ANNUAL COMPREHENSIVE FINANCIAL REPORT

Fiscal Years Ended June 30, 2021 and 2020

KCERA

KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

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)

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Fiscal Years Ended June 30 ,2021 and 2020

ISSUED BY:

Dominic Brown, Chief Executive Officer

Matthew Henry, Chief Operating Officer

Angela Kruger, Chief Financial Officer

Kern County Employees' Retirement Association (KCERA)

11125 River Run Blvd, Bakersfield, CA 93311

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

INTRODUCTORY SECTION

KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

KCERA

PRUDENT INVESTMENT • QUALITY SERVICE

December 16, 2021

Dominic D. Brown

Chief Executive Officer

Dear Board Members:

As Chief Executive Officer of the Kern County Employees' Retirement Association (KCERA), I am pleased to present the Annual Comprehensive Financial Report (ACFR) for the fiscal years ended June 30, 2021, and 2020. 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 Annual Comprehensive 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, 2021, KCERA had 12,589 active and deferred-vested members and paid retirement benefits to 8,835 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, 2021, 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 three 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 & COVID-19

As is the case with everyone in the world KCERA had a short time frame to make accommodations for COVID-19. KCERA was able to transition staff to remote work over a three-day period. The service to members was essentially uninterrupted, with staff utilizing technology to provide services. In May of 2021 KCERA began a gradual return to the office, by June 30, 2021, more than half of KCERA's staff had returned to the KCERA offices.

KCERA Reorganization and Recruitments

KCERA management continued the reorganization that is allowing us to better accomplish the mission of the organization. As part of the reorganization, KCERA added an Applications Manager and a Programmer to the IT section to provide better support for the KCERA team. An Investment Analyst position was filled to assist in the management of the $5.4 billion fund.

Alameda Decision

On August 24th, 2020, the Board of Retirement approved a resolution to implement the Alameda California Supreme Court decision. The Alameda decision filed on July 30, 2020, concludes that all amendments to the definition of compensation earnable in Government Code section 31461, enacted as a result of the Public Employees' Pension Reform Act of 2013 and related statutory changes to CERL ("PEPRA"), effective January 1, 2013 are constitutional, and that CERL retirement boards may not be contractually bound or estopped by settlement agreements, board resolutions, or other similar actions, from implementing those amendments. The Alameda Decision further determines that CERL retirement boards may not include items in retirement allowance calculations, either compensation earnable under section 31461, as amended, or pensionable compensation under section 7522.34, that the applicable statutes require them to exclude ("PEPRA Exclusions"). Additional information may be found in the notes to these financial statements.

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, 2020, the funded ratio of the Plan was 64.4% using actuarial assets and actuarial liabilities of $4,508,548,000 and $7,005,589,000, respectively. The funded percentage decreased .4% from June 30, 2019, due primarily to recognition of net deferred losses.

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, 2019.

The triennial analysis covered several changes to economic and non-economic assumptions that were adopted by the Board of Retirement on August 12, 2020, for the June 30, 2020, actuarial valuation. The actuary recommended changes in the assumptions for inflation, promotional and merit salary increases, retirement rates, mortality rates, termination rates, and disability incidence rates. The major changes included lowering the inflation assumption from 3.00% to 2.75%, reducing the current inflationary salary increase assumption from 3.00% to 2.75%, real "across the board" salary increases will decrease from 3.50% to 3.25%, and changing the mortality tables to the Pub-2010 Amount Weighted Mortality Tables.

FINANCIAL INFORMATION

The Annual Comprehensive Financial Report (ACFR) for the fiscal years June 30, 2021, and 2020 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, 2021, and 2020 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, Albourne America, Cambridge Associates and Abel Noser 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 2021, the investments of the Plan returned 23.9%* (net of fees). KCERA's annualized rate of return, net of fees, was 10.3% in the past three years, 9.8% in the past five years, and 7.6% 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 76-79.

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 73 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 Annual Comprehensive Financial Report for the fiscal year ended June 30, 2020. 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 Annual Comprehensive 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 Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program's requirements, and we will again submit it to the GFOA for appraisal.

KCERA also received the Public Pension Standards Award for Fund and Administration for the fiscal year ended June 30, 2020. The award is issued by the Public Pension Coordinating Council and is used to recognize KCERA meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

* 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
Chief Executive Officer

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, 2020

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award
For Funding and Administration
2021

Presented to

Kern County Employees' Retirement Association

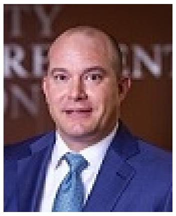
In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

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

Alan H. Winkle

Alan H. Winkle
Program Administrator



Rick Kratt
Elected by Safety Members
Term expires on December 31, 2021

Joseph D. Hughes
Appointed by Board of Supervisors
Term expires on December 31, 2022

Photo Unavailable

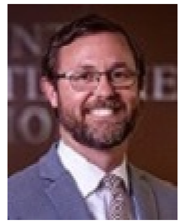
Bradly Brandon
Elected by Safety Members
Term expires on December 31, 2021

David Couch
Appointed by Board of Supervisors
Term expires on December 31, 2021

Phil Franey
Elected by Retired Members
Term expires on December 31, 2022

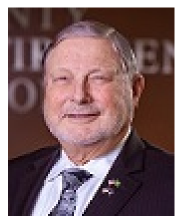
Juan Gonzalez
Elected by General Members
Term expires on December 31, 2021

Jordan Kaufman
Member, Investment Committee
Appointed by Statute

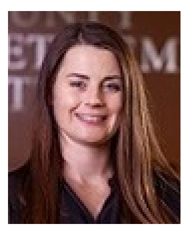


Chase Nunneley
Appointed by Statute: 1st Member
Alternate since 2020

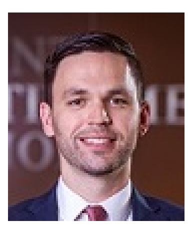
Edward Robinson
Elected by General Members
Term expires on December 31, 2022



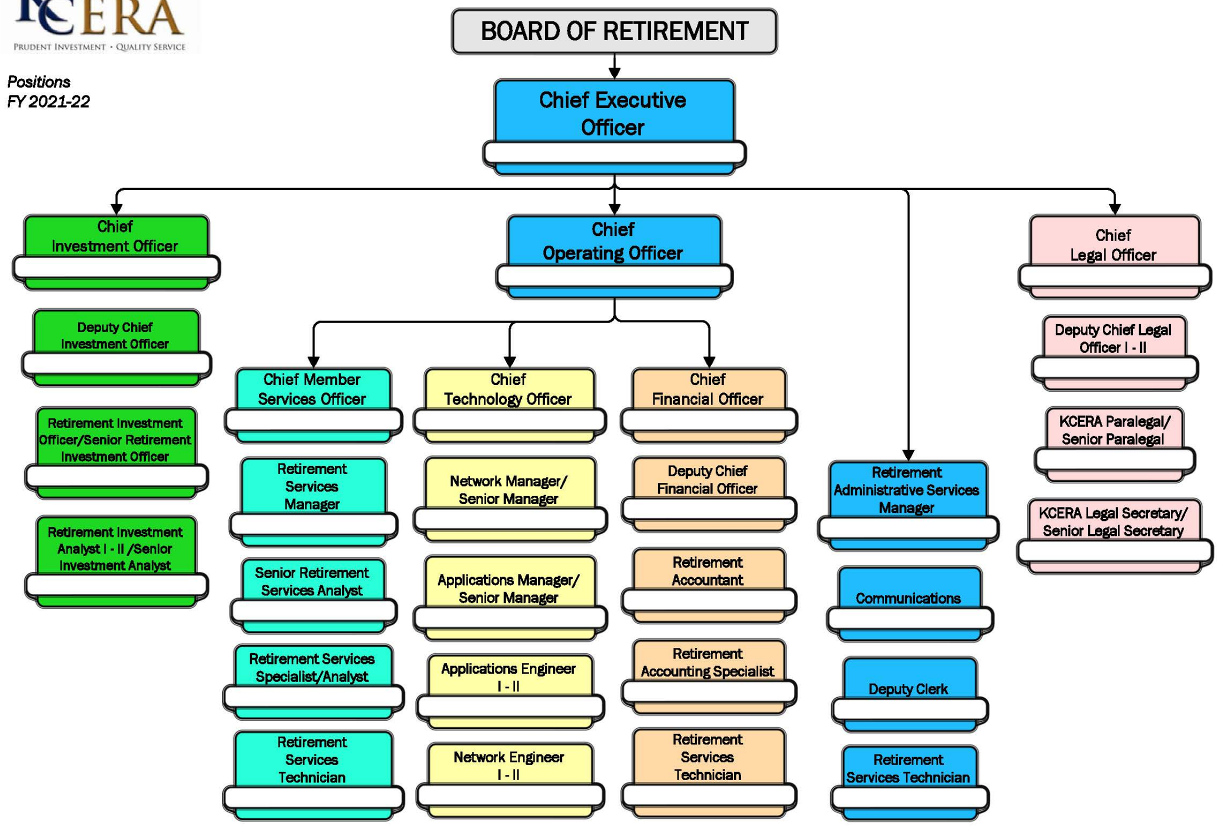
Robb Seibly
Elected by Retired Members
Term expires on December 31, 2022



Lauren Skidmore
Appointed by Board of Supervisors
Term expires on December 31, 2021



Tyler Whitezell
Appointed by Board of Supervisors
Term expires on December 31, 2022


Positions
FY 2021-22
BOARD OF RETIREMENT
Chief Executive Officer
Chief Investment Officer
Chief Operating Officer
Chief Legal Officer
Deputy Chief Investment Officer
Retirement Investment Officer/Senior Retirement Investment Officer
Retirement Investment Analyst I - II /Senior Investment Analyst
Chief Member Services Officer
Chief Technology Officer
Chief Financial Officer
Retirement Services Manager
Senior Retirement Services Analyst
Retirement Services Specialist/Analyst
Retirement Services Technician
Network Manager/ Senior Manager
Applications Manager/ Senior Manager
Applications Engineer I - II
Network Engineer I - II
Deputy Chief Financial Officer
Retirement Accountant
Retirement Accounting Specialist
Retirement Services Technician
Retirement Administrative Services Manager
Communications
Deputy Clerk
Retirement Services Technician
Deputy Chief Legal Officer I - II
KCERA Paralegal/ Senior Paralegal
KCERA Legal Secretary/ Senior Legal Secretary

As of June 30, 2021

ACTUARY

The Segal Company, Inc.

