.S. commercial real estate and utilizes a combination of Core open-end commingled funds and closed-end Value-Added funds. The open-end funds are eligible for redemption on a quarterly basis. Distributions are received from the closed-end funds as underlying investments within the funds are liquidated. Individual holdings contained in the funds are valued at NAV using a combination of the income, cost and sales comparison approaches.

NOTE 4 – FAIR VALUE MEASUREMENT (CONT)

The valuation method for investments measured at the net asset value (NAV) per share, or equivalent, is presented in the table below.

(In thousands)

Investments Measured at Net Asset Value (NAV)	6/30/2018	Redemption Frequency	Redemption Notice Period	Unfunded Commitments
Commingled Bond Funds [1]	$ 605,936	Daily, Quarterly, None	2-30 Days	$ —
Commingled Commodity Funds [1]	175,300	Daily, Monthly	1-30 Days	—
Commingled Equity Fund Domestic [1]	646,767	Daily, Quarterly	1-60 Days	—
Commingled Equity Fund Non-US [1]	415,609	Daily, Monthly	1-15 Days	—
Hedge Funds:				
CTA [2]	21,366	Monthly	30 Days	—
Directional [3]	44,923	Monthly	30-60 Days	—
Equity Long/Short [4]	26,583	Quarterly	45 Days	—
Event-Driven [5]	81,367	Quarterly, Annually, 36 months	45-90 Days	—
Multi-Strategy [6]	99,975	Quarterly, Annually	60-90 Days	—
Relative Value [7]	112,989	Monthly, Quarterly, Semi-annually	45-120 Days	—
Real Estate Funds [8]	237,790	Quarterly, None	30-45 Days	71,504
Private Asset Funds [8]	174,207	N/A	N/A	112,794
Total	**$ 2,642,812**			**$ 184,298**

[1] Commingled Bond Funds, Commodity Funds and Equity Funds: Five bond funds, three commodity funds and five equity funds are considered to be commingled in nature. Each is valued at the net asset value (NAV) of units held at the end of the period based upon the fair value of the underlying investments.

[2] CTA: The objective of this fund is to provide consistent long-term appreciation of assets through implementation of a systematic trading model or portfolio of systematic trading models that trade in a number of debt, equity, foreign exchange and commodity instruments and derivative contracts. The fund is valued at NAV.

[3] Directional: The three global macro funds utilizing this strategy seek to generate consistent long-term appreciation through active, direct and indirect, leveraged trading and investment on a global basis in multiple investment strategies. All three funds are valued at NAV.

[4] Equity Long/Short Hedge Fund: Consisting of one fund utilizing both long and short strategies seeking risk-adjusted returns principally through investment in the Asian-Pacific region. The fund is valued at NAV.

[5] Event-Driven Hedge Funds: Consisting of two funds, this strategy seeks to gain an advantage from pricing inefficiencies that may occur in the onset or aftermath of a corporate action or related event. These investments are valued at NAV per share.

[6] Fund of Funds: Side pocket of illiquid investments from the constituent underlying funds for a fund-of-funds terminated on 2013.

[7] Multi-Strategy Hedge Funds: The three funds that make up this group aim to pursue varying strategies in order to diversify risks and reduce volatility. These investments are valued at NAV per share.

[8] Relative Value Hedge Funds: Consisting of five funds, this strategy's main focus is to benefit from valuation discrepancies that may be present in related financial instruments by simultaneously purchasing or selling these instruments. All five funds are valued at NAV.

[9] Private Asset and Real Estate Funds: KCERA's Private Asset portfolio consists of 9 funds investing primarily in buyouts with some exposure to distressed funds, venture capital and special situations. The Real Estate portfolio, comprised of 5 funds, invests mainly in U.S. commercial real estate and utilizes a combination of Core open-end commingled funds and closed-end Value-Added funds. The open-end funds are eligible for redemption on a quarterly basis. Distributions are received from the closed-end funds as underlying investments within the funds are liquidated. Individual holdings contained in the funds are valued at NAV using a combination of the income, cost and sales comparison approaches.

NOTE 5 – SECURITIES LENDING

Under provisions of state statutes, the Board of Retirement permits KCERA to participate in a securities lending program, whereby securities are transferred to independent broker-dealers and other entities for collateral with a simultaneous agreement to return the collateral for the same securities plus a fee in the future. Deutsche Bank is KCERA's agent for securities lending.

Deutsche Bank is authorized to lend U.S. government obligations, U.S. bonds and equities, and international bonds and equities that are being held in custody to various borrowers, such as banks and brokers. Securities are lent for collateral. KCERA does not have the ability to pledge or sell collateral securities absent a broker default. All securities loans can be terminated on demand by either KCERA or the borrower.

U.S. securities are loaned versus collateral valued at 102% of the fair value of the securities plus any accrued interest. Non-U.S. securities are loaned versus collateral valued at 110% of the fair value of the securities plus any accrued interest. Marking to market is performed every business day subject to de minimis rules of change in value; the borrower is required to deliver additional collateral when necessary so that the total collateral held by the agent will at least equal the fair value of the borrowed securities. Deutsche Bank invests cash collateral in repurchase agreements on an overnight and term basis collateralized by readily liquid and marketable securities at 102% or greater.

At June 30, 2019 and 2018, KCERA had no credit risk exposure to borrowers due to the nature of the program's collateralization of loans at 102% or 110% plus accrued interest.

The tables below show the balances relating to securities lending transactions as of June 30, 2019 and 2018.

As of June 30, 2019 (In thousands)

Security Type	Fair Value of Loaned Securities Securitized by Cash	Cash Collateral	Fair Value of Loanded Secuities Securitized by Non-Cash Collateral	Non-Cash Collateral
Domestic Equities	$ 25,202	$ 25,798	$ 17,575	—
International Equities	2,763	2,925	3,423	—
Corporate Bonds	48,738	49,705	—	—
Government Bonds	784	798	—	—
Treasuries	18,297	18,709	—	21,527
Total	**$ 95,784**	**$ 97,935**	**$ 20,998**	**$ 21,527**

As of June 30, 2018 (In thousands)

Security Type	Fair Value of Loaned Securities Securitized by Cash	Cash Collateral	Fair Value of Loanded Secuities Securitized by Non-Cash Collateral	Non-Cash Collateral
Domestic Equities	$ 74,487	$ 76,202	$ 16,648	$ —
International Equities	2,208	3,319	2,049	—
Corporate Bonds	54,890	55,538	83	—
Corporate Bonds	1,406	1,435	—	—
Government Bonds	3,543	3,587	—	19,497
Total	**$ 136,534**	**$ 140,081**	**$ 18,780**	**$ 19,497**

NOTE 6 – DERIVATIVES

DESCRIPTION OF AND AUTHORITY FOR DERIVATIVE INVESTMENTS

KCERA invests in derivative financial investments (i.e., instruments) as authorized by the Board of Retirement. Investment managers may use derivatives where guidelines permit. A derivative instrument is defined as a contract that derives its value, usefulness and marketability from an underlying instrument that represents a direct ownership of an asset or a direct obligation of an issuer. Derivative instruments include, but are not limited to, futures, options, forward contracts, and interest rate or commodity swap transactions. All derivatives are considered investments by KCERA.

Substitution and risk control are the two derivative strategies permitted. Substitution strategy is when the characteristics of the derivative sufficiently parallel that of the cash market instruments; the derivatives may be substituted on a short-term basis for the cash market instrument. Risk control strategy is when the characteristics of the derivative sufficiently parallel that of the cash instrument; an opposite position from the cash instrument could be taken in the derivative instrument to alter the exposure to or the risk of the cash instrument.

Portfolios may not sell securities short nor create leverage through the use of financial futures and options. Uncovered futures or options positions are prohibited.

Financial futures and options may only be used to hedge currency risk or to manage portfolio duration. Investment in structured notes is prohibited. KCERA may invest in the following:

FUTURES

Futures contracts are used to hedge against a possible increase in the price of currency. Futures contracts are classified by category of underlying instrument, such as equity, fixed income, commodity or cash equivalent. Derivative positions are tied to the performance of underlying securities. Futures contracts are priced “mark-to-market,” and daily settlements are recorded as investment gains or losses. Accounting for the daily mark-to-markets in this manner, the fair value of the futures contract at the end of the reporting period is the pending mark-to-market. For investment performance, risk and exposure purposes, KCERA’s custodian reports the notional fair values of futures contracts with corresponding offsets. When a futures contract is closed, futures are removed from the record with the final gain/loss equal to the fluctuation in value from the last mark-to-market to the closing value.

OPTIONS

Options are used to manage risk exposures in certain accounts as a result of asset allocation requirements or unusual flows of cash to or from such accounts. Purchased put/call options are reported as assets with cost equal to the premium amount paid at inception, and written put/call options are reported as liabilities with cost equal to the premium received at inception. During the term of the options contracts, options are revalued at the end of each reporting period. Unrealized gains and losses are reported as the difference between the premium (cost) and the current fair value. At expiration, sale, or exercise, options are removed from record, and realized gains and losses are generally recognized. Because of the nature of options transactions, notional values are not included in the Investment Derivatives Summary table on page 46.

NOTE 6 – DERIVATIVES (CONT)

DESCRIPTION OF AND AUTHORITY FOR DERIVATIVE INVESTMENTS (CONT)

SWAPS

Swap transactions are used to preserve a return or spread on investments to protect against currency fluctuations as a duration management technique or to protect against any increase in the price of securities. Because the fair values of swaps can fluctuate, swaps are represented as assets (if fair value is greater than zero) and liabilities (if fair value is less than zero). If a premium is paid or received at inception of the swap, the premium amount is generally recorded as the cost of the swap. During the term of the swap agreement, the periodic cash flows as either income or expense associated with the swap agreement. At each reporting period, swaps are revalued and unrealized gains or losses are reported. KCERA's custodian generally obtains swap valuations from a pricing vendor, the investment manager or the counterparty. At closing, KCERA's custodian removes the swap assets and liabilities from the record. The difference between any closing premium exchanged and the cost basis is recognized as realized gain or loss.

FORWARD EXCHANGE CONTRACTS

Forward exchange contracts are used for the purpose of hedging against adverse movement in currency exchange rates and to facilitate settlement of transactions in foreign securities. KCERA's reporting methodology for foreign exchange (FX) contracts reflects payables and receivables for the currencies to be exchanged while the forward FX contracts are pending; the two pending cash flows are valued separately. The overall cost basis for a pending FX deal is zero (the net of the cost basis for the payable and receivable). Pending forward FX contracts are valued using the closing forward FX rate as of the report date. The difference between the forward rate (base fair value) at the reporting date and the contracted rate on trade date (base cost) of the forward FX contract is unrealized gain/loss. The difference between the spot rate applied at settlement date and the contracted rate on trade date is realized gain/loss at the settlement of the forward FX contract. KCERA does not discount the valuation of the anticipated cash flows associated with pending forward FX contracts.

SUMMARY OF DERIVATIVE INVESTMENTS

Investment derivative instruments are reported as investments (if fair value is greater than zero) or liabilities (if fair value is less than zero) as of fiscal year end on the Statement of Fiduciary Net Position. Listed market prices are used to report the fair values for derivative instruments, if available. If listed market prices are not available for derivative instruments, the price used may be from a vendor, an investment manager or a counterparty. All changes in fair value are reported in the Statement of Changes in Fiduciary Net Position as a component of investment income.

As of June 30, 2019 and 2018, KCERA has the following instruments outstanding (see Summary table on next page) with an objective to earn a rate of return consistent with KCERA's investment policies. Notional values listed on the Summary table that are positive (assets) or negative (liabilities) are aggregated for similar derivative types.

NOTE 6 – DERIVATIVES (CONT)

Derivative Investment Summary

As of June 30, 2019

Derivative Investment Type	Changes in Fair Value Gain (Loss)	Fair Value	Notional Value
Futures	$ (1,423)	$ —	$ 123,584
Options	225	(165)	—
Swaps	(1,664)	(10,876)	—
Foreign Exchange Contracts	1,627	(222)	—
Rights/Warrants Equity Contracts	—	—	—
Total Value	**$ (1,235)**	**$ (11,263)**	**$ 123,584**

As of June 30, 2018 (In thousands)

Derivative Investment Type	Changes in Fair Value Gain (Loss)	Fair Value	Notional Value
Futures	$ (1,532)	—	$ 3,912
Options	46	(457)	(20)
Swaps	2,778	5,882	—
Foreign Exchange Contracts	(1,527)	346	—
Rights/Warrants Equity Contracts	6	—	—
Total Value	**$ (229)**	**$ 5,771**	**$ 3,892**

NOTE 7 – CONTRIBUTIONS

Following the establishment of KCERA on January 1, 1945, eligible employees and their beneficiaries became entitled to pension, disability and survivor benefits under the provisions of the CERL. As a condition of participation under the provisions of the CERL, members are required to pay a percentage of their salaries, depending on their entry age in the Plan, membership type and benefit tier.

The funding objective of the KCERA Board of Retirement is to provide sufficient assets to permit the payment of all regular benefits promised under KCERA while minimizing the volatility of contribution rates for participating employers from year to year as a percentage of covered payroll. There are three sources of funding for KCERA retirement benefits: employer contributions, member contributions and investment earnings.

Total contributions made during fiscal years 2019 and 2018, respectively, amounted to approximately $279.3 million and $295.0 million, of which $229.1 million and $242.5 million were contributed by employers, and $50.1 million and $52.5 million were contributed by members.

PENSION OBLIGATION BONDS

In 1995 and 2003, the County of Kern issued pension obligation bonds and contributed $224.5 million and $285.1 million to the Plan, respectively. Special districts did not participate in the funding provided by pension obligation bonds. Therefore, different employer contribution rates are required to fund the unfunded liabilities for each class of participation.

COST-OF-LIVING ADJUSTMENT

On April 1, 1973, an annual cost-of-living adjustment (COLA) of up to 2% for all retirees and continuance beneficiaries was adopted. The 2% COLA was funded entirely from the unreserved fund balance until February 5, 1983. After this date and prior to fiscal year 2003, funding of the 2% COLA was included in the employers' contributions. In fiscal year 2002, the County of Kern activated Government Code Section 31617, which provides that COLAs shall be funded first from excess earnings, to the extent of such excess, and thereafter from employer contributions. In fiscal year 2019, the Plan had no excess earnings; $0 was reserved to fund the employer COLA contributions in fiscal year 2019.

EMPLOYER CONTRIBUTIONS

Each year, an actuarial valuation is performed for the purpose of determining the funded position of the retirement plan and the employer contributions necessary to pay benefits accruing to KCERA members not otherwise funded by member contributions or investment earnings. The employer contribution rates are actuarially determined by using the Entry Age Actuarial Cost Method. The Plan's employer rates provide for both "Normal Cost" and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. Contribution rates determined in each actuarial valuation (as of June 30) apply to the fiscal year beginning 12 months after the valuation date. Employer rates for fiscal year 2019 ranged from 31.93% to 68.63% of covered payroll, with a combined average of 45.66% for all employers.

NOTE 7 – CONTRIBUTIONS (CONT)

MEMBER CONTRIBUTIONS

Member contributions are made through payroll deductions on a pre-tax basis, per IRS Code Section 414(h)(2). Member contribution rates for fiscal year 2019 ranged from 3.14% to 14.15% and were applied to the member's base pay plus "pensionable" special pay; they were calculated based on the member's KCERA entry age and actuarially calculated benefits. Members are required to contribute depending on the member's tier, employer and bargaining unit. For certain safety bargaining units, a flat member contribution rate is applied. "New members," as defined in PEPRA, hired on or after January 1, 2013 pay a flat member contribution rate: 50% of the total Normal Cost rate.

For members covered by Social Security, the member contribution rates above apply to monthly salaries over $350. (A one-third reduction in the rates applies to the first $350 of monthly salary.)

As a result of the 1997 Memorandum of Understanding (MOU), some members received an employer "pick up" of their contributions. General members hired after MOU-specified dates in 2004 or 2005 and safety members hired after MOU-specified dates in 2007 were required to pay 100% of the employees' retirement contributions with the employer paying no part of the employees' contributions. Effective in 2014, non-contributing County general and safety members were required to pay one-third of their employee contributions. Buttonwillow Recreation and Park District and San Joaquin Valley Air Pollution Control District did not elect the 1997 MOU. Buttonwillow employees continue to pay 50% of their full rates. San Joaquin's Tier I members pay 50% of the Normal Cost rate as of June 30, 2018. Employees of the Kern County Superior Court are required to pay an additional 8% of base salary.

Interest is credited to member contributions semiannually on June 30 and December 31, in accordance with Article 5.5 of the CERL. Member contributions and credited interest are refundable upon termination of membership.

NOTE 8 – RESERVE ACCOUNTS AND DESIGNATIONS OF NET POSITION

Member and employer contributions are allocated to various legally required reserve accounts based on actuarial determinations. Member, employer and retired members' reserves are fully funded. KCERA maintains the following reserve and designation accounts:

MEMBER'S DEPOSIT RESERVE – member contributions and interest allocation to fund member retirement benefits.

EMPLOYER'S ADVANCE RESERVE – employer contributions and interest allocation to fund member retirement benefits.

COST-OF-LIVING RESERVE– employer contributions and interest allocation to fund annual cost-of-living increases for retirees and their continuance beneficiaries.

RETIRED MEMBERS' RESERVE – transfers from members' deposit reserve and employers' advance reserve, and interest allocation for funding of retirees' and their beneficiaries' monthly annuity payments.

SUPPLEMENTAL RETIREE BENEFIT RESERVE – monies reserved for enhanced, non-vested benefits to current and future retired members and their beneficiaries.

COLA CONTRIBUTION RESERVE – monies reserved to credit future employer COLA contributions

NOTE 8 – RESERVE ACCOUNTS AND DESIGNATIONS OF NET POSITION (CONT)

CONTINGENCY RESERVE – excess income to supplement deficient earnings. The contingency reserve satisfies the Government Code Section 31616 requirement for KCERA to reserve at least 1% of assets, up to a maximum of 3% of assets. At fiscal year ended June 30, 2019, -0.38% of the Plan's net position were in contingencies, according to the Board of Retirement's Interest Credit Policy.

Balances in these reserve accounts and designations of net position available for pension and other benefits at June 30, 2019 and 2018 (under the five-year smoothed market asset valuation method for actuarial valuation purposes) are as follows:

(In thousands)

Reserve Account	2019	2018
Members' Deposit Reserve - General	$ 258,421	$ 244,678
Members' Deposit Reserve - Safety	128,906	117,439
Members' Deposit Reserve - Special District	26,755	25,259
Employers' Advance Reserve - General	388,473	401,996
Employers Advance Reserve-Courts	7,831	—
Employers Advance Reserve-Kern Medical	23,108	—
Employers' Advance Reserve - Safety	483,850	442,448
Employers' Advance Reserve - Special Distict	40,865	43,598
Cost-of-living Reserve - General	742,110	715,878
Cost-of-Living Reserve-General, Courts	2,754	—
Cost-of-Living Reserve-General, Kern Medical	7,761	—
Cost-of-living Reserve - Safety	535,882	509,151
Cost-of-living Reserve - Special District	57,478	53,059
Retired Members' Reserve - General	1,138,138	1,122,463
Retired Members' Reserve - Safety	423,605	454,492
Supplemental Retiree Benefit Reserve (SRBR)	126,545	127,719
SRBR allocated for 0.5% COLA	41,991	49,370
Contingency Reserve	(16,355)	(16,355)
Total reserves at five-year smoothed market actuarial valuation	**4,418,118**	**4,291,195**
Market Stabilization Reserve*	(72,338)	(92,333)
Total Fiduciary Net Position - Restricted for Pension Benefits	**$ 4,345,780**	**$ 4,198,862**

** The Market Stabilization Reserve represents the difference between the five-year smoothed fair value of the fund and the fair value as of the fiscal year end.*

NOTE 9 - RELATED PARTY TRANSACTION

OFFICE LEASE

KCERA, as the sole shareholder, formed a title holding corporation, KCERA Property, Inc. (KPI) for the purpose of accommodating the administrative offices of the Plan. In October 2010, KCERA entered into a build-to-suit lease agreement with KPI to occupy 14,348 square feet. KCERA is required to pay a monthly rate of $1.75 per square foot as well as taxes, insurance and operating costs as defined in the agreement. The base rent was subject to an automatic 10.4% increase beginning on the fifth anniversary of the commencement date, November 2015, and on each fifth year anniversary date thereafter during the lease term. The sum of payments due for fiscal year ended June 30, 2019 is $332,644 for base rent and $12,621 for HVAC, insurance and assessment fees. KCERA's base rent and other costs are abated from KPI's rental income

NOTE 10 – NET PENSION LIABILITY

The components of the net pension liability are as follows:

Reserve Account	June 30, 2019	June 30, 2018
Total Pension Liability	$6,728,284,463	$6,529,662,330
Plan Fiduciary Net Position	(4,345,780,060)	(4,198,862,285)
Net Pension Liability	**$2,382,504,403**	**$2,330,800,045**
Plan Fiduciary Net Position as Percentage of Total Pension Liability	**64.59%**	**64.30%**

The Plan's Fiduciary Net Position includes assets held for the Supplemental Retiree Benefit Reserve (SRBR). A split of the Total Pension Liability (TPL), Plan's Fiduciary Net Position (FNP) and Net Pension Liability (NPL) by the regular benefits (non- SRBR) and the SRBR benefits as of June 30, 2019 and June 30, 2018 are shown in the tables below.

June 30, 2019	Regular Benefits (Non-SRBR)	SRBR Benefits	Total KCERA
Total Pension Liability	$6,646,533,719	$81,750,744	$6,728,284,463
Plan Fiduciary Net Position	4,219,235,088	126,544,972	4,345,780,060
Net Pension Liability (Asset)	**$2,427,298,631**	**$(44,794,228)**	**$2,382,504,403**

June 30, 2018	Regular Benefits (Non-SRBR)	SRBR Benefit	Total KCERA
Total Pension Liability	$6,444,352,894	$85,309,436	$6,529,662,330
Plan Fiduciary Net Position	4,071,143,271	127,719,014	4,198,862,285
Net Pension Liability (Asset)	**$2,373,209,623**	**$(42,409,578)**	**$2,330,800,045**

The Net Pension Liability (NPL) for the plan was measured as of June 30, 2019 and June 30, 2018. The Plan's Fiduciary Net Position was valued as of the measurement dates while the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2018, and June 30, 2017, respectively, to the measurement date of June 30, 2019 and 2018 respectively.

PLAN PROVISIONS. The plan provisions used in the measurement of the net pension liability are the same as those used in the KCERA actuarial valuation as of June 30, 2019 and June 30, 2018, respectively. The TPL and the Plan's Fiduciary Net Position include liabilities and assets held for the Supplemental Retiree Benefit Reserve (SRBR).

ACTURIAL ASSUMPTIONS AND METHODS. The TPLs as of June 30, 2019 and June 30, 2018 that were measured by actuarial valuations as of June 30, 2018 and June 30, 2017, respectively, used the same actuarial assumptions and actuarial cost method as the June 30, 2018 and June 30, 2017 funding valuations. The actuarial assumptions used in both valuations were based on the results of an experience study for the period from July 1, 2013 through June 30, 2016. In particular, the following actuarial assumptions were applied to all periods included in the measurement.

NOTE 10 – NET PENSION LIABILITY (CONT)

As of June 30, 2019	
Inflation:	3.00%
Salary Increases:	General: 4.00% to 9.00%. Safety: 4.00% to 12.50%. Varies by service, including inflation.
Investment Rate of Return:	7.25%, net of plan investment expenses, including inflation.
Administrative Expenses:	0.90% of payroll allocated to both employers and members based on the components of the total average contribution rate (before expenses) for employers and members.
Other Assumptions:	Same as those used in the June 30, 2019 funding valuation. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2013 through June 30, 2016.

As of June 30, 2018	
Inflation:	3.00%
Salary Increases:	General: 4.00% to 9.00%. Safety: 4.00% to 12.50%. Varies by service, including inflation.
Investment Rate of Return:	7.25%, net of plan investment expenses, including inflation.
Administrative Expenses:	0.90% of payroll allocated to both employers and members based on the components of the total average contribution rate (before expenses) for employers and members.
Other Assumptions:	Same as those used in the June 30, 2018 funding valuation. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2013 through June 30, 2016.

The Entry Age Actuarial Cost Method used in KCERA's annual actuarial valuation has also been applied in measuring the Service Cost and TPL with one exception. For purposes of measuring the Service Cost and TPL, KCERA has reflected the same plan provisions used in determining the member's Actuarial Present Value of Projected Benefits. This is different from the version of this method applied in KCERA's annual funding valuation, where the Normal Cost and Actuarial Accrued Liability are determined as if the current benefit accrual rate had always been in effect.

The long-term expected rate of return on pension plan investments was determined using building block method in which expected future real rates of return (i.e., expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class. This data is combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and 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 on the next page.

NOTE 10 – NET PENSION LIABILITY (CONT)

	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return	Weighted Average
Large Cap U.S. Equity	15%	5.61%	0.84%
Small Cap U.S. Equity	4%	6.37%	0.25%
Global Equity	6%	6.50%	0.39%
Developed International Equity	8%	6.96%	0.56%
Emerging Market Equity	4%	9.28%	0.37%
U.S. Core Fixed Income	19%	1.01%	0.20%
High Yield / Specialty	6%	3.65%	0.22%
Emerging Market Debt	4%	3.85%	0.15%
Core Real Estate	5%	4.37%	0.22%
Value-Added Real Estate	5%	6.00%	0.30%
Commodities	4%	3.76%	0.15%
Hedge Funds	10%	4.70%	0.47%
Private Equity	5%	8.70%	0.44%
Private Credit	5%	5.10%	0.26%
Total	**100%**		**7.82%***

**Includes inflation at 3.00%*

Discount rate. The discount rate used to measure the TPL was 7.25% as of June 30, 2019 and June 30, 2018. The projection of cash flows used to determine the discount rates 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 employee and 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 pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both June 30, 2019 and June 30, 2018.

The discount rate assumptions have been developed without taking into consideration any impact of the 50/50 allocation of future excess earnings between the retirement and Supplement Retirement Benefit Reserve (SRBR) asset pools.