AUDITORS

CliftonLarsonAllen, LLP

CUSTODIAN

The Northern Trust Company

INVESTMENT CONSULTANTS

Abel Noser
Albourne America LLC
Cambridge Associates
Verus Investments

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
Cheiron

Refer to the Investment Section for a list of Investment Managers, pg 74 and the Schedule of Investment Management Fees pgs 77-80

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, 2021 and 2020, and the related notes to the basic 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 an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 opinion.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Kern County Employees' Retirement Association as of June 30, 2021 and 2020, and the 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 rates of returns 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 and the introductory, investment, actuarial and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other 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 them.

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 13, 2021, 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 results 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 13, 2021

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, 2021 and 2020. 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 increased by $978.7 million during the fiscal year ended June 30, 2021, a 22.0% increase from the last fiscal year. The increase was primarily the result of positive investment returns.

- Member contributions decreased by $(4.1) million, or (7.0)%, mainly as a result of a decrease in covered payroll. Employer contributions decreased by $(5.3) million, or (1.9)%, which was primarily due to decrease in covered payroll. The average employer contribution rate decreased from 49.16% of payroll for fiscal year 2019-20 to 49.10% for fiscal year 2020-21.

- The total fund's investment performance exceeded the actuarial assumed rate of return for the fiscal year. The investment portfolio reported a total return of 23.9% (net of fees)* versus the actuarial assumed rate of return of 7.25% for the fiscal year ended June 30, 2021. The increase was due to favorable market conditions.

- Vested pension benefits increased by $16.3 million, or 4.8%, over the prior year. The increase is attributable to a 1.9% increase in retired members and beneficiaries receiving pension benefits, and a 2.8% increase in the average monthly benefit, which rose to $3,563 in the fiscal year. In 2020, the Board adopted a COLA increase of 1.5% for new pensioners. Pensioners with an accumulated COLA carry-over received up to the maximum 2.5% increase in April 2021.

- As of June 30, 2021, the date of the most recent actuarial funding valuation, the funded ratio for KCERA was 67.1% compared to the funded ratio of 64.4% as of June 30, 2020. The increase in the ratio is mainly due to strong investment performances.

OVERVIEW OF BASIC FINANCIAL STATEMENTS AND ACCOMPANYING 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 ACCOMPANYING 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, 2021 was $5.4 billion, an increase of $978.7 million, or 22.0%, from June 30, 2020. KCERA's fiduciary net position-restricted for pension benefits at June 30, 2020 was $4.4 billion, an increase of $93.0 million, or 2.1%, from June 30, 2019. Key elements of the increase in net position are described below and in Tables 1 and 2 on pages 18 & 19.

CONTRIBUTIONS AND INVESTMENT INCOME

Additions to fiduciary net position include member and employer contributions and investment income. Member contributions were approximately $53.8 million, $57.9 million and $50.1 million for the years ended June 30, 2021, 2020 and 2019, respectively.

Member contributions decreased by $(4.1) million, or (7.0)% in 2021 and increased by $7.7 million, or 15.4% in 2020. The decrease in member contributions in 2021 was primarily the result of decreases in covered payroll.

Employer contributions were $268.6 million, $273.9 million and $229.1 million for the years ended June 30, 2021, 2020 and 2019, respectively. Employer contributions decreased approximately $(5.3) million, or (1.9)% in 2021 and increased approximately $44.8 million, or 19.6% in 2020. The decrease in 2021 was due to a decrease in covered payroll. The increase in 2020 was primarily due to increased contribution rates from the investment return (after "smoothing") less the assumption rate.

Net investment and securities lending income was $1,043.4 million, $127.9 million and $214.2 million for the years ended June 30, 2021, 2020 and 2019, respectively.

For the fiscal years ended June 30, 2021, 2020 and 2019, the KCERA portfolio returned (net of fees) 23.9%, 3.0%, and 5.3%, 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 $355.2 million, $338.9 million and $320.9 million for the years ended June 30, 2021, 2020 and 2019, respectively. Pension benefits increased by approximately $16.3 million, or 4.8% in 2021 and $18 million, or 5.6% in 2020.

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 2.0% in 2021 and by 2.3% in 2020.

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 2021, 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 $19.3 million, $17.7 million and $16.1 million for the years ended June 30, 2021, 2020 and 2019, respectively. Refunds of member contributions were $6.5 million, $4.5 million and $4.7 million for the years ended June 30, 2021, 2020 and 2019, respectively.

KCERA's administrative expenses were $6.1 million, $5.5 million and $4.8 million for the years ended June 30, 2021, 2020 and 2019, respectively.

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

2021	2020	2019
$30.9 million	$28.2 million	$26.7 million
8,835	8,667	8,496

STATEMENT OF FIDUCIARY NET POSITION

Table 1 *(in thousands)*

	2021	Increase (Decrease) Amount	2020	Increase (Decrease) Amount	2019
Assets					
Current Assets	$ 493,109	$ 170,150	$ 322,959	$ (107,325)	$ 430,284
Investments	5,000,984	607,362	4,393,622	(115,559)	4,509,181
Securities Lending Collateral	181,519	(2,641)	184,160	86,225	97,935
Capital Assets	1,692	(653)	2,345	(448)	2,793
Total Assets	**5,677,304**	**774,218**	**4,903,086**	**(137,107)**	**5,040,193**
Liabilities					
Current Liabilities	78,272	(201,859)	280,131	(316,347)	596,478
Liabilities for Security Lending	181,519	(2,641)	184,160	86,225	97,935
Total Liabilities	**259,791**	**(204,500)**	**464,291**	**(230,122)**	**694,413**
Fiduciary Net Position - Restricted for Pension Benefits	**$ 5,417,513**	**$ 978,718**	**$ 4,438,795**	**$ 93,015**	**$ 4,345,780**

FINANCIAL ANALYSIS (cont)

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Table 2 *(in thousands)*

	2021	Increase (Decrease) Amount	2020	Increase (Decrease) Amount	2019
Additions					
Employer Contributions*	$ 268,625	$ (5,284)	$ 273,909	$ 44,789	$ 229,120
Member Contributions*	53,789	(4,073)	57,862	7,730	50,132
Net Investment Income	1,043,361	915,500	127,861	(86,383)	214,244
Total Additions	**1,365,775**	**906,143**	**459,632**	**(33,864)**	**493,496**
Deductions					
Pension Benefits	355,197	16,302	338,895	18,000	320,895
Supplemental Retirement Benefits	19,286	1,539	17,747	1,605	16,142
Refunds of Member Contributions	6,513	2,061	4,452	(285)	4,737
Administrative Expenses	6,061	538	5,523	719	4,804
Total Deductions	**387,057**	**20,440**	**366,617**	**20,039**	**346,578**
Increase (Decrease) in Net Position	**$ 978,718**	**$ 885,703**	**$ 93,015**	**$ (53,903)**	**$ 146,918**
Fiduciary Net Position - Restricted for Pension Benefits					
At Beginning of Year	**$ 4,438,795**	**$ 93,015**	**$ 4,345,780**	**$ 146,918**	**$ 4,198,862**
At End of Year	**$ 5,417,513**	**$ 978,718**	**$ 4,438,795**	**$ 93,015**	**$ 4,345,780**

**Employer paid member contributions are classified 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 $429.1 million, $(196.2) million and $(72.3) million for the years ended June 30, 2021, 2020 and 2019, 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 7.25% in fiscal year 2021 and 6.99% in fiscal year 2020. In addition, in fiscal year 2021, $53.6 million was credited to reduce the negative contingency reserve to a positive 0.99% of total market value of assets, in accordance with the Board of Retirement’s Interest Crediting Policy. As investment returns continue to improve, the Contingency Reserve will increase to 3% of market value of assets.

RESERVES (cont)

(in thousands)

KCERA Reserves	2021	2020	2019
Member Reserve	505,907	461,921	414,083
Employer Reserve	1,169,530	1,052,439	944,125
Cost of Living Reserve	1,557,603	1,437,684	1,345,986
Retired Member Reserve	1,549,933	1,539,650	1,561,743
Supplemental Retiree Benefit Reserve	151,852	159,691	168,536
Contingency Reserve	53,624	(16,355)	(16,355)
Market Stabilization Reserve	429,064	(196,235)	(72,338)
Total	**$ 5,417,513**	**$ 4,438,795**	**$ 4,345,780**

FIDUCIARY 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 Chief Financial Officer, at angela.kruger@kcera.org or (661) 381-7700.