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL of the KCERA as of June 30, 2019, calculated using the discount rate of 7.25%, as well as what the KCERA's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1% Decrease (6.25%)	Current (7.25%)	1% Increase (8.25%)
Net Pension Liability as of June 30, 2019	$3,269,998,294	$2,382,504,403	$1,652,493,587

	1% Decrease (6.25%)	Current (7.25%)	1% Increase
Net Pension Liability as of June 30, 2018	$3,198,828,485	$2,330,800,045	$1,617,558,748

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS FOR FISCAL YEARS ENDED JUNE 30

(In thousands)

	2019	2018	2017	2016	2015	2014	2013
Total Pension Liability:							
Service Cost	$ 122,869	$ 123,407	$ 122,184	$ 123,181	$ 125,161	$ 125,118	$ 125,644
Interest	466,379	450,172	438,385	427,646	415,820	400,559	384,837
Change of Benefit Terms		31,034	—	—	5,036	—	—
Differences between Expected and Actual Experience	(48,814)	(80,208)	(109,368)	(105,053)	(89,306)	(57,034)	(49,064)
Changes in Assumptions		—	196,259	—	—	205,038	—
Benefit Payments, including Refunds	(341,812)	(321,613)	(305,817)	(288,738)	(273,865)	(257,495)	(242,630)
Net Change in Total Pension Liability	198,622	202,792	341,643	157,036	182,846	416,186	218,787
Total Pension Liability: Beginning of Year	6,529,662	6,326,870	5,985,227	5,828,191	5,645,345	5,229,159	5,010,372
Total Pension Liability: End of Year (a)	**6,728,284**	**6,529,662**	**6,326,870**	**5,985,227**	**5,828,191**	**5,645,345**	**5,229,159**
Plan Fiduciary Net Position:							
Contributions - Employer	229,120	242,534	224,351	234,713	215,477	220,393	211,677
Contributions - Employee	50,132	52,504	51,410	33,279	30,325	25,810	20,283
Net Investment Income	214,244	267,659	426,606	(27,535)	81,931	487,591	319,432
Benefit Payments, including Refunds	(341,774)	(321,613)	(305,817)	(288,738)	(273,864)	(257,495)	(242,630)
Administrative Expense	(4,804)	(5,117)	(5,243)	(5,224)	(4,887)	(4,958)	(4,016)
Net Change in Plan Fiduciary Net Position	146,918	235,967	391,307	(53,505)	48,982	471,341	304,746
Plan Fiduciary Net Position:							
Beginning of Year	4,198,862	3,962,895	3,571,588	3,625,093	3,576,111	3,104,770	2,800,024
Plan Fiduciary Net Position: End of Year (b)	**4,345,780**	**4,198,862**	**3,962,895**	**3,571,588**	**3,625,093**	**3,576,111**	**3,104,770**
Net Pension Liability: (a) - (b)	**$2,382,504**	**$2,330,800**	**$2,363,975**	**$2,413,639**	**$2,203,098**	**$2,069,234**	**$2,124,389**
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	64.59%	64.30%	62.64%	59.67%	62.20%	63.35%	59.37%
Covered Payroll*	$ 579,072	$ 576,729	$ 546,671	$ 537,540	$ 531,598	$ 533,851	$ 516,465
Plan Net Pension Liability as a Percentage of Covered Employee Payroll	411.43%	404.14%	432.43%	449.02%	414.43%	387.61%	411.33%

Notes to Schedule:

Benefit Changes: *None*

(1) See footnote (1) under Schedule of Employer contributions

(2) Covered Payroll represents payroll on which contributions to the pension plan are based.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contribution as % of Covered Payroll
2010	$151,127,000	$151,127,000	0	$559,872,000	26.99%
2011	$177,444,000	$177,444,000	0	$559,380,000	31.72%
2012	$189,837,000	$189,837,000	0	$526,079,162	36.09%
2013	$211,677,000	$211,677,000	0	$516,465,189	40.99%
2014	$220,393,000	$220,393,000	0	$533,850,811	41.28%
2015	$215,477,000	$215,477,000	0	$531,598,183	40.53%
2016	$234,717,000	$234,717,000	0	$537,539,991	40.23%
2017	$224,351,000	$224,351,000	0	$546,671,003	41.04%
2018	$242,534,000	$242,534,000	0	$576,728,789	42.05%
2019	$229,120,000	$229,120,000	0	$579,071,865	39.57%

See accompanying notes to this schedule on next page.

(1) All "Actuarially Determined Contributions" through June, 2014 were determined as the "Annual Required Contribution" under GAS 25 and 27. Starting from 2016, actuarially determined contributions exclude employer paid member contributions.

(2) Covered payroll represents payroll on which contributions to the pension plan are based.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

METHODS AND ASSUMPTIONS USED TO ESTABLISH ACTUARIALLY DETERMINED CONTRIBUTION RATES:

Valuation date:	Actuarially determined contribution rates are calculated as of June 30, two years prior to the fiscal year in which contributions are reported.
Actuarial cost method	Entry Age Actuarial Cost Method
Amortization method	Level percent of payroll for total unfunded liability (assuming 3.625% increase).
Remaining amortization period:	16.5 years 5 years as of June 30, 2019 for all UAAL as of June 30, 2011. Effective June 30, 2012, any changes in UAAL due to actuarial gains or losses or due to changes in actuarial assumptions or methods will be amortized over a 18-year closed period effective with each valuation. Any change in unfunded actuarial accrued liability that arises due to plan amendments is amortized over its own declining 15-year period (with exception of a change due to retirement incentives, which is amortized over a declining period of up to 5
Asset valuation method	Fair value of assets less unrecognized returns in each of the last five years. Unrecognized returns are equal to the difference between the actual market return and the expected return on a fair value basis and are recognized semiannually over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION *(CONT)*

	June 30, 2018	June 30, 2017
Actuarial Assumptions:		
Investment rate of return	7.25%, net of investment expenses, including inflation	7.25%, net of investment expenses, including inflation
Inflation rate	3.00%	3.0%
Real across-the-board salary increase	0.50%	0.50%
*Projected salary increases**	General: 4.00% to 9.00% Safety: 4.00% to 12.50%	General: 4.00% to 9.00% Safety: 4.00% to 12.50%
Administrative expenses	0.90% of payroll allocated to both the employer and member based on the components of the total average contribution rate (before expenses) for the	0.90% of payroll allocated to both the employer and member based on the components of the total average contribution rate (before expenses)
Cost-of-living adjustments	2.5% (actual increases based on CPI increases with a 2.5%	2.5% (actual increases based on CPI increases with a 2.5%
Other assumptions	Same as those used in the June 30, 2018 funding actuarial	Same as those used in the June 30, 2017 funding actuarial

(1) Includes inflation at 3% plus real across-the-board salary increase o 0.50% plus merit and promotional increases.

SCHEDULE OF MONEY WEIGHTED RATES OF RETURNS FOR LAST 10 FISCAL YEARS ENDED JUNE 30

	2019	2018	2017	2016	2015	2014	2013
Annual Money-Weighted Rate of Return*	5.6%	6.8%	12.0%	0.3%	3.0%	15.5%	10.8%

**Net of investment expenses.*

Data is provided only for those years for which information is available.

SCHEDULE ADMINISTRATIVE EXPENSES FOR THE YEARS ENDED JUNE 30, 2019 AND 2018

	2019	2018
Staffing		
Salaries	$ 1,855,173	$ 1,827,083
Benefits	1,300,661	1,246,085
Temporary staff	25,303	33,846
Staffing Total	**3,181,137**	**3,107,014**
Staff Development	65,718	58,079
Professional Fees:		
Actuarial fees	23,983	33,526
Audit fees	46,500	39,750
Consultant fees	36,400	61,991
Legal fees	29,756	65,187
Professional Fees Total	**136,639**	**200,454**
Office Expenses:		
Building expenses	70,885	62,328
Communications	17,585	16,597
Equipment lease	13,007	10,780
Equipment maintenance	5,540	20,155
Memberships	18,404	8,750
Office supplies & misc. admin.	41,667	46,480
Payroll & accounts payable fees	8,514	6,147
Postage	12,473	25,513
Subscriptions	12,119	13,016
Utilities	40,545	43,359
Office Expenses Total	**240,739**	**253,125**
Insurance	126,807	127,538
Member Services		
Benefit payment fees	9,394	34,977
Disability - legal	—	57,262
Disability - medical advisors	18,750	61,206
Disability - professional services	154,322	39,098
Member communications	6,263	27,144
Member Services Total	**$ 188,729**	**$ 219,687**

See accompanying independent auditors' report. *Schedule continued on next page.*

SCHEDULE ADMINISTRATIVE EXPENSES FOR THE YEARS ENDED JUNE 30, 2019 AND 2018 *(CONT)*

	2019	2018
Systems:		
Audit - security & vulnerability scan	$ —	$ 7,650
Business continuity expense	15,313	8,073
Hardware	96,456	83,611
Licensing & support	194,234	273,166
Software	74,847	40,224
Website design	780	885
Systems Total	**381,630**	**413,609**
Board of Retirement		
Board compensation	8,014	11,175
Board conferences & training	61,240	47,776
Board elections	25,018	
Board meetings	1,712	5,759
Board of Retirement Total	**95,984**	**64,710**
Depreciation/Amortization	386,612	672,526
Total Administrative Expenses	**4,803,995**	**5,116,742**

SCHEDULE OF INVESTMENT EXPENSES FOR THE YEARS ENDED JUNE 30, 2019 AND 2018

	2019	2018
Investment manager Fees:		
Equity	$ 5,902,371	$ 8,010,189
Fixed income	3,018,051	3,358,730
Commodities	1,280,667	1,631,711
Real estate	2,234,545	4,047,290
Private equity/Credit funds	4,011,362	2,228,395
Hedge funds	10,049,622	10,254,369
Total Investment Manager Fees	**26,496,618**	**29,530,684**
Other Investment Expenses:		
Custodian	75,097	344,565
Actuaral valuation	124,583	307,393
Investment consultants	998,188	970,878
Legal fees	95,013	127,398
Due diligence	5,716	1,561
Real estate	30,660	39,445
Total Other Investment Expenses	**1,329,257**	**1,791,240**
Total Fees and Other Investment Expenses	**27,825,875**	**31,321,924**
Securities Lending rebates and bank fees	61,309	84,256
Total Investment Expenses	**$ 27,887,184**	**$ 31,406,180**

See accompanying independent auditors' report.

SCHEDULE OF PAYMENTS TO CONSULTANTS FOR THE YEARS ENDED JUNE 30, 2019 AND 2018

		Commission/Fee	
Individual or Firm	**Nature of Service**	**2019**	**2018**
Cortex Applied Research, Inc.	Policy consultants	$ 36,250	$ 48,750
Segal Consulting	Actuarial services	23,983	33,526
Kern County Counsel	Legal counsel	88,694	59,308
Nossaman LLP	Legal counsel	1,358	41,685
Ice Miller	Legal counsel	2,225	5,843
Reed Smith LLP	Legal counsel	26,172	15,614
CliftonLarsonAllen	External auditors	46,500	39,750
Agility Recovery Solutions	Disaster recovery	15,313	8,073
TraceSecurity LLC	System audit	—	7,650
Total Payments to Consultants		**$ 240,495**	**$ 260,199**

These payments were made to outside consultants other than investment professionals.
A Schedule of Investment Fees is presented on pages 73-75 in the Investment Section.

See accompanying independent auditors' report.

INVESTMENT SECTION

November 14, 2019

Mr. Dominic Brown
Executive Director
Kern County Employees' Retirement Association
11125 River Run Boulevard
Bakersfield, CA 93311

Dear Mr. Brown,

Verus is pleased to have had the opportunity to serve the Kern County Employees' Retirement Association since July 2011 and to provide this investment review for the fiscal year ending June 30, 2018.

Verus independently calculated the Fund's fiscal year performance results utilizing a time-weighted annualized rate of return methodology (modified Dietz method) with data on market valuations and transactions provided by the Fund's custodian bank, the Northern Trust Company. For the fiscal year ended June 30, 2019, KCERA's retirement fund had an investment gain of 5.6% (gross of fees) and 5.3% (net of fees) and ended the fiscal year with total assets of approximately $4.33 billion.

All KCERA's investments are managed according to guidelines codified in KCERA's Statement of Investment Goals, Objectives and Policies. This Statement is reviewed periodically to ensure best practices are employed in all aspects our work and was last updated in March 2019.

<u>Capital Markets Review</u>
The US economy has been growing slowly and steadily since the Global Financial Crisis ended more than 10 years ago, and in July this year, the current expansion became the longest US expansion on record, surpassing the previous record of 120 months set in March 2001. While talk of recession remains at the forefront of economic news, the US economy continues to plug away. As of June 30, unemployment remained well below 4%, reaching a level of strength not seen since the 1960s, as wages have grown steadily over the past five years. At 2.1%, the annual inflation rate remains in a range most economists (and the Fed) consider healthy. In addition, economic growth, as measured by gross domestic product, grew at 2.0% in the second quarter from a year ago. All these metrics imply a "goldilocks" economy that is running at a sustainable pace.

However, there are also signs giving many economists and market participants pause. First and foremost is something known as an inverted yield curve. This is a condition in bond markets

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characterized by rates on longer term debt falling below rates on shorter term debt. In the past, this condition has served as a prelude to an economic downturn, and it recently occurred for the first time since 2007, as the yield on the 10-year Treasury note briefly dropped below that of the 2-year note. In addition, other predictive indicators such as Purchasing Manager Indices and business and consumer sentiment have recently peaked and are moving lower. Finally, global political and economic risk, including trade disputes, Britain's pending departure from the European Union, and increased tension between the US and many of its traditional enemies have market watchers paying close attention.

Over the past year, risk markets have been driven by three primary factors: US/China trade tensions; the Fed's willingness to ease monetary policy; and corporate earnings projections. Uncertainty surrounding each of these factors has recently led to higher market volatility, with markets most recently focusing on trade tensions. Depending on how these three issues play out, the economy and risk markets may continue their steady march forward or turn toward recession and higher market volatility.