As of June 30, 2021 and 2020

	(In thousands) 2021	2020
Assets		
Cash in County Pool	$ 10,945	$ 11,045
Short-Term Investment Funds	425,488	152,206
Total Cash and Short-Term Investment Funds	436,433	163,251
Receivables:		
Investments Sold	33,460	137,113
Interest and Dividends	7,956	8,644
Contributions and Other Receivables	15,095	13,913
Total Receivables	56,511	159,670
Investments at Fair Value:		
Domestic Fixed Income	834,930	1,106,431
International Fixed Income	366,910	301,576
Domestic Equities	912,614	1,013,064
International Equities	978,552	685,222
Real Estate Investments	390,499	278,658
Alternative Investments	1,173,685	792,527
Commodities	345,848	220,590
Swaps/Options	(2,054)	(4,446)
Collateral Held for Securities Lending	181,519	184,160
Total Investments	5,182,503	4,577,782
Capital Assets:		
Computer Software	6,298	6,298
Equipment/Computers	813	609
Accumulated Depreciation	(5,419)	(4,562)
Total Capital Assets	1,692	2,345
Prepaid Expenses	165	38
Total Assets	5,677,304	4,903,086
Liabilities		
Securities Purchased	77,248	275,979
Collateral Held for Securities Lent	181,519	184,160
Other Liabilities	1,024	4,152
Total Liabilities	259,791	464,291
Fiduciary Net Position - Restricted for Pension Benefits	**$ 5,417,513**	**$ 4,438,795**

See accompanying notes to the financial statements.

KCERA 2021 - Statement of Changes in Fiduciary Net Position

for the years ended June 30, 2021 and 2020

	(In thousands) 2021	2020
Additions		
Contributions:		
Employer	$ 268,625	$ 273,909
Member	53,789	57,862
Total Contributions	**322,414**	**331,771**
Investment Income:		
Net Appreciation in Fair Value of Investments	1,038,614	98,538
Interest	33,928	31,997
Dividends	15,619	16,519
Real Estate Investments	16,385	14,715
Total Investment Income	1,104,546	161,769
Less: Investment Expenses	61,550	34,407
Net Investment Income	1,042,996	127,362
Securities Lending Activity:		
Securities Lending Income	405	554
Less: Rebates & Bank Fees	40	55
Net Securities Lending Income	365	499
Total Additions	**1,365,775**	**459,632**
Deductions		
Retirement and Survivor Benefits	355,197	338,895
Supplemental Retirement Benefits	19,286	17,747
Refunds of Member Contributions	6,513	4,452
Administrative Expenses	6,061	5,523
Total Deductions	**387,057**	**366,617**
Net Increase	**978,718**	**93,015**
Fiduciary Net Position - Restricted for Pension At Beginning of Year	**4,438,795**	**4,345,780**
Fiduciary Net Position - Restricted for Pension At End of Year	**$ 5,417,513**	**$ 4,438,795**

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, 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, which consists of nine members and two alternate members.

As of June 30, 2021, employee membership data related to the pension plan was as follows:

	General	Safety	Total
Active – Vested	4,240	1,302	5,542
Active – Non-Vested	3,142	388	3,530
Total Active Members	**7,382**	**1,690**	**9,072**
Terminated – Deferred Vested	2,569	241	2,810
Retirees and Beneficiaries	6,746	2,089	8,835
Total Members	**16,697**	**4,020**	**20,717**

As of June 30, 2020, employee membership data related to the pension plan was as follows:

	General	Safety	Total
Active – Vested	4,173	1,358	5,531
Active – Non-Vested	3,468	327	3,795
Total Active Members	**7,641**	**1,685**	**9,326**
Terminated – Deferred Vested	2,224	196	2,420
Retirees and Beneficiaries	6,626	2,041	8,667
Total Members	**16,491**	**3,922**	**20,413**

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 2021 for members with membership dates on or after July 1, 1996 but before January 1, 2013 is $290,000. The maximum amount of compensation earnable that was taken into account for 2020 was $285,000. For General Tier III members enrolled in Social Security who joined on or after January 1, 2013, the maximum pensionable compensation for 2021 is $128,059. The maximum pensionable compensation for 2020 was $126,291. 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 and is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. 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, 2021 and 2020.
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 software	$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.

GASB PRONOUNCEMENTS

The accompanying financial statements were prepared in conformity with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). KCERA has determined that no new GASB statements were applicable to KCERA during fiscal year 2021.

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. Earn a long-term net of fees rate of return which is equal to or exceeds the assumed rate of return.
2. Earn a long-term net of fees rate of return which is equal to or exceeds the established benchmark.
3. Earn a long-term net of fees rate of return which exceeds the long-term rate of inflation.

NOTE 3 - DEPOSITS AND INVESTMENTS (CONT.)

The asset allocation decision is a critical decision and involves complex analysis. KCERA's policy regarding the allocation of 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, 2021:

Asset Class	Target	Range
Global Equity	37 %	32 - 46%
Domestic		16 - 27%
International Developed		8 - 18%
Emerging Market		1 - 9%
Fixed Income	24 %	20 - 34%
Core	14 %	12 - 25%
Credit	6 %	3 - 9%
Emerging Market Debt	4 %	1 - 7%
Commodities	4 %	0 - 6%
Hedge Funds	10 %	5 - 15%
Core Real Estate	5 %	3 - 7%
CE Alpha Pool	5 %	0 - 7%
Midstream Energy	5 %	0 - 7%
Opportunistic	0 %	0 - 10%
Private Equity	5 %	0 - 10%
Private Credit	5 %	0 - 10%
Private Real Estate	5 %	0 - 10%
Cash*	-5 %	- 7 - 5%

* *In fiscal year 2019-2020 the Board approved a new strategic long-term asset allocation which includes the new Capital Efficiency program. The Capital Efficiency program seeks to improve the returns of the Plan by using derivatives in place of physical securities, and then utilizing a portion of the unencumbered cash from the derivative position to fund investments in the CE Alpha Pool. As a result, as capital is invested in the CE Alpha Pool, the effective cash exposure for the Plan becomes negative.*

For the year ended June 30, 2021 and 2020, the annual money-weighted rate of return on pension plan investments, net of pension investment expenses, was 24.3% and 3.2%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The Board retains a number of professional investment managers. Investment manager selection involves complex due diligence and the Board's investment policy requires independent performance measurement of investment managers.

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT.)

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 into collective, short-term investment funds.

Below is a summary of cash, deposits and short- term investments as of as of June 30, 2021 and 2020:

(In thousands)

Held by	2021	2020
County of Kern	$ 10,945	$ 11,045
Wells Fargo	1,776	1,100
Northern Trust	426,782	150,699
Disbursements	(3,070)	407
Total	**$ 436,433**	**$ 163,251**

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 $1.7 million and $1.8 million for the years ended June 30, 2021 and 2020, 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, 2021 and 2020, 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, 2021 and 2020, 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, 2021 *(In thousands)*

	S&P Credit Quality								
Type of Investment	**AAA**	**AA**	**A**	**BBB-B**	**CCC-C**	**D**	**NR**	**U.S. Gov Guaranteed**	**Total**
Asset-Backed Securities	$ 2,219	$ 972	$ 681	$ 2,482	$ 5,181	$ 299	$ 5,941		**$ 17,775**
Bank Loans				22,872	337		6,409		**29,618**
Commercial Mortgage-Backed Securities	1,798		280	1,053			9,495		**12,626**
Corporate Bonds	3,568	7,146	39,904	273,392	14,003		22,202		**360,215**
Corporate Convertible Bonds				1,594	449		4,798		**6,841**
Government Agencies		1,120	2,143	5,930	313		9,084	1,463	**20,053**
Government Bonds		5,955	8,455	62,865	2,743	127	60,956	97,713	**238,814**
Government Mortgage Backed Securities				198			281	82,359	**82,838**
Government-Issued Commercial Mortgage Backed Securities	—							1,316	**1,316**
Municipal / Provincial Bonds	—	198	3,663	606		455	715		**5,637**
U.S. Treasuries & Notes	—		—	—	—	—	1,602	3,949	**5,551**
Non-Government-Backed C.M.O.s	—	576	77	262	773		4,210	—	**5,898**
Sukuk	—		273	1,460			2,055	—	**3,788**
Collective / Commingled Funds	—	—	—	—	—	—	410,870	—	**410,870**
Total	**$ 7,585**	**$ 15,967**	**$ 55,476**	**$372,714**	**$23,799**	**$ 881**	**$538,618**	**$ 186,800**	**$ 1,201,840**

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT.)

INVESTMENTS (CONT)

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

As of June 30, 2020 *(In thousands)*

	S&P Credit Quality								
Type of Investment	**AAA**	**AA**	**A**	**BBB-B**	**CCC-C**	**D**	**NR**	**U.S. Gov Guaranteed**	**Total**
Asset-Backed Securities	$ 2,119	$ 1,014	$ 651	$ 2,307	$ 1,552	$ —	$ 6,017	$ —	**$ 13,660**
Bank Loans	—	—	—	23,686	399	252	6,043	—	**30,380**
Commercial Mortgage-Backed Securities	2,223	408	—	562	—	$ —	9,674	—	**12,867**
Corporate Bonds	3,938	9,933	61,102	314,460	12,027	—	12,437	—	**413,897**
Corporate Convertible Bonds	—	—	—	4,727	396	—	1,788	—	**6,911**
Government Agencies	—	558	892	2,987	284	—	2705	628	**8,054**
Government Bonds	—	4,093	7,109	51,252	1,652	949	50,748	199,763	**315,566**
Government Mortgage Backed Securities	—	—	—	—	—	—	2,214	116,206	**118,420**
Government-Issued Commercial Mortgage Backed Securities	225	—	—	—	—	—	—	2,585	**2,810**
Municipal / Provincial Bonds	—	—	3,853	322	—	411	504	—	**5,090**
U.S. Treasuries & Notes	—	—	—		—	—	1,373	13,154	**14,527**
Non-Government-Backed C.M.O.s	—	696	102	192	251	—	6,236	—	**7,477**
Sukuk	—	—	—	977	—	—	303	—	1,280
Collective / Commingled Funds	—	—	—	—	—	—	457,068	—	**457,068**
Total Fixed Income	**$ 8,505**	**$ 16,702**	**$ 73,709**	**$401,472**	**$ 16,561**	**$1,612**	**$557,110**	**$ 332,336**	**$ 1,408,007**