Even if we do enter a recession, however, it is not anticipated to be nearly as severe as the last one experienced more than 10 years ago. Overall, the US consumer is in a much better position to weather an economic downturn, as are banks and corporations, and much of the excesses one typically sees this late in an economic cycle have not materialized this time around. Further, TCERA's investment portfolio is positioned relatively conservatively, which should limit the impact of any downturn.

Asset Allocation

At fiscal year-end, KCERA's asset allocation was broadly in line with Investment Policy targets, as shown in the table below:

Asset Class	Target	Year-End Allocation*
Equity	37%	39.7%
Fixed Income	29%	33.6%
Real Estate	10%	6.4%
Hedge Funds	10%	9.8%
Private Equity	5%	2.0%
Private Credit	5%	3.2%
Commodities	4%	3.8%
Cash	0%	1.5%

**May not sum to 100% due to rounding*

Verus

Overweights to equity and fixed income at the end of the fiscal year are due to the use of these asset classes as a holding place for expected investments in private market equity, credit, and real estate.

Investment Performance

Plan performance fell short of the actuarial assumed rate of return and the policy benchmark, as the total fund returned 5.6% for the fiscal year, versus the policy benchmark return of 6.4%. The primary cause of the shortfall was the Plan's overweight to fixed income in a strong equity market environment, as well as benchmark-relative underperfomance by the hedge fund portfolio.

As always, Verus greatly appreciates the opportunity to assist the KCERA Board in meeting the Plan's long-term investment objectives. We look forward to continuing in our role of investment advisor and providing guidance to help navigate ever-changing capital markets.

Sincerely,

Scott J. Whalen, CFA
Executive Managing Director

POLICIES ADOPTED BY THE BOARD OF RETIREMENT ON MARCH 9, 2016

GENERAL INFORMATION

The Board of Retirement (the Board) has exclusive control of the investments of the retirement fund and, therefore, establishes investment policies and implements investment decisions. The overall objective of KCERA's investment program is to prudently invest assets such as to offset some of the costs of the Plan in providing the retirement benefits required by the County Employees' retirement Law of 1937.

The Board is governed by Government Code Sections 31594 and 31595, which provide a standard of care commonly known as the "prudent expert rule," a rule that recognizes that special skill and knowledge may be necessary in order to invest the fund prudently. Accordingly, the Board retains a number of professional investment advisers and investment consultants. The Board is required to diversify the investments of the Plan so as to minimize the risk of loss and to maximize the rate of return, unless it is clearly prudent not to do so.

The Board consists of nine members and two alternate members. Four members of the Board are appointed by the Kern County Board of Supervisors; four members are elected by active and retired members of KCERA; and the County Treasurer-Tax Collector is a statutory member of the Board.

SUMMARY OF INVESTMENT GUIDELINES

The Board of Retirement has adopted an Investment Policy Statement to serve as the framework for investment policy making and investment objective setting within the context of applicable California laws. The Statement establishes investment guidelines, objectives and policies, and defines the responsibilities of the Board members in regard to KCERA's investments. The investment philosophy articulated in the Statement is outlined below:

- Protecting the corpus of the Fund;
- Managing the fund in a prudent manner, recognizing risk and return trade-offs;
- Earning adequate investment returns in order to protect and pay the benefits promised to the participants with a minimum amount of associated risk;
- Maintaining sufficient liquidity to fund expenses and benefit payments as they come due; and
- Complying with applicable law.

SUMMARY OF PROXY VOTING GUIDELINES

The Board has established the KCERA Proxy Voting Policy for dealing with proxies. This policy considers shareholder voting on corporate issues to represent assets of the Plan to be voted in the best interests of the beneficiaries of the Plan. The voting of proxies is delegated to a third party to vote on behalf of the Board according to the guidelines established in the policy. The Board is responsible to monitor proxy voting to see that its policies are implemented effectively.

ASSET ALLOCATION

The Board of Retirement periodically establishes an asset allocation policy aimed at achieving a long-term rate of return on the fund's investments such as to prudently add income to the fund to help provide the benefits promised. The asset allocation statement provides a target allocation or weighting to each of the broad investment classes of assets along with allowable ranges of weightings around each target weight. The target weights are viewed as longer-term objectives to be funded in a manner consistent with efficiency and cost savings. The asset allocation policy provides the target level of diversification among asset classes anticipated for the future. Asset allocation is reviewed on an annual basis to ensure that the expectations and assumptions incorporated in the policy remain valid and appropriate. Investment performance is monitored on quarterly, annual and multi-year basis. The asset allocation of the fund is rebalanced, as needed, but also in view of the costs of such transactions.

The Board engages external professional investment advisers to invest various portions of the fund. The advisers are, however, constrained to invest as provided in KCERA's investment policies and allocation guidelines. Investment advisers formally notice their compliance with such policies, and their portfolios are scrutinized for compliance at regular intervals. KCERA's investment consultant and investment staff participate in policy formulation and new manager searches, as well as in the termination of existing managers failing to perform or maintain compliance with their investment mandates.

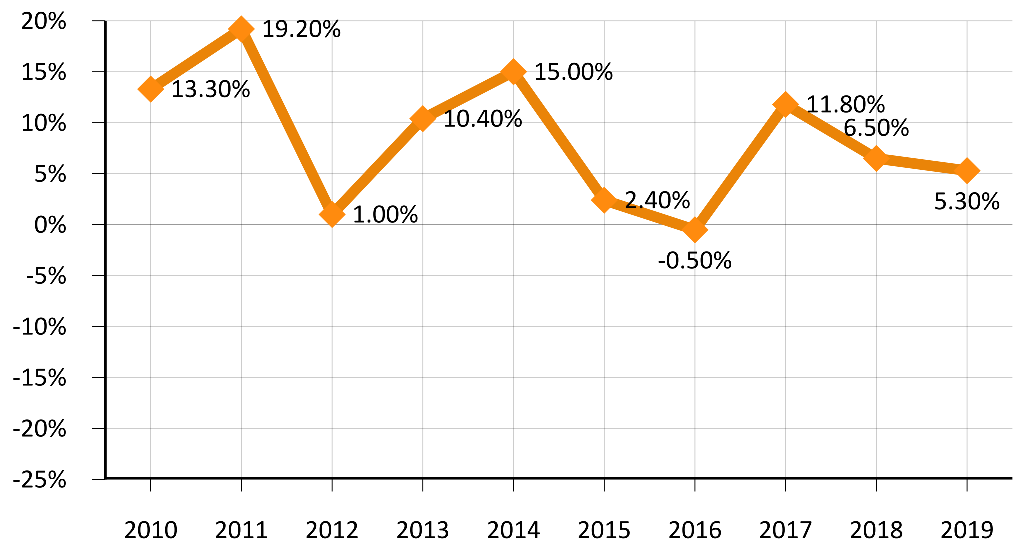
The Board of Retirement adopted the current asset allocation policy in July 2016. KCERA's strategic target asset allocation and actual asset allocation as of June 30, 2019 are as follows:

Asset Class	Actual	Target	Minimum	Maximum
Domestic Equity	20.0%	19.0%	15.0%	23.0%
International /Global Equity	10.4%	8.0%	6.0%	10.0%
Emerging Markets Equity	4.3%	4.0%	2.0%	6.0%
Global Equity	5.0%	6.0%	4.0%	8.0%
Domestic Fixed Income Core Plus	23.4%	19.0%	16.0%	22.0%
Domestic Fixed Income High Yield	6.0%	6.0%	4.0%	8.0%
Emerging Markets Fixed Income	4.1%	4.0%	2.0%	6.0%
Real Estate	6.5%	10.0%	5.0%	15.0%
Hedge Funds	9.8%	10.0%	8.0%	12.0%
Private Equity	2.0%	5.0%	—%	10.0%
Private Credit	3.2%	5.0%	—%	10.0%
Commodities	3.8%	4.0%	2.0%	6.0%
Cash and Equivalents	1.5%	—%	—%	5.0%
Total	100%	100.0%		

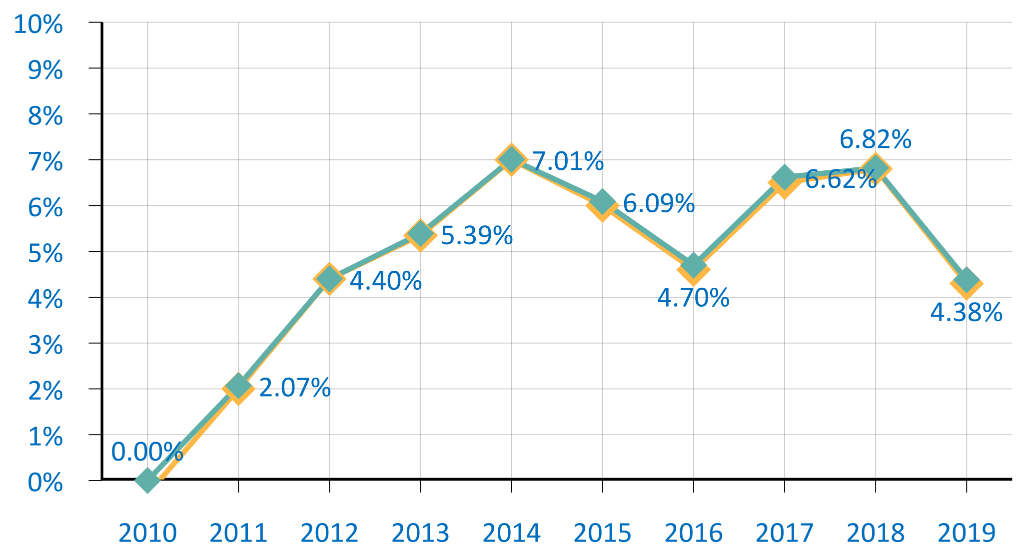
Type of Investment	Fair Value (In thousands)	% of Total Fair Value
Domestic Equity:		
All Cap Passive	$ 423,095	9.76%
Large Cap Enhanced	305,303	7.04%
Small Cap Growth	69,590	1.61%
Small Cap Value	68,117	1.57%
Total Domestic Equities	866,105	19.98%
International /Global Equity		
Large Cap	373,617	8.62%
Global	217,064	5.01%
Small Cap	75,682	1.75%
Emerging Markets	186,857	4.31%
Total International Equities	853,220	19.69%
Fixed Income		
Core	499,887	11.53%
Core Plus	514,211	11.86%
Structured Debt	99,550	2.30%
High Yield	162,352	3.74%
Emerging Markets	177,587	4.10%
Total Fixed Income	1,453,587	33.53%
Real Estate		
Core	217,743	5.02%
Value Added	46,391	1.07%
Opportunistic	12,488	0.29%
Property	3,151	0.07%
Total Real Estate	279,773	6.45%
Alternate Investments		
Private Credit	140,270	3.24%
Private Equities	85,804	1.98%
Hedge Funds	423,371	9.77%
Commodities	164,921	3.80%
Total Alternative Investments	814,366	18.79%
Cash and Equivalents	68,458	1.58%
Total Investments	**$ 4,335,509**	**100.02%**
KCERA Capital Assets	2,793	
KCERA Receivables/Payables	7,478	
Fiduciary Net Position	**$ 4,345,780**	

*Fair Value totals are inclusive of payables and receivables as of June 30.

ANNUAL RETURNS (NET OF FEES) FOR PERIODS ENDED JUNE 30



FIVE-YEAR SMOOTHED ASSET VALUATION FOR PERIODS ENDED JUNE 30



KCERA uses the five-year smoothed spread gain valuation method to allocate investment earnings greater than (or less than) the assumed investment return (i.e., actuarial assumption rate minus actual rate). The reserve account balances reflect the five-year smoothed asset valuation method for actuarial purposes. In accordance with KCERA's Interest Crediting Policy, when investment returns would result in a negative five-year smoothed rate, KCERA sets the smoothed rate at 0.00% and credits the Contingency Reserve with the negative balance.

RETURNS FOR PERIODS ENDED JUNE 30

		Annualized		
	Current Year	3-Year	5-Year	10-Year
Total Fund:	5.3	7.8	5.0	8.3
Benchmark: Policy Index*	6.4	7.8	5.0	8.3
Domestic Equity:	8.8	14.3	10.8	
Benchmark: Russell 3000	9.0	14.0	10.2	14.7
International Equity:	(0.7)	9.9	3.4	
Benchmark: MSCI ACWI ex-US	1.8	9.9	2.6	7.0
Global Fixed Income:	7.6	3.9	2.9	5.8
Benchmark: Barclays US Aggregate	7.9	2.3	2.9	3.9
Real Estate:	5.9	6.2		
Benchmark: NCREIF-ODCE	6.4	7.6	9.8	9.9
Hedge Funds	1.7	5.8	3.4	4.7
Benchmark: Policy Index**	6.4	7.8	5.0	8.3
Private Equity:	10.9	10.9	8.8	9.4
Private Credit:	9.7	9.7		
Commodities:	(6.3)	0.9	(7.9)	
Benchmark: Bloomberg Comm. Index	(6.8)	(2.2)	(9.1)	(3.7)

*Total Fund: Black Diamond Relative Value liquidated 11/1/2018.

Magnetar Constellation funded 11/14/2018.

Blue Trend fund liquidated and transfered to Systematica Trend Following Fund.

OZ Domestic partners II tranfered to OZ Enhanced Domestic Partners.

Note: Return calculations were prepared, net of fees, using a time-weighted rate of return based on fair values.