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, 2021 and 2020, 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, 2021 and 2020 (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, 2021 and 2020, 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, 2021 Less Than 1	1-5	6-10	More Than 10	Maturity Not Determined
Asset-Backed Securities	$ 17,774	$ 289	$ —	$ 3,692	$ 13,793	$ —
Bank Loans	29,618	—	10,598	19,020	—	—
Commercial Mortgage-Backed Securities	12,626	—	—	863	11,763	—
Corporate Bonds	360,214	8,294	100,158	181,909	69,853	—
Corporate Convertible Bonds	6,841	345	2,395	620	3,481	—
Government Agencies	20,053	—	9,981	4,899	5,173	—
Government Bonds	238,815	10,985	77,710	54,868	95,252	—
Government Mortgage Backed Securities	82,839	17,951	59	3,222	61,607	—
Government-Issued Commercial Mortgage Backed Securities	1,316	—	10	924	382	—
US Treasuries & Notes	5,551	3,500	—	—	2,051	—
Municipal / Provincial Bonds	5,637	150	1,139	1,824	2,524	—
Non-Government-Backed C.M.O.s	5,898	—	324	41	5,533	—
Sukuk	3,788	—	1,083	2,705	—	—
Collective / Commingled Funds	$ 410,870	$ —	$ —	$ —	$ —	$ 410,870
Total	**$ 1,201,840**	**$ 41,514**	**$ 203,457**	**$ 274,587**	**$ 271,412**	**$ 410,870**

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT)

INVESTMENTS (CONT)

(In thousands)

Investment Type	Investment Maturities (in years) as of June 30, 2020					
	Fair Value	Less than 1	1-5	6-10	More than 10	Maturity Not Determined
Asset-Backed Securities	$13,660	$ —	$ 1,175	$ 2,718	$ 9,767	$ —
Bank Loans	30,380	—	19,059	11,321	—	—
Commercial Mortgage-Backed Securities	12,867	—	—	995	11,872	—
Corporate Bonds	413,897	6,774	190,046	134,851	82,226	—
Corporate Convertible Bonds	6,911	—	1,010	82	5,819	—
Government Agencies	8,054	—	4,053	827	3,174	—
Government Bonds	315,566	8,375	124,238	105,544	77,409	—
Government Mortgage Backed Securities	118,420	—	263	2,864	81,078	34,215
Government-Issued Commercial Mortgage Backed Securities	2,810	—	40	2,233	537	—
Index-Linked Government Bonds	14,527	—	1,730	2,815	9,982	—
Municipal / Provincial Bonds	5,090	132	1,152	1,325	2,481	—
Non-Government-Backed C.M.O.s	7,477	—	450	57	6,970	—
Sukuk	1,280	—	—	1,280	—	—
Collective / Commingled Funds	457,068	—	—	—	—	457,068
Total	**$1,408,007**	**$15,281**	**$343,216**	**$266,912**	**$291,315**	**$491,283**

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, 2021 and 2020.

NOTE 3 – DEPOSITS AND INVESTMENTS (CONT)

Foreign Currency — **Fair Value**

As of June 30, 2021 *(In thousands)*

Foreign Currency	Equities	Fixed Income	Cash	Cash Collateral/ Variation Margin	Swaps/Options	Total
Brazilian real	$ —	$ 14,629	$ (6,065)		$ 28	$ 8,592
Canadian dollar	11,112	654	3,986	—		15,752
Chinese yuan renminbi	—	3,752	2,856		(63)	6,545
Colombian peso	—	8,744	(1,574)		69	7,239
Czech koruna	—	2,107	1,184	10	(8)	3,293
Euro	—	3,682	(12)	270	35	3,975
Hungarian forint	—	397	2,737	46	(36)	3,144
Indonesian rupiah	—	6,509	774			7,283
Malaysian ringgit	—	4,762	1,009			5,771
Mexican peso	—	8,263	3,989	(22)	76	12,306
Polish zloty	—	2,478	4,352	79	(49)	6,860
Russian ruble	—	11,817	(2,309)			9,508
South African rand	—	7,057	(832)	—		6,225
Thai baht	—	3,355	3,555			6,910
Other Currencies[1]	38	11,338	862	211	(104)	12,345
Total	$ 11,150	$ 89,544	$ 14,512	$ 594	$ (52)	$ 115,748

Foreign Currency — **Fair Value**

As of June 30, 2020 *(In thousands)*

Foreign Currency	Equities	Fixed Income	Cash	Cash Collateral/ Variation Margin	Swaps/Options	Total
Australian dollar	$ 3,011	$ —	$ —	$ —	$ —	$ 3,011
Brazilian real	—	9,991	(4,185)	—	159	5,965
British pound sterling	9,825	(9,097)	(503)	153	9,453	9,831
Canadian dollar	4,756	174	(265)	—	—	4,665
Euro	18,683	(8,896)	(5,071)	1,034	13,002	18,752
Indonesian rupiah	—	4,366	(3)	—	—	4,363
Japanese yen	17,676	(7,042)	(103)	97	7,042	17,670
Malaysian ringgit	—	3,904	(763)	—	—	3,141
Mexican peso	—	8,865	2,125	(584)	592	10,998
Polish zloty	—	2,602	1,426	—	—	4,028
Russian ruble	—	7,928	(60)	—	—	7,868
South African rand	—	3,840	(498)	—	—	3,342
Swiss franc	4,385	—	5	—	—	4,390
Thai baht	—	1,976	2,382	—	—	4,358
Other Currencies[2]	10,420	14,276	210	(18)	69	24,957
Total	$ 68,756	$ 32,887	$ (5,303)	$ 682	$ 30,317	$ 127,339

1 Other currencies include (in thousands) $5 of Argentine peso, $51 of Australian dollar, $335 of British Pound Sterling, $2,035 of Chilean peso, $98 of Dominican peso, $1,378 of HK offshore Chinese Yuan Renminbi, $2,650 of Japanese yen, $2,437 of New Romanian leu, $50 of New Zealand dollar, $1,719 of Peruvian nuevo sol, $98 of Philippine peso, $5 of Swiss franc, $1,485 of Turkish lira
1

2 Other currencies include (in thousands) $347 of Argentine peso, $1,086 of Chilean peso, $453 of Chinese Yuan Renminbi, $2,443 of Columbian peso, $2,334 of Czech koruna, $742 of Danish krone, $249 of Dominican peso, $1,426 of HK offshore Chinese Yuan Renminbi, $1,600 of Hong Kong dollar, $1,687 of Hungarian forint, $309 of New Israeli shekel, $1,342 of New Romanian leu, $533 of New Zealand dollar, $837 of Norwegian krone, $1,619 of Peruvian nuevo sol, $96 of Philippine peso, $1,106 of Singapore dollar, $2,418 of South Korean won, $2,923 of Swedish krona, $1,407 of Turkish lira [2]

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, 2021	June 30, 2020
Mortgage-Backed Securities	$ 96,780	$ 134,097
Asset-Backed Securities	17,775	13,660
Collateralized Mortgage Obligation Securities	5,898	7,477
Total	**$ 120,453**	**$ 155,234**

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, 2021	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				
Asset-Backed Securities	117,451	—	103,011	14,440
Bank Loans	29,618	—	29,618	—
Bond Funds	11,524	—	11,524	—
Collateralized Debt Obligations	3,525	—	—	3,525
Corporate Debt Securities	364,839	—	363,123	1,716
Government Debt Securities	263,669	107,414	155,363	892
State & Local Government Debt Securities	3,228	—	3,228	—
Structured Debt	4,858	2,052	—	2,806
Sukuk	3,788	—	3,788	—
Short Term Investment Funds	69,938	2,160	67,778	—
Debt Securities:	**$ 802,500**	**$ 109,466**	**$ 669,655**	**$ 23,379**
Common Stock	345,733	345,562	—	171
Convertible Equity	559	—	559	—
Equity Funds	96,745	86,745	—	10,000
Preferred Stock	789	—	789	—
Equity Investments:	**443,826**	**432,307**	**1,348**	**10,171**
Real Estate	5,014	—	—	5,014
Real Assets:	**5,014**	**—**	—	**5,014**
Investments Measured at the Net Asset Value (NAV)				
Real Estate Funds	385,485			
Hedge Funds	770,926			
Private Equity	402,759			
Commingled Commodity Funds	345,848			
Commingled Equity Funds	1,447,340			
Commingled Bond Funds	399,340			
Net Asset Value (NAV)	**3,751,698**			
Credit Contracts	(3,132)	—	(3,132)	—
Interest Rate Contracts	1,783	(53)	1,836	—
Other	(705)	—	(705)	—
Derivatives	**(2,054)**	**(53)**	**(2,001)**	**—**
Invested Securities Lending Collateral	**181,519**	—	**181,519**	—
Total	**$ 5,182,503**			

NOTE 4 – FAIR VALUE MEASUREMENT (CONT)

Investments Measured at Fair Value

(In thousands)

	June 30, 2020	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				
Asset-Backed Securities	153,267	—	135,988	17,279
Bank Loans	30,380	—	30,380	—
Bond Funds	10,925	—	10,925	—
Collateralized Debt Obligations	2,525	—	—	2,525
Corporate Debt Securities	419,604	—	417,696	1,908
Government Debt Securities	324,947	220,487	102,535	1,925
State & Local Government Debt Securities	3,205	—	2,158	1,047
Structured Debt	15,732	14,266	261	1,205
Escrow	14,837	14,837	0	—
Debt Securities:	**$ 976,702**	**$ 249,590**	**$ 701,223**	**$ 25,889**
Common Stock	181,092	179,799	—	1,293
Equity Funds	251	251	—	—
Preferred Stock	99,602	95,508	4,094	—
Stapled Securities	267	267	—	—
Equity Investments:	**281,212**	**275,825**	**4,094**	**1,293**
Real Estate	5,015	—	—	5,015
Real Assets:	**5,015**	—	**—**	**5,015**
Investments Measured at the Net Asset Value (NAV)				
Real Estate Funds	273,643			
Hedge Funds	569,785			
Private Equity	222,742			
Commingled Commodity Funds	220,590			
Commingled Equity Funds	1,417,074			
Commingled Bond Funds	431,305			
Net Asset Value (NAV)	**3,135,139**			
Credit Contracts	(164)	—	(164)	—
Interest Rate Contracts	(4,414)	125	(4,539)	—
Other	132	—	132	—
Derivatives	**(4,446)**	**125**	**(4,571)**	**—**
Invested Securities Lending Collateral	**184,160**	**—**	**184,160**	**—**
Total	**$4,577,782**			

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)	6/30/2021	Redemption Frequency	Redemption Notice Period	Unfunded Commitments
Commingled Bond Funds [1]	$ 399,340	Daily, Quarterly, None	2-30 Days	$ —
Commingled Commodity Funds [1]	345,848	Daily, Monthly	1-30 Days	—
Commingled Equity Fund Domestic[1]	555,899	Daily, Quarterly	1-60 Days	—
Commingled Equity Fund Non-US [1]	891,441	Daily, Monthly	1-15 Days	—
Hedge Funds and Alpha Pool:				
Directional [2]	136,141	Monthly	30-60 Days	—
Equity Long/Short [3]	40,202	Quarterly	45 Days	—
Event-Driven [4]	158,036	Quarterly, Annually, 36 months	45-90 Days	—
Multi-Strategy [5]	252,962	Quarterly, Annually	60-90 Days	—
Relative Value [6]	183,585	Monthly, Quarterly, Semi-annually	45-120 Days	—
Real Estate Funds [7]	385,485	Quarterly, None	30-45 Days	103,430
Private Asset Funds [7]	402,759	N/A	N/A	159,568
Total	**$ 3,751,698**			**$ 262,998**

[1] Commingled Bond Funds, Commodity Funds and Equity Funds: Three bond funds, three commodity funds and nine 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] Directional: The global macro funds utilize this strategy to generate consistent long-term appreciation through active, direct and indirect, leveraged trading and investment on a global basis in multiple investment strategies. The directional funds are valued at NAV.

[3] 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.

[4] Event-Driven Hedge Funds: Consisting of four 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.

[5] Multi-Strategy Hedge Funds: The eight 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.

[6] 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. The funds are valued at NAV.

[7] Private Asset and Real Estate Funds: KCERA's Private Asset portfolio consists of twelve private equity funds with exposure to funds investing in buyouts, venture capital and special situations. An additional eight private credit funds and two opportunistic funds investing directly 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)	6/30/2020	Redemption Frequency	Redemption Notice Period	Unfunded Commitments
Commingled Bond Funds [1]	$ 431,305	Daily, Quarterly, None	2-30 Days	$ —
Commingled Commodity Funds [1]	220,590	Daily, Monthly	1-30 Days	—
Commingled Equity Fund Domestic [1]	822,978	Daily, Quarterly	1-60 Days	—
Commingled Equity Fund Non-US [1]	594,096	Daily, Monthly	1-15 Days	—
Hedge Funds:				
CTA [2]	12,101	Monthly	30 Days	—
Directional [3]	101,026	Monthly	30-60 Days	—
Equity Long/Short [4]	29,135	Quarterly	45 Days	—
Event-Driven [5]	105,298	Quarterly, Annually, 36 Months	45-90 Days	—
Multi-Strategy [6]	148,903	Quarterly, Annually	60-90 Days	—
Relative Value [7]	114,302	Monthly, Quarterly, Semi-annually	45-120 Days	—
Structured Credit [8]	59,020	Monthly	N/A	—
Real Estate Funds [8]	273,643	Quarterly, None	30-45 Days	89,040
Private Asset Funds [8]	222,742	N/A	N/A	224,444
Total	**$ 3,135,139**			**$ 313,484**

[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 funds utilize this strategy to generate consistent long-term appreciation through active, direct and indirect, leveraged trading and investment on a global basis in multiple investment strategies. The directional 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 four 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 four 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 four 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. An additional four private credit funds and two opportunistic funds investing directly 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 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, 2021 and 2020, 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, 2021 and 2020.

As of June 30, 2021 *(In thousands)*

Security Type	Fair Value of Loaned Securities Securitized by Cash	Cash Collateral	Fair Value of Loaned Secuities Securitized by Non-Cash Collateral	Non-Cash Collateral
Domestic Equities	$ 40,281	$ 41,269	$ 318	
International Equities	—	—	—	—
Corporate Bonds	61,400	62,784	157	—
Government Bonds	1,287	1,323	—	—
Treasuries	74,983	76,143	—	—
Total	**$ 177,951**	**$ 181,519**	**$ 475**	**$ 504**

As of June 30, 2020 *(In thousands)*

Security Type	Fair Value of Loaned Securities Securitized by Cash	Cash Collateral	Fair Value of Loaned Secuities Securitized by Non-Cash Collateral	Non-Cash Collateral
Domestic Equities	$ 56,078	$ 57,464	$ 1,596	$ —
International Equities	712	749	—	—
Corporate Bonds	58,967	60,322	614	—
Corporate Bonds	328	334	—	—
Government Bonds	64,249	65,291	—	2,329
Total	**$ 180,334**	**$ 184,160**	**$ 2,210**	**$ 2,329**

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, 2021 and 2020, 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, 2021 *(In thousands)*

Derivative Investment Type	Changes in Fair Value Gain (Loss)	Fair Value	Notional Value
Futures	$ 81,122	$ —	$ 536,690
Options	(182)	(114)	—
Swaps	(6,331)	(1,235)	—
Foreign Exchange Contracts	(67)	(705)	—
Rights/Warrants Equity Contracts	—	—	—
Total Value	**$ 74,542**	**$ (2,054)**	**$ 536,690**

As of June 30, 2020 *(In thousands)*

Derivative Investment Type	Changes in Fair Value Gain (Loss)	Fair Value	Notional Value
Futures	$ 3,358	—	$ (118,597)
Options	429	122	—
Swaps	(13,478)	(4,700)	—
Foreign Exchange Contracts	1,359	132	—
Rights/Warrants Equity Contracts	(8)	—	—
Total Value	**$ (8,340)**	**$ (4,446)**	**$ (118,597)**

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 2021 and 2020, respectively, amounted to approximately $322.4 million and $331.8 million, of which $268.6 million and $273.9 million were contributed by employers, and $53.8 million and $57.9 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 2021, the Plan had no excess earnings; $0 was reserved to fund the employer COLA contributions in fiscal year 2021.

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 2021 ranged from 35.78% to 78.08% of covered payroll, with a combined average of 49.10% for all employers.

NOTE 7 – CONTRIBUTIONS (CONT)

DECLINING EMPLOYER CONTRIBUTIONS

In August 2019, the Board determined that a triggering event occurred during the 2019-20 fiscal year, resulting from two employers ceasing to enroll new hires and/or a material and expected long-lasting reduction in KCERA covered payroll. Based on KCERA's Declining Employer Payroll Policy, KCERA's actuary determined the Valuation Value of Assets (VVA), Actuarial Accrued Liability (AAL) and resulting Unfunded Actuarial Accrued Liability (UAAL). AS of June 30, 2020 the UAAL allocated to Inyokern Community Services District was $117,000 and the UAAL allocated to Berrenda Mesa Water District was $4,847,000. The District's UAAL were amortized as a single layer over an 18-year period. Inyokern[1] and Berrenda[2] Mesa will be billed annually for the UAAL contributions.

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 2021 ranged from 4.55% to 18.74% 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.

[1] The annual UAAL contribution in dollars of $11,000 for Inyokern is equal to an 18-year level dollar amortization of the $117,000 in UAAL of $11,000 plus $0 in administrative expenses plus a $0 adjustment due to the 12-month delay between the valuation date and the plan year beginning July 1, 2021.

[2] The annual UAAL contribution in dollars of $490,000 for Berrenda Mesa is equal to an 18-year level dollar amortization of the $4,847,000 in UAAL of $486,000 plus $1,000 in administrative expenses plus a $3,000 adjustment due to the 12-month delay between the valuation date and the plan year beginning July 1, 2021.

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

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, 2021, 0.99% 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, 2021 and 2020 (under the five-year smoothed market asset valuation method for actuarial valuation purposes) are as follows:

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

(In thousands)

Reserve Account	2021	2020
Members' Deposit Reserve - General	$ 305,216	$ 284,659
Members' Deposit Reserve - Safety	158,711	143,397
Members' Deposit Reserve - Special District	33,029	31,090
Members’ Deposit Reserve - Courts	2,324	1,434
Members’ Deposit Reserve - Hospital Authority	6,627	1,341
Employers' Advance Reserve - General	427,228	406,404
Employers' Advance Reserve - Safety	581,003	527,844
Employers' Advance Reserve - Special Distict	54,312	48,621
Employers Advance Reserve - Courts	25,370	17,087
Employers Advance Reserve - Kern Medical	81,617	52,483
Cost-of-living Reserve - General	830,471	778,856
Cost-of-living Reserve - Safety	619,641	571,879
Cost-of-living Reserve - Special District	69,634	62,866
Cost-of-Living Reserve - Courts	9,329	6,155
Cost-of-Living Reserve - Kern Medical	28,528	17,928
Retired Members' Reserve - General	1,150,088	1,131,013
Retired Members' Reserve - Safety	399,845	408,637
Supplemental Retiree Benefit Reserve (SRBR)	128,798	126,481
SRBR allocated for 0.5% COLA	23,054	33,210
Contingency Reserve	53,624	(16,355)
Total reserves at five-year smoothed market actuarial valuation	**4,988,449**	**4,635,030**
Market Stabilization Reserve*	429,064	(196,235)
Total Fiduciary Net Position - Restricted for Pension Benefits	**$ 5,417,513**	**$ 4,438,795**

** 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 $2.13 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, 2021 is $355,707 for base rent and $24,023 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, 2021	June 30, 2020
Total Pension Liability	$7,306,894,934	$7,100,695,964
Plan Fiduciary Net Position	(5,417,513,179)	(4,438,794,794)
Net Pension Liability	**$1,889,381,755**	**$2,661,901,170**
Plan Fiduciary Net Position as Percentage of Total Pension Liability	**74.14%**	**62.51%**

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, 2021 and June 30, 2020 are shown in the tables below.