CONSULTANTS

Verus Investments
Verus Investments
Albourne America LLC
The Northern Trust Company

THIRD-PARTY SECURITIES LENDING

Deutsche Bank

INVESTMENT MANAGERS

Domestic Equity

Mellon Capital Management EB DV
Mellon Capital Management EB DV Tangent
PIMCO
AllianceBernstein
Henderson Geneva Capital

International / Global Equity

BlackRock International Alpha Tilts
Mellon Capital Management-EB DV
Fidelity- Pyramis
AB Emerging Markets Strategic Core
DFA Amerging Markets Value Portfolio
Dodge & Cox Funds
Sustainable Growth Advisers (SGA)

Global Fixed Income

Mellon Capital Management
PIMCO
Western Asset Management
TCW Securitized Opportunities LP
Stone Harbor Global Funds
Gramercy Funds Management
Western Asset Management Company

Private Equity

Abbott Capital Funds
Pantheon Funds

INVESTMENT MANAGERS (CONT.)

Real Estate

ASB Capital Management
JPMCB Strategic Property Fund
Invesco Real Estate Funds III & IV
Landmark Real Estate Partners VIII
Long Wharf Real Estate Partners VIII
KCERA Property

Commodities

Gresham Commodity Builder Fund
Wellington Trust Company (WTC)

Hedge Funds

Aristeia International Ltd
Brevan Howard Fund Limited
Cevian Capital II LP
D.E. Shaw Composite Fund
HBK Multi-Strategy Fund
Hudson Bay Enhanced Fund LP
Indus Pacific Opportunities Fund
Magnetar Structured Credit Fund
Myriad Opportunities Offshore Fund
OZ Domestic Partners II
PIMCO Commodity Alpha Fund LLC
River Birch International Ltd
Systematica Blue Trend
York Capital Management

Private Credit

Colony Distressed Credit Fund
Brookfield Real Estate Finance Fund V
Magnetar Constellation Fund V
TSSP Adjacent Opportunities Partners

LARGEST STOCK DIRECT HOLDINGS (FAIR VALUE)

Shares	Stocks	Fair Value
447,758	AIA Group Ltd.	4,828,622
27,427	Visa Inc	4,759,956
35,089	ADR HDFC BK Ltd.	4,562,974
2,171	Amazon Com Inc	4,111,071
48,467	Abbott Lab Com	4,076,075
36,362	Yum Brands Inc	4,024,183
22,526	ADR Alibaba Group Holding Ltd	3,817,031
36,509	Nestle Sa CHF0.10 (REGD)	3,784,205
7,494	Equinix Inc	3,779,149
27,354	SAP SE-Sponsored ADR	3,742,027

LARGEST BOND DIRECT HOLDINGS (FAIR VALUE)

Par	Bonds	Fair Value
55,100,000	FNMA Single Family Mortgage 4.5% 30 yrs	57,559,609
50,120,000	U.S. Treasury NTS 2.625% due 02-15-2029	52,853,094
46,800,000	FNMA Single Family Mortgage 4% 30 Yrs	48,354,836
34,100,000	U.S. Treasury BDS 2.25% due 08-15-2027	34,927,198
28,450,000	U.S. of America Treasury Bonds DTD	28,930,094
25,000,000	FNMA Single Family Mortgage 3.5% 30 Yrs Sept	25,545,575
18,400,000	FNMA Single Family Mortgag 3.5% 30 Yrs August	18,808,002
14,770,000	U.S. Treasury BDS 3.75 due 11-15-2043	18,182,106
16,300,000	U.S. Treasury NTS DTD 07/31/2016 1.25%	15,986,730
8,100,000	U.S. Treasury NTS 2.125% 03-31-2024	8,235,424

A complete list of portfolio holdings is available upon request.

for the years ended June 30, 2019 and 2018

(In thousands)

Asset Classes		2019		2018
Domestic Equity	$	917,714	$	909,836
International / Global Equity		818,309		811,986
Fixed Income		1,669,637		1,536,699
Real Estate		284,166		242,065
Hedge Funds		424,692		386,974
Private Credit		79,519		63,769
Private Equity		86,778		110,667
Commodities		228,366		175,300
Investments at Fair Value		**4,509,181**		**4,237,296**
Cash & Short-Term Investments		106,312		103,722
Investments Sold / Purchased		(279,984)		(165,708)
Investment Income & Other Liabilities		10,455		26,796
Total Assets Under Management		**4,345,964**		**4,202,106**
KCERA Capital Assets		2,793		3,180
KCERA Prepaid Expenses		—		25
KCERA Accruals		(2,977)		(6,449)
Fiduciary Net Position	**$**	**4,345,780**	**$**	**4,198,862**

for the years ended June 30, 2019 and 2018

Investment Manager Fees	2019	2018
Domestic Equity		
AllianceBernstein Trust Company	$ 612,877	$ 867,320
Henderson Geneva Capital Management	490,976	662,409
Mellon Capital Management (Dynamic US Equity)	710,341	889,697
Mellon Capital Management (US Equity)	43,867	34,983
Mellon Int'l (Canada Stock & Int'l Stock)	30,932	—
Pacific Investment Management Company	1,107,905	274,745
Sustainable Growth Advisors	535,334	632,114
Total Domestic Equity Managers	**3,532,232**	**3,361,268**
International / Global Equity		
BlackRock Institutional Trust Company	290,564	2,032,259
Dodge & Cox Funds	660,772	680,687
JP Morgan Investment Management	866	—
Pyramis Global Advisors (Small Cap)	315,162	800,591
Total International Equity Managers	**1,267,364**	**3,513,537**
Emerging Markets Managers		
AllianceBernstein Trust Company	564,049	759,039
Dimensional Fund Advisors	538,725	376,345
Total Emerging Markets Managers	**1,102,774**	**1,135,384**
High Yield Managers:		
Western Asset Management Company	363,934	406,585
Total High Yield Managers	**363,934**	**406,585**
Global Fixed Income		
Gramercy Funds Management	494,072	582,967
Mellon Capital Management (Fixed Income)	96,133	117,984
Pacific Investment Management Company	448,710	556,533
Stone Harbor Investment Partners	393,745	468,396
TCW Securitized Opportunities	693,237	714,308
Western Asset Management Company	528,220	511,957
Total Global Fixed Income Managers	**2,654,117**	**2,952,145**
Commodities		
Gresham Investment Management	282,187	253,289
Pacific Investment Management Company	370,626	961,620
Wellington Trust Company	627,854	416,802
Total Commodity Managers	**1,280,667**	**1,631,711**

(Schedule of Investment Fees continued on next page)

for the years ended June 30, 2019 and 2018

Investment Manager Fees	2019	2018
Real Estate		
ASB Real Estate Investors	852,399	714,645
Long Wharf Real Estate Partners (FREG Fund III)	181,975	
Invesco Real Estate (Fund III)	258,646	329,683
Invesco Real Estate (US Value-Add Fund IV)	491,966	1,250,204
J.P. Morgan Chase Banke (Strategic Property Fund)	(149,458)	825,041
Landmark Real Estate Partners VIII	599,017 *	927,717
Total Real Estate Managers	**2,234,545**	**4,047,290**
Private Equity		
Abbott Capital Management (Fund V)	260,672	289,636
Abbott Capital Management (Fund VI)	311,648	346,276
Pantheon Ventures, Inc. (Fund V)	547,381	61,625
Pantheon Ventures, Inc. (Fund VI)	141,860	157,624
Pantheon Ventures, Inc. (Fund VII)	288,689	320,762
Pantheon Ventures, Inc. (Secondary Fund III)	278,861	308,414
Total Private Equity Managers	**1,829,111**	**1,484,337**
Hedge Funds		
Aristeia International Ltd	822,308	479,319
Black Diamond Relative Value Partners	—	358,444
BlueTrend Fund	78,935	334,369
Brevan Howard Multi-Strategy Fund	1,524,825	664,962
Cevian Capital II SP	894,871	300,499
D.E. Shaw Composite Fund	2,463,997	1,924,243
HBK Multi-Strategy Fund	960,442	836,844
Hudson Bay Cap Structure Arbitrage	25,000	—
Indus Pacific Opportunities Fund	331,486	1,042,171
Magnetar Structured Credit Fund	518,269	690,601
MentaGlobal Offshore Ltd	—	345,632
MKP Opportunity Offshore Ltd	137,859	408,173
Myriad Opportunities Offshore Fund	361,079	1,115,002
Sculptor Capital (Formerly OZ Domestic Partners II)	1,390,831	1,033,599
River Birch International Ltd	334,638	335,229
York Capital Management	205,083	385,282
Total Hedge Fund Managers	**10,049,623**	**10,254,369**
Private Credit		
Brookfield Real Estate Finance Fund V	666,859	96,330
Colony Capital Credit IV, LLC	1,070,915	330,778
TSSP Adjacent Opportunities Partners	444,477	316,950
Total Private Credit Managers	**2,182,251**	**744,058**
Total Investment Managers' Fees	**$ 26,496,618**	**$ 29,530,684**

*In fiscal year 2018, KCERA paid management fees from fund's initial closing date 12/15/2016; $327,717 fees attributed to prior fiscal years.

(Schedule of Investment Fees continued on next page)

for the years ended June 30, 2019 and 2018

Other Investment Expenses	2019	2018
Custodial Fees		
The Northern Trust Company	$75,097	$344,565
Actuarial Fees		
Segal Company	124,583	307,393
Investment Consultant Fees		
Albourne America LLC	600,400	590,000
Glass, Lewis & Co.	14,588	14,588
Verus	383,200	366,290
Legal Fees		
Foley & Lardner LLP	40,516	28,906
Nossaman LLP	54,497	98,492
Due Diligence Travel Expenses		
Trustees / KCERA Management	5,716	1,561
Security Lending Bank Fees		
Deutsche Bank	61,309	84,256
Real Estate Expenses		
KCERA Property Inc.	30,660	39,445
Total Other Investment Expenses	**1,390,566**	**1,875,496**
Total Investment Fees and Services	**$27,887,184**	**$31,406,180**

ACTUARIAL SECTION

Segal Consulting

180 Howard Street, Suite 1100 San Francisco, CA 94105-6147
T 415.263.8200 www.segalco.com

September 24, 2019

Board of Retirement
Kern County Employees' Retirement Association
11125 River Run Boulevard
Bakersfield, CA 93311

Re: Kern County Employees' Retirement Association
June 30, 2018 Actuarial Valuation for Funding Purposes

Dear Members of the Board:

Segal Consulting (Segal) prepared the June 30, 2018 annual actuarial valuation of the Kern County Employees' Retirement Association (KCERA). We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices and KCERA's funding policy that was last reviewed with the Board in 2012. 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).

As part of the June 30, 2018 actuarial valuation, Segal conducted an examination of all participant data for reasonableness. 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 10 six-month periods. The deferred return is further adjusted, if necessary, so that the actuarial value of assets will stay within 50% 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 for each generation of active members. 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 as of June 30, 2011 is amortized as a level percentage of payroll over a 17.5-year period as of June 30, 2018. Effective June 30, 2012, any changes in UAAL due to actuarial gains or losses or due to changes in actuarial assumptions or methods will be amortized over a 18-year closed period effective with each valuation. Any change in UAAL that arises due to plan

Board of Retirement
Kern County Employees' Retirement Association
September 24, 2019
Page 2

amendments is amortized over its own declining 15-year period (with exception of a change due to retirement incentives, which is amortized over a declining period of up to 5 years). The progress being made towards meeting the funding objective through June 30, 2018 is illustrated in the Schedule of Funding Progress.

A listing of supporting schedules Segal prepared for inclusion in the actuarial, statistical, and financial sections of the Association's CAFR is provided below. Unless otherwise stated, the schedules were prepared based on the results of the actuarial valuation as of June 30, 2018 for funding purposes. The notes to the financial section and Required Supplementary Information were prepared by the Association based on the results of the Govermental Accounting Standards (GAS) 67 actuarial valuation as of June 30, 2019 prepared by Segal.

Exhibit I	Schedule of Active Member Valuation Data;
Exhibit II	Retirees and Beneficiaries Added To and Removed From Retiree Payroll;
Exhibit III	Schedule of Funded Liabilities by Type;
Exhibit IV	Actuarial Analysis of Financial Experience; and
Exhibit V	Schedule of Funding Progress.

The valuation assumptions included in the Actuarial Section were adopted by the Retirement Board based on our recommendations following the June 30, 2016 Actuarial Experience Study.

As we disclosed in our June 30, 2018 funding valuation report, the 7.25% investment return assumption that the Board approved for determining the liabilities for funding purposes and used for establishing the employer and employee contribution rates was developed without considering the impact of any future 50/50 excess earnings allocation. This is based on our understanding that Article 5.5 of the Statute, which authorizes the allocation of 50% of excess earnings to the SRBR, does not allow for the use of a different investment return for funding than is used for interest crediting. This would appear in effect to preclude the prefunding of the SRBR through the use of an assumption lower than the market earnings assumption of 7.25%.

As indicated by the guidance found in Actuarial Standard of Practice (ASOP) No. 4 ("Measuring Pension Obligations and Determining Pension Plan Costs or Contributions"), we performed stochastic modeling in 2015 to estimate the impact of the 50% allocation of future excess earnings to the SRBR. The results of our model indicated that the 50/50 allocation of future excess earnings would have about the same impact as an "outflow" (i.e., assets not available to fund the benefits included in the funding valuation) that would average approximately 0.3% of assets over time. **For informational purposes only,** when we applied the results of our stochastic model to this valuation, we estimated that such an annual outflow would increase the AAL measured in this valuation using a 7.25% investment return assumption from $6.40 billion to $6.64 billion (for a difference of $238 million) and would increase the employer's contribution rate by about 4.2% of payroll.