June 30, 2021	Regular Benefits (Non-SRBR)	SRBR Benefits	Total KCERA
Total Pension Liability	$7,227,710,796	$79,184,138	$7,306,894,934
Plan Fiduciary Net Position	5,288,714,922	128,798,257	5,417,513,179
Net Pension Liability (Asset)	**$1,938,995,874**	**$(49,614,119)**	**$1,889,381,755**

June 30, 2020	Regular Benefits (Non-SRBR)	SRBR Benefit	Total KCERA
Total Pension Liability	$7,020,429,953	$80,266,011	$7,100,695,964
Plan Fiduciary Net Position	4,312,313,461	126,481,333	4,438,794,794
Net Pension Liability (Asset)	**$2,708,116,492**	**$(46,215,322)**	**$2,661,901,170**

The Net Pension Liability (NPL) for the plan was measured as of June 30, 2021 and June 30, 2020. 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, 2020, and June 30, 2019, respectively, to the measurement date of June 30, 2021 and 2020, 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, 2021 and 2020, respectively. The TPL and the Plan's Fiduciary Net Position include liabilities and assets held for the Supplemental Retiree Benefit Reserve (SRBR).

ACTUARIAL ASSUMPTIONS AND METHODS. The TPLs as of June 30, 2021 and 2020 that were measured by actuarial valuations as of June 30, 2020 and 2019, respectively, used the same actuarial assumptions and actuarial cost method as the June 30, 2020 and 2019 funding valuations. The actuarial assumptions used in the 2020 valuation were based on the results of an experience study for the period from July 1, 2016 though June 30, 2019. The assumptions used in the 2019 valuation 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 the periods included in the measurement.

NOTE 10 – NET PENSION LIABILITY (CONT)

As of June 30, 2021	
Inflation:	2.75%
Salary Increases:	General: 4.00% to 8.75%. Safety: 3.75% to 12.00%. 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, 2020 funding valuation. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2016 through June 30, 2019.

As of June 30, 2020	
Inflation:	2.75%
Salary Increases:	General: 4.00% to 8.75%. Safety: 3.75% to 12.00%. 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, 2020 funding valuation. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2016 through June 30, 2019.

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
Global Equity	37%	6.51%	2.41%
Core Fixed Income	14%	1.09%	0.15%
High Yield Corporate Credit	6%	3.38%	0.20%
Emerging Market Debt Blend	4%	3.41%	0.14%
Commodities	4%	3.08%	0.12%
Core Real Estate	5%	4.59%	0.23%
Private Real Estate	5%	9.50%	0.48%
Midstream	5%	8.20%	0.41%
Capital Efficiency Alpha Pool	5%	2.40%	0.12%
Hedge Funds	10%	2.40%	0.24%
Private Equity	5%	9.40%	0.47%
Private Credit	5%	5.60%	0.28%
Cash	-5%	0.00%	0.00%
Inflation	—	—	2.75%
Total	100%		**8.00%**

Discount rate. The discount rate used to measure the TPL was 7.25% as of June 30, 2021 and 2020. 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, 2021 and 2020.

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, 2021, 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, 2021	$ 2,845,489,516	$ 1,889,381,755	$ 1,103,132,119

	1% Decrease (6.25%)	Current (7.25%)	1% Increase (8.25%)
Net Pension Liability as of June 30, 2020	$ 3,609,272,609	$ 2,661,901,170	$ 1,892,133,726

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

(In thousands)

	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Pension Liability:									
Service Cost	$ 123,394	$ 124,146	$ 122,869	$ 123,407	$ 122,184	$ 123,181	$ 125,161	$ 125,118	$ 125,644
Interest	510,015	481,972	466,379	450,172	438,385	427,646	415,820	400,559	384,837
Change of Benefit Terms	(32,129)	—	—	31,034	—	—	5,036	—	—
Differences between Expected and Actual Experience	(16,282)	(23,991)	(48,814)	(80,208)	(109,368)	(105,053)	(89,306)	(57,034)	(49,064)
Changes in Assumptions	—	151,379	—	—	196,259	—	—	205,038	—
Benefit Payments, including Refunds	(378,799)	(361,094)	(341,812)	(321,613)	(305,817)	(288,738)	(273,865)	(257,495)	(242,630)
Net Change in Total Pension Liability	206,199	372,412	198,622	202,792	341,643	157,036	182,846	416,186	218,787
Total Pension Liability: Beginning of Year	7,100,696	6,728,284	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)	**7,306,895**	**7,100,696**	**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 [1]	268,625	273,909	229,120	242,534	224,351	234,713	215,477	220,393	211,677
Contributions - Employee	53,789	57,862	50,132	52,504	51,410	33,279	30,325	25,810	20,283
Net Investment Income	1,043,361	127,861	214,244	267,659	426,606	(27,535)	81,931	487,591	319,432
Benefit Payments, including Refunds	(378,799)	(361,094)	(341,774)	(321,613)	(305,817)	(288,738)	(273,864)	(257,495)	(242,630)
Administrative Expense	(6,061)	(5,523)	(4,804)	(5,117)	(5,243)	(5,224)	(4,887)	(4,958)	(4,016)
Other [2]	(2,197)	—	—	—	—	—	—	—	—
Net Change in Plan Fiduciary Net Position	978,718	93,015	146,918	235,967	391,307	(53,505)	48,982	471,341	304,746
Plan Fiduciary Net Position:									
Beginning of Year	4,438,795	4,345,780	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)	**5,417,513**	**4,438,795**	**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)	**$1,889,382**	**$2,661,901**	**$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	74.14 %	62.51 %	64.59 %	64.30 %	62.64 %	59.67 %	62.20 %	63.35 %	59.37 %
Covered Payroll [3]	$ 604,320	$ 607,695	$ 579,072	$ 576,729	$ 546,671	$ 537,540	$ 531,598	$ 533,851	$ 516,465
Plan Net Pension Liability as a Percentage of Covered Payroll	312.65 %	438.03 %	411.43 %	404.14 %	432.43 %	449.02 %	414.43 %	387.61 %	411.33 %

[1] See footnote (1) under Schedule of Employer contributions.
[2] This represents the amount of recovery or refunds of benefits and/or member contributions previously paid in conjunction with pay items impacted by the implementation of the Alameda Decision.
[3] 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
2012	$189,837,000	$189,837,000	—	$526,079,162	36.09%
2013	$211,677,000	$211,677,000	—	$516,465,189	40.99%
2014	$220,393,000	$220,393,000	—	$533,850,811	41.28%
2015	$215,477,000	$215,477,000	—	$531,598,183	40.53%
2016	$234,717,000	$234,717,000	—	$537,539,991	40.23%
2017	$224,351,000	$224,351,000	—	$546,671,003	41.04%
2018	$242,534,000	$242,534,000	—	$576,728,789	42.05%
2019	$229,120,000	$229,120,000	—	$579,071,865	39.57%
2020	$273,908,831	$273,908,831	—	$607,695,110	45.07%
2021	$268,626,000	$268,626,000	—	$604,320,398	44.45%

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: 15.5 years as of June 30, 2020 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 years).

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.

	June 30, 2019
Actuarial Assumptions:	
Investment rate of return	7.25%, net of investment expenses, including inflation
Inflation rate	3.00%
Real across-the-board salary increase	0.50%
*Projected salary increases**	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 employer and member.
Cost-of-living adjustments	2.5% (actual increases based on CPI increases with a 2.5% maximum)
Other assumptions	Same as those used in the June 30, 2019 funding actuarial valuation

(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

	2021	2020	2019	2018	2017	2016	2015	2014	2013
Annual Money-Weighted Rate of Return*	24.3%	3.2%	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, 2021 AND 2020

	2021	2020
Staffing		
Salaries	$ 2,357,739	$ 2,174,798
Benefits	1,651,823	1,532,800
Temporary staff	82,179	26,910
Staffing Total	**4,091,741**	**3,734,508**
Staff Development	16,636	51,193
Professional Fees:		
Actuarial fees	71,570	132,870
Audit fees[1]	126,500	46,500
Consultant fees	45,807	105,838
Legal fees	119,665	52,261
Professional Fees Total	**363,542**	**337,469**
Office Expenses:		
Building expenses	62,863	73,471
Communications	35,540	23,083
Equipment lease	10,138	11,276
Equipment maintenance	9,638	7,690
Memberships	9,495	9,856
Office supplies & misc. admin.	50,631	54,626
Payroll & accounts payable fees	4,584	10,633
Postage	20,209	20,599
Subscriptions	9,991	4,890
Utilities	39,586	39,566
Office Expenses Total	**252,675**	**255,690**
Insurance	136,176	129,645
Member Services		
Benefit payment fees	14,745	12,340
Disability - legal	46,111	16,125
Disability - medical advisors	15,113	34,047
Disability - professional services	167,210	39,731
Member communications	13,247	5,860
Member Services Total	**$ 256,426**	**$ 108,103**