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It is our opinion that the assumptions used in the June 30, 2018 valuation produce results, which, in aggregate, reflect the future experience of the retirement plan. Actuarial valuations are performed on an annual basis. An experience analysis is performed every three years and was last performed as of June 30, 2016 with those assumptions first being implemented in the June 30, 2017 actuarial valuation.

In the June 30, 2018 valuation, the ratio of the valuation assets to actuarial accrued liabilities (funded percentage) increased from 63.2% to 65.1%. The aggregate employer contribution rate has decreased from 47.69% of payroll to 46.72% of payroll, while the aggregate employee rate has increased from 6.46% of payroll to 6.58% of payroll.

Under the asset smoothing method, the total unrecognized investment losses are $92 million as of June 30, 2018. These investment losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years.

The deferred losses of $92 million represent about 2% of the market value of assets as of June 30, 2018. Unless offset by future investment gains or other favorable experience, the recognition of the $92 million market losses is expected to have an impact on the Association's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:

- If the deferred losses were recognized immediately in the valuation value of assets, the funded percentage would decrease from 65.1% to 63.6%.

- If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 46.72% to 48.02% of payroll.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Paul Angelo, FSA, MAAA, FCA, EA	John Monroe, ASA, MAAA, EA
Senior Vice President and Actuary	Vice President and Actuary

MYM/bbf
Enclosures

5597120v1/13452.002

The methods and assumptions below were selected by the actuary as being appropriate for the Plan and were used in the latest actuarial valuation dated June 30, 2018. The most recently updated Summary of Actuarial Assumptions and Methods was adopted by the Board of Retirement on December 10, 2014.

Economic Assumptions

Interest Rate of Return: 7.25% per year, net of investment expenses

Salary Increases: General: 4.00% to 9.00%. Safety: 4.00% to 12.50% (see Table 1 on page 86)

Inflation Assumption: 3.00% per year

Cost-of-Living Adjustments: 2.50% (actual increases depend on CPI increases; 2.50% maximum)

Actuarial Methods

Funding Method: Entry Age Funding Method. Costs are allocated as a level percent of salary.

Actuarial Cost Method: Entry Age Actuarial Cost Method. The actuarial present value of the projected benefits of each member are allocated as a level percentage of the member's projected compensation between entry age and assumed exit (until maximum retirement age).

Amortization Period: The actuarial present value of benefits expected to be paid in the future is the Normal Cost. The difference between the Normal Cost and the actuarial present value of all future benefits for contributing members, former contributing members and their survivors is the Actuarial Accrued Liability (AAL). The difference between the AAL and the actuarial value of the assets is the Unfunded Actuarial Accrued Liability (UAAL).

As of June 30, 2018, the remaining amortization period for all UAAL as of June 30, 2011 was 17.5 years. Effective June 30, 2012, any changes in UAAL due to actuarial gains or losses or due to changes in actuarial assumptions or methods will be amortized over an 18-year closed period, effective with each valuation. Any change in UAAL that arises due to plan amendments is amortized over its own declining 15-year period (with the exception of a change due to retirement incentives, which are amortized over a declining period of up to 5 years).

Actuarial Methods (cont.)

Amortization Period (cont.):	Beginning July 1, 2009, any liability attributable to golden handshakes is paid by one of two methods, as elected by the employer: 1. Payment in full in the first month of the fiscal year following the fiscal year in which the golden handshake(s) was granted; or 2. According to a 5-year amortization to be invoiced to the employer in the first month of the fiscal year following the fiscal year in which the golden handshake(s) was granted. The amortization schedule will be based upon the valuation interest rate used in the most recently completed valuation at the time that the amortization schedule is created. The employer may complete payment of the golden handshake(s) at any time during the 5-year amortization period.

Demographic Assumptions

Post-Retirement Mortality:	
A) General Members and Safety Members:	Combined RP-2014 Healthy Annuitant Mortality Table set forward one year for male and two years for female General Members and set back one year for male and female Safety members projected generationally with the two-dimensional MP-2016 projection scale.
B) Beneficiaries:	Rates are the same as a General service retiree of the opposite sex.
C) Disability Retirement:	Combined RP-2014 Healthy Annuitant Mortality Table set forward seven years for male and eight years for female General Members and set forward three years for male and female Safety Members projected generationally with the two-dimensional MP-2016 projection scale
Proportion of Members with Spouse/Partner at Retirement:	75% of male active members and 55% of female active employees are assumed to have a spouse or registered domestic partner eligible for the 60% continuance at retirement. Females are assumed to be three years younger than their spouses.
Rate of Termination of Employment:	Rates vary by years of service, as shown in Table 2 on page 87.
Reciprocal Agency:	For current active members, the probability of joining a reciprocal agency immediately after terminating is 55% for General members and 60% for Safety members.
Deferred Retirement Age for Vested Termination:	Age 57 for General members. Age 53 for Safety members.

KCERA 2019 - Table 1: Assumed Rate of Salary Increase

Years of Service	General Members	Safety Members
0	5.50%	8.00%
1	4.00%	6.50%
2	3.50%	5.50%
3	3.00%	4.00%
4	2.25%	3.50%
5	2.00%	3.25%
6	1.75%	3.00%
7	1.50%	2.50%
8	1.25%	1.75%
9	1.00%	1.50%
10	0.90%	1.25%
11	0.80%	1.00%
12	0.70%	0.90%
13	0.60%	0.85%
14	0.50%	0.80%
15	0.50%	0.75%
16	0.50%	0.70%
17	0.50%	0.65%
18	0.50%	0.60%
19	0.50%	0.55%
20 & Over	0.50%	0.50%

The chart above depicts annual increases in salary before wage inflation. Inflation is 3.00% per year, plus "across-the-board" salary increases of 0.50% per year, plus the promotional and merit increases listed above.

(Rates in percentage)

Age Nearest	Ordinary Death	Disability *	Service Retirement		
General Members - Male			*Tier I*	*Tier II*	*Tier III*
25	0.04	0.03	0.00	0.00	0.00
30	0.05	0.05	0.00	0.00	0.00
40	0.11	0.14	0.00	0.00	0.00
50	0.23	0.28	6.00	3.00	0.00
60	0.64	0.38	23.00	13.50	13.50
General Members - Female			*Tier I*	*Tier II*	*Tier III*
25	0.02	0.03	0.00	0.00	0.00
30	0.03	0.05	0.00	0.00	0.00
40	0.07	0.14	0.00	0.00	0.00
50	0.17	0.28	6.00	3.00	0.00
60	0.45	0.38	23.00	13.50	13.50
Safety Members - Male			*Tier I*	*Tier II*	
25	0.04	0.08	0.00	0.00	
30	0.04	0.16	0.00	0.00	
40	0.10	0.50	0.00	0.00	
50	0.19	1.35	20.00	6.00	
60	0.52	3.60	20.00	20.00	
Safety Members - Female			*Tier I*	*Tier II*	
25	0.04	0.08	0.00	0.00	
30	0.04	0.16	0.00	0.00	
40	0.10	0.50	0.00	0.00	
50	0.19	1.35	20.00	6.00	
60	0.52	3.60	20.00	20.00	

(Rates in percentage)

Years of Service	Withdrawal	
	General	**Safety**
0	18.00	8.00
5	6.00	2.60
10	3.25	2.00
15	2.30	1.10
20	1.50	0.00
25	1.00	0.00
30 & Over	0.00	0.00

* *55% of General member disabilities are assumed to be service-connected, and the other 45% are assumed to be nonservice-connected. Furthermore, 100% of Safety member disabilities are assumed to be service-connected.*

Valuation Date	Plan Type	Members	Annual Payroll	Annual Average Pay	Increase in Average Pay
6/30/2009*	General	7,166.00	$ 423,075,334	$ 59,039	15.4 %
	Safety	1,854.00	$ 141,829,138	$ 76,499	19.4 %
	Total	**9,020**	**$ 564,904,472**	**$ 62,628**	**16.5 %**
6/30/2010	General	6,802.00	$ 423,551,766	$ 62,269	5.5 %
	Safety	1,765.00	$ 141,008,072	$ 79,891	4.4 %
	Total	**8,567**	**$ 564,559,838**	**$ 65,899**	**5.2 %**
6/30/2011	General	6,487.00	$ 404,729,012	$ 62,391	0.2 %
	Safety	1,700.00	$ 135,105,643	$ 79,474	(0.5)%
	Total	**8,187**	**$ 539,834,655**	**$ 65,938**	**0.1 %**
6/30/2012	General	6,494.00	$ 406,039,414	$ 62,525	0.2 %
	Safety	1,759.00	$ 137,518,061	$ 78,180	(1.6)%
	Total	**8,253**	**$ 543,557,475**	**$ 65,862**	**(0.1)%**
6/30/2013	General	6,619.00	$ 410,905,480	$ 62,080	(0.7)%
	Safety	1,866.00	$ 144,847,330	$ 77,625	(0.7)%
	Total	**8,485**	**$ 555,752,810**	**$ 65,498**	**(0.6)%**
6/30/2014	General	6,629.00	$ 410,350,884	$ 61,902	(0.3)%
	Safety	1,883.00	$ 145,284,147	$ 77,156	(0.6)%
	Total	**8,512**	**$ 555,635,031**	**$ 65,277**	**(0.3)%**
6/30/2015	General	6,637.00	$ 411,427,313	$ 61,990	0.1 %
	Safety	1,844.00	$ 145,396,935	$ 78,849	2.2 %
	Total	**8,481**	**$ 556,824,248**	**$ 65,655**	**0.6 %**
6/30/2016	General	6,788.00	$ 421,043,714	$ 62,028	0.1 %
	Safety	1,839.00	$ 146,217,425	$ 79,509	0.8 %
	Total	**8,627**	**$ 567,261,139**	**$ 65,754**	**0.2 %**
6/30/2017	General	6,966.00	$ 431,532,274	$ 61,948	(0.1)%
	Safety	1,762.00	$ 140,549,312	$ 79,767	0.3 %
	Total	**8,728**	**$ 572,081,586**	**$ 65,546**	**(0.3)%**
6/30/2018	General	7,106.00	$ 443,482,638	$ 62,410	0.7 %
	Safety	1,762.00	$ 140,698,321	$ 79,897	0.2 %
	Total	**8,868**	**$ 584,180,959**	**$ 65,883**	**0.5 %**

* *Annual payroll data as of June 30, 2009 includes supplemental pay items with pensionable salary.*

KCERA 2019 - Schedule of Retirees and Beneficiaries Added to and Removed from Payroll

Plan Year	At Beginning of Year	Added During Year	Removed During Year	At End of Year	Annual Allowance Added	Annual Allowance Removed	Retiree Payroll Ending	% Increase in Retiree Allowance	Average Annual Allowance *
2008	5,552	196	97	5,651	$5,039,591	$1,610,546	$145,783,55	4.8%	$25,798
2009	5,651	458	182	5,927	$16,056,013	$2,751,455	$164,591,02	12.9%	$27,770
2010	5,927	476	204	6,199	$13,128,260	$3,658,618	$181,377,90	10.2%	$29,259
2011	6,199	569	198	6,570	$27,159,926	$3,568,064	$204,969,76	13.0%	$31,198
2012	6,570	499	179	6,890	$24,783,041	$3,411,092	$226,341,71	10.4%	$32,851
2013	6,890	468	187	7,171	$22,305,618	$3,825,313	$244,822,02	8.2%	$34,141
2014	7,171	442	216	7,397	$19,663,621	$4,173,211	$260,312,43	3.1%	$35,192
2015	7,397	440	238	7,599	$20,734,025	$5,817,539	$275,229,09	5.7%	$36,219
2016	7,599	454	206	7,847	$20,236,339	$5,034,075	$290,431,36	5.5%	$37,012
2017	7,847	501	255	8,093	$22,566,737	$6,358,810	$306,639,28	5.6%	$37,889
2018	8,093	426	218	8,301	$22,799,714	$6,125,093	$323,313,90	5.4%	$38,949

* *Excludes SRBR amounts*

Solvency Test

(Dollars in thousands)

	Aggregate Accrued Liabilities					Portion of Accrued Liabilities Covered by Reported Assets		
Valuation Date	Active Member Contributions	Retired/ Vested Members	Active Members (Employer Financed Portion)	Total	Actuarial Value of Assets	Active Member Contributions	Retired/ Vested Members	Active Members (Employer Financed Portion)
6/30/2008	222,418	1,913,946	1,535,096	3,671.46	2,654,316	100%	100%	34%
6/30/2009	232,426	2,159,371	1,813,403	4,205.2	2,780,215	100%	100%	21%
6/30/2010	229,784	2,380,826	1,846,429	4,457.038	2,794,644	100%	100%	10%
6/30/2011	225,649	2,680,161	1,766,538	4,672.348	2,839,747	100%	98%	—%
6/30/2012	231,626	2,933,987	1,729,377	4,894.99	2,960,507	100%	93%	—%
6/30/2013	244,832	3,153,966	1,709,821	5,108.619	3,120,632	100%	91%	—%
6/30/2014	268,826	3,446,962	1,776,652	5,492.44	3,342,122	100%	89%	—%
6/30/2015	295,447	3,607,511	1,754,215	5,657.173	3,529,786	100%	90%	—%
6/30/2016	320,400	3,766,875	1,725,817	5,813.092	3,685,447	100%	89%	—%
6/30/2017	$351,592	$4,093,826	$1,746,015	$6,191.433	$3,913,073	100%	87%	—%
6/30/2018	$387,376	$4,288,475	$1,722,963	$6,398.814	$4,163,476	100%	88%	—%

Actuarial Analysis of Financial Experience

(In thousands)

	June 30, 2018	June 30, 2017	June 30, 2016
Investment Performance			
Greater (Less) than Expected	$ (5,686)	$ (17,692)	$ (87,833)
Salary Increase			
(Greater) Less than Expected	47,018	50,071	50,037
Other Experience			
Including Demographic Changes	(14,367)	26,780	39,692
Change in Assumptions/Methodology		(213,476)	
Composite Gain (or Loss) During Year	**$ 26,965**	**$ (154,317)**	**$ 1,896**

SCHEDULE OF FUNDING PROGRESS* (Dollars in thousands)

Actuarial Valuation Date (1)	Actuarial Value of Assets (2)	Actuarial Accrued Liability (3)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2) (4)	Funded Ratio (2) / (3) (5)	Annual Covered Payroll (6)	UAAL as % of Annual Payroll (4) / (6) (7)
6/30/2008	2,654,305	3,671,460	$ 1,017.155	72.3%	482,879	210.6%
6/30/2009	2,780,215	4,205,200	$ 1,424.985	66.1%	559,872	254.5%
6/30/2010	2,794,644	4,457,038	$ 1,662.394	62.7%	559,380	297.2%
6/30/2011	2,839,747	4,672,348	$ 1,832.601	60.8%	539,836	339.5%
6/30/2012	2,960,507	4,894,990	$ 1,934.483	60.5%	543,558	355.9%
6/30/2013	3,120,632	5,108,619	$ 1,987.987	61.1%	555,752	357.7%
6/30/2014	3,342,122	5,492,440	$ 2,150.318	60.8%	555,634	387.0%
6/30/2015	3,529,786	5,657,173	$ 2,127.387	62.4%	556,824	382.1%
6/30/2016	3,685,447	5,813,092	$ 2,127.645	63.4%	567,261	375.1%
6/30/2017	$3,913,073	$6,191,433	$ 2,278.36	63.2%	$ 572,081	398.3%
6/30/2018	$4,163,476	$6,398,814	$ 2,235.338	65.1%	$ 584,180	382.6%

** Net of SRBR and $5,000 death benefits*

SCHEDULE OF EMPLOYER CONTRIBUTIONS (Dollars in thousands)

Fiscal Year Ended June 30,	Annual Required Contribution	Percentage Contributed
2008	$137,264	100%
2009	138,815	100%
2010	151,127	100%
2011	177,444	100%
2012	189,837	100%
2013	211,677	100%
2014	220,393	100%
2015	215,477	100%
2016	234,714	100%
2017	224,351	100%
2018	$242,534	100%

Briefly summarized below are the major provisions of the County Employees' Retirement Law of 1937, including Sections 31676.01, 31676.14, 31676.17, 31664, 31664.1 and 7522.20(a), as adopted by the County of Kern and special districts.

Membership

Membership is automatic upon appointment to a permanent position of 50% or more of the regular standard hours required. Retirement entry date is the first day of the first full biweekly payroll period following the date of employment.

All safety and general members hired by the County of Kern or a special district on or after January 1, 2013 are subject to the "new member" provisions found in Code Section 7522.20(a) of the Public Employees' Pension Reform Act of 2013 (PEPRA).

Final Average Salary

For non-PEPRA benefit tiers, "final average salary" is the highest 12 consecutive months of pensionable pay, including base salary and other pay elements includible as a result of the "Ventura" decision. "Pensionable compensation" for members subject to PEPRA is the highest 36 consecutive months of pensionable pay, including base salary and eligible special pay items defined in PEPRA.

Vesting

Members are considered vested in the Plan after obtaining five years of retirement service credit.

Member Contribution Rates

The basic contribution is computed on the member's base pay plus pensionable special pays, with the contribution rate being determined by the member's entry age into KCERA, the classification of the member, the Plan's economic assumptions and the member's life expectancy at the retirement age specified in the County Employees' Retirement Law of 1937.

The normal rates of contribution are such as to provide, for each year of service, an average annuity at age 55 of 1.0% of final compensation for General Tier I members, an average annuity at age 60 of 0.833% of final compensation for General Tier II members, an average annuity at age 50 of 1.5% of final compensation for Safety Tier I members, and an average annuity at age 50 of 1.0% of final compensation for Safety Tier II members, according to the tables adopted by the Board of Supervisors, for each year of service rendered after entering the Plan.

General and safety members subject to PEPRA provisions will pay 100% of their contributions until retirement. Their contribution rates will be 50% of the actuarially determined Normal Cost rate for each membership group. All other KCERA members will contribute based on their entry age or a flat average rate (i.e., for certain safety bargaining units).

Per IRS Code Section 414(h)(2), member contributions made through payroll deductions are pretax. Interest is credited to contribution balances on June 30 and December 31, per the County Employees' Retirement Law of 1937, Article 5.5.

Withdrawal Benefits

If a member resigns, his or her contributions plus interest can be refunded. Members with less than five years of service may elect to leave his or her contributions on deposit and receive interest. Any vested member may elect to leave his or her contributions on deposit and receive a deferred-vested benefit when eligible for retirement.

Compensation Limit

For members who joined KCERA on or after July 1, 1996 but before January 1, 2013, "compensation earnable" is limited by IRC Section 401(a)(17) and indexed annually for inflation. "Pensionable compensation" for General Tier III members enrolled in Social Security is capped at the Social Security limit and indexed annually for inflation.

Service Retirement Benefits

General members with at least 10 years of retirement service credit who are age 50 or older, have 30 years of service credit regardless of age, or are age 70 regardless of service credit are eligible for service retirement.

General Tier I provides 3.0% of final compensation for each year of service at age 60, multiplied by Government Code Section 31676.17 factors. General Tier II provides 1.62% of final compensation for each year of service at age 65, multiplied by Government Code Section 31676.01 factors.

Berrenda Mesa Water District and Inyokern Com- munity Services District still have Government Code Secion 31676.14 for service prior to January 1, 2005.

General Tier II applies to most general members hired by the County of Kern and Kern County Hospital Authority on or after October 27, 2007, or hired by the following special districts: Berrenda Mesa Water District on or after January 12, 2010; Buttonwillow Recreation and Park District and East Kern Cemetery District on or after December 17, 2012; Inyokern Community Services District on or after December 13, 2012; Kern County Water Agency on or after January 1, 2010; Kern Mosquito and Vector Control District on or after December 12, 2012; North of the River Sanitation District on or after October 29, 2007; San Joaquin Valley Air Pollution Control District on or after July 31, 2012; Shafter Recreation and Park District on or after December 19, 2012; West Side Cemetery District on or after December 18, 2012; West Side Mosquito and Vector Control District on or after November 15, 2012; and Kern County Superior Court on or after March 12, 2011.

General members hired by the West Side Recreation and Park District on or after January 1, 2013 are General Tier III members. Their benefit formula is 2.5% at age 67. They are eligible to retire at age 52 with 5 years of retirement service credit.

Safety members with at least 10 years of retirement service credit who are age 50 or older, or with 20 years of retirement service credit regardless of age, are eligible for service retirement.

Safety Tier I provides 3.0% of final compensation for each year of service at age 50, multiplied by Government Code Section 31664.1 factors. Safety Tier II provides 2.0% of final compensation for each year of service at age 50, multiplied by Government Code Section 31664 factors.

For members integrated with Social Security, benefits based on $350 of monthly final average salary are reduced by one-third.

Disability Benefit

Members with five years of retirement service credit, regardless of age, are eligible for nonservice-connected disability. This benefit provide 20% to 40% of the member's final average monthly compensation for life.

If the disability is service-connected, there is no minimum retirement service credit requirement. This benefit provides 50% of the member's final average monthly compensation, tax-free, for life.

Death Benefit (Before Retirement)

A non-vested active member's beneficiary is entitled to receive the Basic Death Benefit, which consists of accumulated contributions plus interest and one month of salary for each full year of service, up to six months of salary.

Death Benefit (Before Retirement) (cont)

The beneficiary (i.e., eligible spouse or registered domestic partner) of a vested active member who does not die in the performance of duty is entitled to either the Basic Death Benefit or a monthly benefit equal to 60% of the benefit payable if the member had retired with a nonservice-connected disability on his or her date of death. This also applies to minor children if there is no eligible spouse or partner.

If a member dies in the performance of duty, the eligible spouse, partner or minor children receives 50% of the member's final average salary.

Death Benefit (After Retirement)

A death benefit of $5,000 is payable to the designated beneficiary or estate of a retiree after the member dies.

If a member retired for service or with a nonservice-connected disability and he or she chose the Unmodified Option, the eligible surviving spouse, registered domestic partner or minor children will receive a benefit equal to 60% of the member's retirement benefit. If the retirement was for a service-connected disability, the member's spouse, registered domestic partner or minor children will receive a 100% continuance of the benefit.

Supplemental Retirement Benefits (SRBR)

The Board of Retirement adopted California Government Code Section 31618 on April 23, 1984, which provided for the establishment of the Supplemental Retiree Benefit Reserve (SRBR). The SRBR may be used only for the benefit of retired members and their beneficiaries. The distribution of the SRBR shall be determined by the Board of Retirement. SRBR-approved benefits include all Tier 1, Tier 2, Tier 3 and death benefits approved through the June 30, 2016 Actuarial Valuation.

Post-Retirement Cost-of-Living Benefits

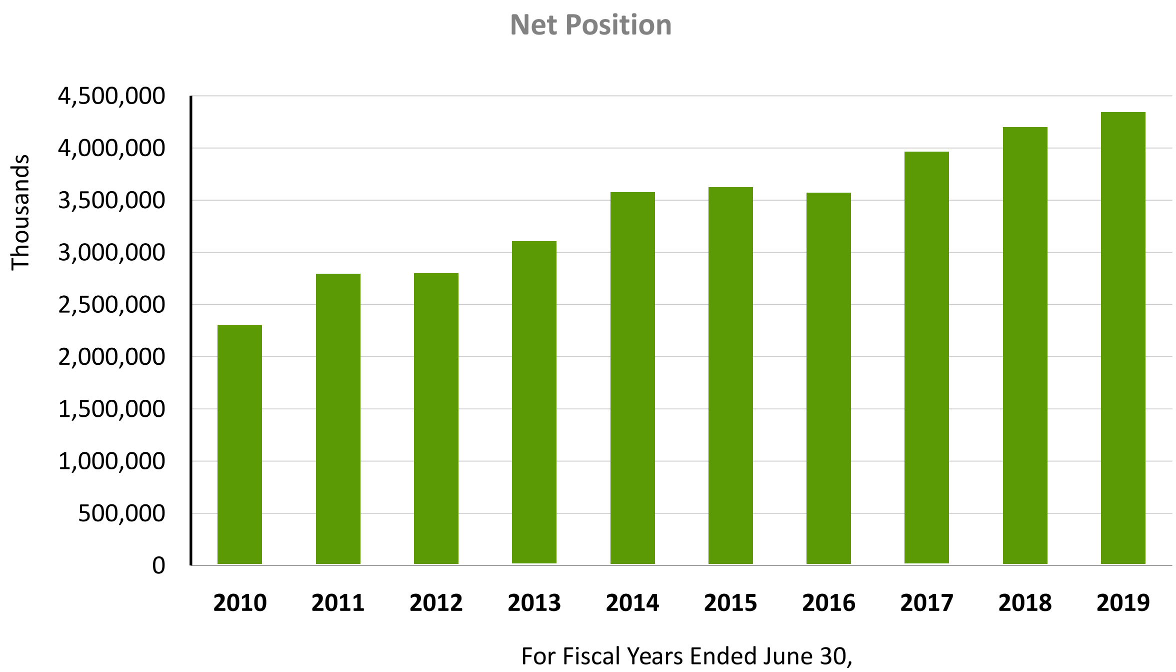
Each April 1, retiree benefits are adjusted by the percentage change in the Consumer Price Index for the preceding calendar year (capped at 2.5%).

Eligibility	Tier 1:	Hired on or before July 1, 1994.
	Tier 2:	Pensioners with at least five years of credited service and who retired prior to 1981 or 1985 (and their surviving beneficiaries) whose benefits have reduced by 20% in purchasing power since retirement.
	Tier 3:	Pensioners and their surviving beneficiaries whose benefits have reduced by 20% in purchasing power since retirement.
Benefits	Tier 1:	$35.50 per month, not subject to cost-of-living adjustments.
	Tier 2:	$1.372 times years of service, per month, for members who retired prior to 1985; granted July 1, 1994. $5.470 times years of service, per month, for members who retired prior to 1985; granted July 1, 1996. $10.276 times years of service, per month, for members who retired prior to 1981; granted July 1, 1997.
	Tier 3:	Additional benefits to maintain 80% purchasing power protection.
	Death Benefit:	A one-time payment of $5,000 to a retired member's beneficiary.
	0.5% COLA	$64.7 million allocation of funds to initially pay for a 0.5% cost-of- living allowance; arisen from a litigation judgment entered on January 24, 2002.
Funding		Crediting of interest and the allocation of "undistributed earnings": the amount that remains after net earnings have been used to credit interest to the Plan's reserves.

STATISTICAL SECTION

The Statistical Section offers additional historical perspective and detail to provide a fuller understanding of this year's financial statements, note disclosures and supplementary information. This section also provides 10 year trending of financial and operating information to supply a more comprehensive perspective on how KCERA's financial position and performance have changed over time. Specifically, the financial and operating information provides contextual data for KCERA's changes in net position, benefit expenses, retirement types, benefit payments and membership data. The financial and operating trend information is located on the following pages.