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

[1] *Includes periodic actuarial audit, see page 60.*

SCHEDULE ADMINISTRATIVE EXPENSES FOR THE YEARS ENDED JUNE 30, 2021 AND 2020 *(CONT)*

	2021	2020
Systems:		
Audit - security & vulnerability scan	$ 7,680	$ 13,750
Business continuity expense	18,730	10,568
Hardware	33,359	23,806
Licensing & support	142,796	83,298
Software	69,384	33,954
Website design	1,655	780
Systems Total	**273,604**	**166,156**
Board of Retirement		
Board compensation	12,161	9,921
Board conferences & training	4,535	39,151
Board elections	—	34,705
Board meetings	137	3,001
Board of Retirement Total	**16,833**	**86,778**
Depreciation/Amortization	653,043	653,687
Total Administrative Expenses	**$ 6,060,676**	**$ 5,523,229**

SCHEDULE OF INVESTMENT EXPENSES FOR THE YEARS ENDED JUNE 30, 2021 AND 2020

	2021	2020
Investment manager Fees:		
Equity	$ 4,491,285	$ 4,712,717
Fixed income	3,863,690	2,600,791
Commodities	1,457,520	2,139,458
Midstream Energy	525,498	—
Real estate	2,537,863	4,211,708
Opportunistic	3,258,096	—
Private equity/Credit funds	8,324,665	3,811,689
Hedge funds	34,122,569	15,061,468
Cash and Overlay	301,265	—
Total Investment Manager Fees	**58,882,451**	**32,537,831**
Other Investment Expenses:		
Custodian	536,729	480,000
Actuaral valuation	130,576	113,871
Investment consultants	1,646,195	1,149,086
Legal fees	308,169	96,546
Due diligence	—	9,021
Real estate	45,600	20,194
Total Other Investment Expenses	**2,667,269**	**1,868,718**
Total Fees and Other Investment Expenses	**61,549,720**	**34,406,549**
Securities Lending rebates and bank fees	40,503	55,392
Total Investment Expenses	**$ 61,590,223**	**$ 34,461,941**

See accompanying independent auditors' report.

SCHEDULE OF PAYMENTS TO CONSULTANTS FOR THE YEARS ENDED JUNE 30, 2021 AND 2020

		Commission/Fee	
Individual or Firm	**Nature of Service**	**2021**	**2020**
Cortex Applied Research, Inc.	Policy consultants	$ 45,807	$ 75,138
Segal Consulting	Actuarial services	71,570	132,870
Kern County Counsel	Legal counsel	63,688	31,705
Nossaman LLP	Legal counsel	68,424	30,422
Ice Miller	Legal counsel	20,809	1,265
Reed Smith LLP	Legal counsel	12,856	12,973
Cheiron	External auditors	80,000	—
CliftonLarsonAllen	External auditors	46,500	46,500
Agility Recovery Solutions	Disaster recovery	18,730	10,568
TraceSecurity LLC	System audit	7,680	13,750
Total Payments to Consultants		**$ 436,064**	**$ 355,191**

These payments were made to outside consultants other than investment professionals.
A Schedule of Investment Fees is presented on pages 78-81 in the Investment Section.

See accompanying independent auditors' report.

INVESTMENT SECTION

October 15, 2021

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, 2021.

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, 2021, KCERA's retirement fund had an investment gain of 24.2% (gross of fees) and 23.9% (net of fees) and ended the fiscal year with total assets of approximately $5.4 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 December 2020.

Capital Markets Review

Two steps forward, one step back, two steps forward, one step back. Slow and bumpy improvement probably best describes the trajectory of the global economy over the last year. The faster-than-expected distribution of highly effective vaccines within the developed world paved the way for gradual reopening of developed economies, but emerging economies with less access to quality vaccines were less prepared to deal with the litany of more-virulent mutations and had to respond with more draconian social distancing controls to mitigate increases in case growth.

Risk-on sentiment propelled financial markets forward, backstopped by continued support from global central banks, the light at the end of the tunnel provided by vaccines and the inclination of markets to shrug off big surprises on earnings and economic data. Expectations for a strong rebound in economic growth and inflation over the intermediate-term sparked a rotation from the growth sectors that had performed well through the crisis toward more value-orientated sectors prospectively positioned to outperform in a period of rising interest rates. This reflation trade thrived from around mid-August until mid-May but began to unravel late in the fiscal year as a result of concerns about the delta Covid-19 variant impeding a full and swift global economic recovery, as well as a hawkish pivot from the Federal Reserve, which reduced the likelihood of higher inflation and interest rates over the longer term. Looking ahead, the major questions investors are grappling with center around the staying power of high levels of inflation, the timeframe over which the Federal Reserve may begin to taper asset purchases, the outlook for fiscal stimulus, and the capability of companies to sustain high enough levels of earnings growth to justify elevated valuations.

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U.S. equity
Up and to the right has been the story for U.S. equity prices over the past year as investors largely looked through the shorter-term impact of pandemic-related shutdowns and bet that fiscal and monetary support would be able to build a bridge to a post-pandemic world. As of June 30th, 2020, the S&P 500 Index remained 8.4% beneath its previous high-water mark of 3386. By August 18th, the overall index had reached a fresh all-time high, and would proceed to close at record high levels in 53 of the 218 remaining trading days in the fiscal year, delivering a 40.8% total return along the way. Realized and implied volatility receded to levels more in line with longer-term historical averages. Since making its full recovery in August of 2020, the largest drawdown from prior peak levels suffered by the S&P 500 Index was -9.6%, and between November 4th, 2020 and June 30th, 2021, the index never closed further than 5% beneath its previous record high.

Corporate revenues began to recover over the year, and higher operating leverage ratios which resulted from a litany of cost-saving initiatives implemented during the pandemic worked to supercharge earnings growth. Per FactSet, the estimated year-over-year earnings growth for the S&P 500 Index as of Q2 2021 is 64.0%. If that rate were to materialize, it would mark the highest year-over-year rate reported by the index since Q4 2009 (109.1%). Despite the massive increase in corporate earnings, increasing prices prevented a material rerating of U.S. equity valuations, which remain at stretched levels relative to recent history. The forward 12-month price-to-earnings ratio of the S&P 500 Index remains at 21.4x -- well above both the five-year (18.1x) and ten-year (16.2x) averages. It is worth noting, however, that forward earnings estimates 12 months ago proved far too pessimistic, as analysts underestimated the strength of profit growth which resulted in an overestimation of valuations.

In terms of size and style, small-cap equities (Russell 2000 Index +62.0%) made back some lost ground relative to large-cap equities (Russell 1000 Index +43.1%) and the value factor (Russell 1000 Value Index +43.7%) narrowly outperformed the growth factor (Russell 1000 Growth Index +42.5). Much of the outperformance of the value factor was driven by the reflation trade which dominated the market narrative from around August when news broke about the successful mRNA vaccines to around mid-May and June when concerns around the delta variant and a hawkish Fed pivot pushed down the long end of the U.S. yield curve. That reflation trade favored sectors more heavily weighted in the value benchmarks, including financials, industrials, and materials, which returned 57.6%, 47.5%, and 46.0% over the fiscal year, respectively.

International equity
Global equities largely tracked U.S. equities over the trailing twelve months, and the MSCI ACWI Index returned 39.3% in U.S. dollar terms, with weakness in the U.S. dollar providing a slight boost to returns experienced by unhedged U.S. investors. Emerging market equities delivered a total return of 40.9% in U.S. dollar terms, edging out U.S. equities (S&P 500 Index +40.8%) and outpacing international developed equities (MSCI EAFE +32.4%).
The superior performance of emerging market equities was driven by a rebound in its Latin American contingent broadly, and Brazil and Mexico specifically. The MSCI Brazil Index returned +46.6%, boosted by a 10% appreciation of the Brazilian real relative to the U.S. dollar. In Mexico, stocks advanced 55.9%, as the Mexican peso appreciated 15.4% relative to the dollar. The recovery in crude oil prices from around $41 to $75 per barrel undoubtedly played a huge role in the resurgence, but that recovery also coincided with a material pickup in inflation which led many central banks within the index to begin tightening the reins with regard to monetary policy. Year-over-year inflation in Brazil rose from 2.1% to 8.4%, which led the Brazilian central bank to hike its

main rate from 2.50% to 4.25% over the course of the year. The story was largely the same in Mexico, where inflation rose from 3.3% to 5.9%, and policymakers at the Banco de Mexico hiked their target overnight rate in June for the first time since December 2018. There exists some concern that given the general lack of access to quality vaccines in some of these countries, persistently high inflation rates could force monetary policymakers to tighten financial conditions before their respective economies are ready, which could pressure the outlook.

In Asia, Taiwanese (+70.5%) and Korean (+66.2%) equites delivered impressive returns, but Chinese equities returned just 27.4%, materially lagging the global opportunity set. Chinese equities began to sell off in late February, with the initial catalyst being a decision from the People's Bank of China to shift its focus away from ensuring accommodative financial conditions to enable a swift economic recovery and toward limiting the risks of excessive leverage which has been building up in certain segments of the economy, most notably the domestic housing market. This shift in focus from ensuring economic recovery to managing the risks of financial excesses resulted in a marginal tightening of liquidity across the region, which sparked a sell-off in some of the high-flying tech companies that had driven emerging market outperformance in the early days of the pandemic. Losses in China accelerated in the second quarter of 2021 when regulators in China cracked down on some national champions in the IT industry over concerns around the risks of the data gathered by those companies falling into the wrong hands, which could undermine the position of the Communist Party of China. While it appears that both general liquidity conditions have begun to improve and the tech crackdown has showed signs of easing, these issues remain front and center for the broader emerging market equity universe.