KCERA NET POSITION VALUE



(In thousands)

	2010	2011	2012	2013	2014
Additions					
Employer Contributions	$ 151,127	$ 177,444	$ 189,837	$ 211,677	$ 220,393
Member Contributions	17,877	18,271	18,720	20,283	25,810
Net Investment Income (Loss)	291,333	503,553	21,150	319,264	487,494
Total Additions	**460,337**	**699,268**	**229,707**	**551,224**	**733,697**
Deductions					
Total Benefit Expenses**	180,366	201,013	222,140	242,630	257,495
Administrative Expenses	3,207	3,763	3,469	3,848	4,860
Miscellaneous					
Total Deductions	**183,573**	**204,776**	**225,609**	**246,478**	**262,355**
Change in Fiduciary Net Position	**$ 276,217**	**$ 494,492**	**$ 4,098**	**$ 304,746**	**$ 471,342**

(In thousands)

	2015	2016	2017	2018	2019
Additions					
Employer Contributions*	$ 215,477	$ 234,714	$ 241,112	$ 242,534	$ 229,120
Member Contributions*	30,325	33,278	34,649	52,503	50,132
Net Investment Income (Loss)	81,930	(27,535)	426,607	267,659	214,244
Total Additions	**327,732**	**240,457**	**702,368**	**562,696**	**493,496**
Deductions					
Total Benefit Expenses**	273,865	288,738	305,817	321,613	341,774
Administrative Expenses	4,886	5,225	5,243	5,116	4,804
Miscellaneous					
Total Deductions	**278,751**	**293,963**	**311,060**	**326,729**	**346,578**
Change in Fiduciary Position	**$ 48,981**	**$ (53,506)**	**$ 391,308**	**$ 235,967**	**$ 146,918**

** The 2018 and 2019 fiscal year's financial statements reclassified employer paid member contributions as member contributions.*

*** See Schedule of Benefit Expenses by Type on next page.*

(In thousands)

	2010	2011	2012	2013	2014
Service Retirement Benefits					
General	$ 89,204	$ 101,934	$ 114,742	$ 127,139	$ 137,993
Safety	49,949	55,886	62,207	68,078	68,705
Total	139,153	157,820	176,949	195,217	206,698
Service-Connected Disability (SCD) Benefits					
General	7,906	7,924	7,947	8,064	8,331
Safety	14,230	14,656	15,145	15,495	20,565
Total	22,136	22,580	23,092	23,559	28,896
Beneficiary Benefits					
General	9,072	9,533	10,353	11,152	10,660
Safety	7,222	7,580	8,231	8,602	7,565
Total	16,294	17,113	18,584	19,754	18,225
Lump Sum Death Benefits	466	383	433	606	564
Total Benefit Payments	**178,049**	**197,896**	**219,058**	**239,136**	**254,383**
Refunds					
General	1,998	2,666	2,408	2,973	2,762
Safety	319	451	674	521	350
Total	2,317	3,117	3,082	3,494	3,112
Total Benefit Expenses	**$ 180,366**	**$ 201,013**	**$ 222,140**	**$ 242,630**	**$ 257,495**

(In thousands)

	2015	2016	2017	2018	2019
Service Retirement Benefits					
General	$ 148,697	$ 159,101	$ 169,370	$ 179,977	$ 193,308
Safety	72,097	74,978	78,453	81,806	86,007
Total	220,794	234,079	247,823	261,783	279,315
Service-Connected Disability (SCD) Benefits					
General	8,422	8,260	8,411	8,647	8,479
Safety	21,222	21,676	22,207	22,842	22,596
Total	29,644	29,936	30,618	31,489	31,075
Beneficiary Benefits					
General	11,186	12,261	13,579	14,136	14,903
Safety	7,881	8,393	8,979	9,612	10,719
Total	19,067	20,654	22,558	23,748	25,622
Lump Sum Death Benefits	862	787	894	903	1,025
Total Benefit Payments	**$ 270,367**	**$ 285,456**	**$ 301,893**	**$ 317,923**	**$ 337,037**
Refunds					
General	2,876	2,563	2,718	2,966	3,519
Safety	622	719	1,206	724	1,218
Total	3,498	3,282	3,924	3,690	4,737
Total Benefit Expenses	**$ 273,865**	**$ 288,738**	**$ 305,817**	**$ 321,613**	**$ 341,774**

Amount of Monthly Benefit	Number of Retirants	Type of Retirement								
		1	2	3	4	5	6	7	8	9
$1-500	399	274	2	0	0	58	11	0	5	49
$501-1,000	907	628	31	1	0	145	18	4	24	56
$1,001-1,500	1012	697	72	45	0	126	27	0	13	32
$1,501-2,000	897	610	40	99	0	85	18	0	19	26
$2,001-3,000	1615	1,104	15	238	0	151	8	2	61	36
$3,001-4,000	1103	812	8	149	0	91	2	6	23	12
$4,001-5,000	691	605	1	35	0	35	1	0	8	6
$5,001-6,000	477	414	3	33	0	21	2	0	4	0
Over $6,000	1395	1,236	8	113	0	21	1	0	14	2
Totals	**8,496**	**6,380**	**180**	**713**	**0**	**733**	**88**	**12**	**171**	**219**

Amount of Monthly Benefit	Number of Retirants	Option Selected						
		Option 1	Option 2	Option 2	Option 4	Unmodified		
						A	B	C
$1-500	399	12	30	0	0	119	238	0
$501-1,000	907	6	61	4	0	329	506	1
$1,001-1,500	1012	6	58	4	1	374	550	19
$1,501-2,000	897	8	42	4	0	331	450	62
$2,001-3,000	1615	12	61	9	4	583	781	165
$3,001-4,000	1103	6	49	1	0	453	484	110
$4,001-5,000	691	3	33	5	3	376	246	25
$5,001-6,000	477	1	24	2	1	280	141	28
Over $6,000	1395	2	55	4	3	963	266	102
Totals	**8,496**	**56**	**413**	**33**	**12**	**3,808**	**3,662**	**512**

Type of Retirement

1 – Normal retirement for age and service
2 – NonService - connected disability retirement
3 – Service-connected disability retirement
4 – Former member with deferred future benefit
5 – Beneficiary payment – normal retirement
6 – Beneficiary payment – active member who died and was eligible for retirement
7 – Beneficiary payment – death in service
8 – Beneficiary payment – disability retirement
9 – Supplemental and ex-spouses

Option Selected

Option 1 – Beneficiary receives lump sum of member's unused contributions

Option 2 – Beneficiary receives 100% of member's reduced monthly allowance

Option 3 – Beneficiary receives 50% of member's reduced monthly allowance

Option 4 – More than one beneficiary receives 100% of member's reduced monthly allowance

A – Unmodified 60% continuance

B – Unmodified no continuance

C – Unmodified 100% continuance

	Years of Retirement Service Credit						
	0-5	**5-10**	**10-15**	**15-20**	**20-25**	**25-30**	**30+**
Fiscal Year 2010							
Average Annual Benefit ($)	9,845	18,365	21,268	36,183	45,074	64,316	90,915
Average Monthly Benefit ($)	820	1,530	1,772	3,015	3,756	5,360	7,576
Average Final Monthly Salary	7,264	5,601	4,722	5,569	5,405	6,311	7,268
Number of Active Retirants	14	31	68	45	60	80	52
Fiscal Year 2011							
Average Annual Benefit ($)	9,326	13,830	25,010	36,390	44,473	62,648	88,002
Average Monthly Benefit ($)	777	1,152	2,084	3,032	3,706	5,221	7,334
Average Final Monthly Salary	5,755	5,031	5,577	5,684	5,468	6,063	7,120
Number of Active Retirants	10	50	72	51	94	96	99
Fiscal Year 2012							
Average Annual Benefit ($)	8,182	15,037	20,599	34,635	46,509	68,852	86,890
Average Monthly Benefit ($)	682	1,253	1,717	2,886	3,876	5,738	7,241
Average Final Monthly Salary	7,079	5,620	4,682	5,603	5,685	6,626	7,035
Number of Active Retirants	13	32	80	47	69	90	78
Fiscal Year 2013							
Average Annual Benefit ($)	9,121	16,908	21,948	32,303	45,408	63,765	78,584
Average Monthly Benefit ($)	760	1,409	1,829	2,692	3,784	5,314	6,549
Average Final Monthly Salary	7,851	5,485	4,951	5,420	5,659	6,332	6,543
Number of Active Retirants	17	31	80	57	67	63	75
Fiscal Year 2014							
Average Annual Benefit ($)	9,215	13,410	21,177	32,740	44,637	70,218	86,650
Average Monthly Benefit ($)	768	1,117	1,765	2,728	3,720	5,851	7,221
Average Final Monthly Salary	9,447	5,590	5,082	5,403	5,829	6,988	7,301
Number of Active Retirants	16	27	67	41	49	68	46

	Years of Retirement Service Credit						
	0-5	**5-10**	**10-15**	**15-20**	**20-25**	**25-30**	**30+**
Fiscal Year 2015							
Average Annual Benefit ($)	4,559	14,428	23,357	35,953	43,234	60,235	89,828
Average Monthly Benefit ($)	380	1,202	1,946	2,996	3,603	5,020	7,486
Average Final Monthly Salary	5,732	5,444	5,236	5,805	5,395	6,350	7,493
Number of Active Retirants	6	44	74	40	42	75	54
Fiscal Year 2016							
Average Annual Benefit ($)	6,508	14,308	24,278	32,909	45,685	64,833	78,159
Average Monthly Benefit ($)	542	1,192	2,023	2,742	3,807	5,403	6,513
Average Final Monthly Salary	7,213	5,417	5,828	5,614	5,958	6,747	7,062
Number of Active Retirants	23	43	70	44	47	78	55
Fiscal Year 2017							
Average Annual Benefit ($)	7,349	14,633	24,354	36,971	49,048	63,608	84,147
Average Monthly Benefit ($)	612	1,219	2,029	3,081	4,087	5,301	7,012
Average Final Monthly Salary	8,677	56,941	5,921	6,001	6,427	6,558	7,230
Number of Active Retirants	17	46	76	65	68	60	55
Fiscal Year 2018							
Average Annual Benefit ($)	6,440	12,906	20,699	33,844	54,312	60,419	84,403
Average Monthly Benefit ($)	537	1,076	1,725	2,820	4,526	5,035	7,034
Average Final Monthly Salary	8,446	6,155	5,588	5,750	7,332	6,635	7,331
Number of Active Retirants	13	46	59	54	56	53	40
Fiscal Year 2019							
Average Annual Benefit ($)	11,162	10,090	22,802	33,047	49,646	78,685	88,127
Average Monthly Benefit ($)	930	841	1,900	2,754	4,137	6,557	7,344
Average Final Monthly Salary	10,168	5,109	5,776	5,712	6,780	8,308	7,905
Number of Active Retirants	15	33	67	46	57	53	54

	2010	2011	2012	2013	2014
County of Kern					
General Members	5,920	5,622	5,632	5,873	5,833
Safety Members	1,765	1,703	1,762	1,873	1,886
Total	7,685	7,325	7,394	7,746	8
Participating Agencies (General Membership):					
Berrenda Mesa Water District	11	10	10	10	10
Buttonwillow Recreation and Park District	5	6	6	6	4
East Kern Cemetery District	1	1	1	1	1
Inyokern Community Services District	2	1	1	1	1
Kern County Water Agency	72	73	71	65	68
Kern Mosquito & Vector Control District	19	18	19	18	18
North of the River Sanitation District	10	10	11	13	12
San Joaquin Valley Air Pollution Control District	292	287	281	281	276
Shafter Recreation and Park District	—	—	—	—	—
West Side Cemetery District	6	6	6	6	6
West Side Mosquito & Vector Control Dist.	8	8	7	7	10
West Side Recreation and Park District	12	10	10	10	11
Kern County Superior Court	444	441	443	353	389
	882	871	866	771	806
Total Active Membership:					
General Members	6,802	6,493	6,498	6,644	6,639
Safety Members	1,765	1,703	1,762	1,873	1,886
Total	8,567	8,196	8,260	8,517	8,525

	2015	2016	2017	2018	2019
County of Kern:					
General Members	5,827	5,937	4,720	4,818	5,014
Safety Members	1,847	1,840	1,767	1,771	1,773
Total	7,674	7,777	6,487	6,589	6,787
Participating .Agencies (General Membership):					
Berrenda Mesa Water District	9	6	6	4	3
Burtonwillow Recreation and Park District	5	4	3	2	1
East Kern Cemetery District	1	2	2	2	2
Inyokern Commnunity Services District	1	1			
Kern County Hospital Authority	—	—	1,374	1,446	1,550
Kern County Water Agency	67	62	60	59	55
Kern Mosquito & Vector Control District	18	18	18	19	18
North of the River Sanitation District	13	13	13	18	18
San Joaquin Valley Air Pollution Control District	264	269	273	275	289
Shafter Recreation and Park District	—	—	1	3	2
West Side Cemetery District	6	6	6	6	6
West Side Mosquito & Vector Control Dist.	10	9	8	8	8
West Side Recreation and Park District	11	11	9	8	7
Kern County Superior Court	414	457	478	483	519
	819	**858**	**2,251**	**2,333**	**2,478**
Total Active Membership:					
General Members	6,645	6,795	6,971	7,151	7,492
Safety Members	1,847	1,840	1,767	1,771	1,773
Total	**8,492**	**8,635**	**8,738**	**8,922**	**9,265**