In Europe, stocks returned just 26.6% in local terms, but the strong run of the euro relative to the dollar boosted performance for unhedged U.S. investors in European equities to 35.1%. Inflation in Europe has picked up more slowly than in the U.S. or the emerging markets. This, combined with the Eurozone's relative inflexibility with regard to fiscal policy, likely supports the case that the European Central Bank will have the longest runway for continuing to provide monetary accommodation. In the first half of 2021, concerns around the spread of the delta variant pushed ECB policymakers to accelerate the pace of purchases within the Pandemic Emergency Purchase Program to provide additional support over the short-term, with the goal of preserving conditions for a robust recovery. The most recent commentary from ECB President Lagarde reflected a "guardedly optimistic" outlook for the economy but did not mention any expected changes to policy in the near term. Within the international developed complex in Asia, Japanese equities underperformed in both local (+28.4%) and U.S. dollar (+24.8%) terms. The Japanese yen was one of the few currencies which depreciated relative to the dollar over the last year, due in part to the significant increase in U.S. Treasury yields above Japanese government bond yields, which officials at the Bank of Japan have committed to keeping within a relatively narrow range (within 25 basis points of 0.0%).

Fixed income

The reflation narrative and debate over the persistence of higher inflation rates largely directed the global fixed income markets over the last year. In the U.S., the 10-year Treasury yield rose from 0.66% to a post-pandemic peak of 1.74% by the end of the first quarter of 2021, before moderating to 1.47% by the end of the fiscal year. Breakeven inflation rates tracked Treasury yields in terms of direction – the ten-year breakeven inflation rate rose from 1.34% to an eight-year high of 2.56% in May before moderating slightly during the last few weeks of the fiscal year. Overall, the Fed has remained steadfast in its view that recent increases in inflation rates have been a byproduct of the broad economic reopening, pandemic-related supply chain disruptions, and low base effects (inflation is a year-over-year calculation which means the depressed prices of early 2020 create the appearance of rising inflation). In other words, their view is that increases in inflation are more likely to be transitory than persistent. An analysis of the drivers of inflation growth on balance appear to support this view - most of the acceleration in price growth of the last year can be attributed increases in gas prices as the energy sector has recovered, and a surge in used car and truck sales. Increases in gas and energy have been highly impacted by the fact that energy prices reached extremely low levels in early 2020, as oil prices actually went negative in the futures market. The price recovery of energy has placed significant upward pressure on inflation because inflation measures 12-month price change. Used car and truck prices were likely pushed higher as a result of two effects: first, a massive surge in new car purchases driven by government stimulus checks and compounded by health concerns relative to public transportation. Second, a global semiconductor shortage which crimped supply of new vehicles. Price movements caused by these effects were likely one-time in nature and will dissipate as stimulus spending slows and supply chains are brought back in order. However, owner's equivalent rent (OER) may be pushing up prices in a more structural way. OER is much slower moving due to the impact of 12-month lease arrangements and the longer time it takes for price increases to flow through to consumers more broadly. Proponents of the persistent inflation argument may point to this category, as well as recent increases in wages as evidence that price growth may prove sustainable. In any case, the Fed appears to be focusing more on the risks to the labor market and economic recovery of pulling back on accommodative policy too early, rather than the risk of runaway inflation. This likely stoked a sizeable steepening in the yield curve and a surge in longer-term interest and breakeven inflation rates. However, at their June meeting, Fed officials signaled that a full labor market recovery was more of a "when" question rather than an "if" question and appeared to be shifting more focus onto inflation over the shorter term, which markets took as hawkish on the margin. Following the release, the market-implied number of fed funds range hikes by the end of 2023 picked up to between two and three, slightly higher than the two hikes implied by the June edition of the Federal Open Market Committee's dot plot. Rising expectations for rate hikes in the shorter-term helped to drive down interest rates on the long-end of the curve, due to the path-dependent nature of longer-term growth and inflation expectations: more restrictive policy in the near-term is likely to reduce the potential for longer-term growth and reduces the likelihood of longer-term inflation. Currently, conversations at the Fed are focused on the optimal time to begin tapering asset purchases. The Fed is still buying $80 billion in Treasuries and $40 billion in mortgage-backed securities per month, and division appears to be forming within the Fed regarding the ideal complexion of the taper. Some members of the committee have pointed to the health of the housing market and argued that mortgage-backed security purchases could perhaps be cut back before Treasuries, while other members are in favor of a proportional unwind over time. We will continue to follow developments.

In terms of performance, global treasuries returned 1.2% in U.S. dollar terms, with U.S. Treasuries underperforming (-3.5%), and longer-duration Treasuries in the U.S. faring the worst (-10.6%). Large increases in breakeven inflation rates helped to buffer Treasury inflation-protected securities from the impact of increasing interest rates, and the Bloomberg Barclays TIPS Index returned 6.5%. Credit spreads compressed to the lowest level since the Global Financial Crisis and default rates fell to below average levels, supporting outperformance of riskier credit. In the U.S., corporates within the Bloomberg Barclays Aggregate Index delivered a return of 3.3%, high-yield credit returned 15.4% as spreads dipped from 6.26% to 2.68%, and bank loans advanced 11.7%. Outside of the U.S., hard-currency denominated emerging markets debt climbed 6.8%, while local-currency emerging market debt returned 6.6%. While emerging market debt spreads have remained at compressed levels, increases in benchmark interest rates pushed forward by central bankers within the complex sent total yields slightly higher, which weighed on performance. The anticipation of further hikes could put pressure on prices.

Commodities

The global economic reopening and the coincident pickup in inflation rates increased the demand for input goods and spot assets. These dynamics fueled strong commodities performance. The Bloomberg Commodity Index generated a 45.6% total return, and all major sectors contributed positively to the total return of the overall index. Three sectors in particular drove the advance. The energy sector surged 54.2%, supported by strong returns of both West Texas Intermediate crude oil (+81.6%) and Brent crude oil (+77.4%). Grains advanced 65.3%, boosted by surges in corn (+85.5%) and soybeans (+69.7%) as Chinese purchases increased dramatically and droughts in the crucial Black Sea region impaired supply. Industrial metals advanced broadly, with copper, aluminum, zinc, and nickel all climbing more than 40% over the fiscal year. Broadly, it appears that corporations around the world were far too pessimistic in their assessments for demand over the year, which led commodity producers to cut production. The subsequent quick recovery in demand forecasts, alongside reduced capacity to supply that demand, resulted in a “bullwhip” effect which helped to push commodity prices up across the board. Roll return continued to exert a significant negative impact on commodities total return, but more recent backwardation in specific commodity futures curves may paint a more optimistic picture for roll return moving ahead.

Currency

Shifts in foreign exchange rates played a large role in relative performance across countries and regions over the last year. The major story proved to be a downward trend in the U.S. dollar relative to both developed and emerging market pairs. Despite showing some signs of stabilization in both the first quarter and the month of June in 2021, the overall trend was lower. The Bloomberg Dollar Spot Index, a gauge of the strength of the U.S. dollar relative to trade-weighted pairs, declined 6.4%. Within the developed market basket, the pound (+11.5%) and the euro (+5.6%) gained ground on the dollar while the yen (-2.9%) weakened slightly. Oil-linked currencies including the Canadian dollar (+9.5%) and Swedish krona (+9.0%) benefitted from the energy rebound. Emerging market currencies (+5.5%) appreciated broadly, with the largest gains coming from currencies in countries whose economies were more value-orientated, and which were poised to benefit more from a pro-cyclical recovery in economic activity and growth. Overall, the embedded currency portfolio of the MSCI ACWI Index increased returns for unhedged U.S. investors by 2.3%, while the boost from embedded currency worked out to 4.3% and 5.8% for unhedged U.S. investors in the MSCI EAFE Index and MSCI Emerging Markets Index, respectively.

Verus

Outlook

Risk-on sentiment has driven global financial markets over the last year, with equity benchmarks hitting fresh all-time highs, bond yields rising, credit spreads tightening to their lowest level in over a decade, and the dollar weakening. Investors appear to have priced in an eventual full recovery from the global pandemic, and the expectation for continued support over the intermediate term from developed market central banks appears to have emboldened market participants to continue to take risk. More recently, concerns have built around the spread of the delta variant and its potential to limit the pace of global economic growth moving forward, as well as eventual asset purchase tapering from the Fed which looks less likely to allow inflation to run unchecked. As a result, the reflation trade has slowed, and investors have rotated out of shorter-duration energy stocks toward longer-duration tech stocks, and into bets on a flatter yield curve. Corporate earnings have delivered to some extent on the promise implied by price action last year, but continued price increases this year have kept valuations at historically stretched levels. While it appears possible that risk assets could continue to rally into the next year, the road could well become bumpier from here, given the lack of value apparent across asset classes at present.

Written by Verus Advisory

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	*Policy Target*	*Year-End Allocation**
Equity	37%	41.4%
Fixed Income	24%	23.1%
Commodities	4%	5.4%
Hedge Funds (incl. Alpha Pool)	15%	14.7%
Midstream Energy MLPs	5%	4.4%
Core Real Estate	5%	5.0%
Private Equity	5%	1.6%
Private Credit	5%	4.2%
Private Real Estate	5%	1.2%
Opportunistic Investments	0%	1.8%
Cash	-5%	-2.8%

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

During the year, the Plan implemented adjustments to its strategic asset allocation, which included additional allocations to Midstream Energy, Private Real Estate, and a Capital Efficiency program intended to take advantage of the alpha earning potential inherent in hedge funds. These changes are expected to increase the Plan's efficiency by increasing return expectations while maintaining a relatively conservative risk profile.

Investment Performance

The Plan earned 23.9% for the fiscal year ending 6/30/21, exceeding the actuarial assumed rate of return and its policy benchmark. The primary contributor to the Plan's excess returns was the sharp market recovery from the global pandemic, combined with a modest overweight to public market equity as the recovery strengthened.

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 market environments.

Sincerely,

Scott J. Whalen, CFA, CAIA
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.

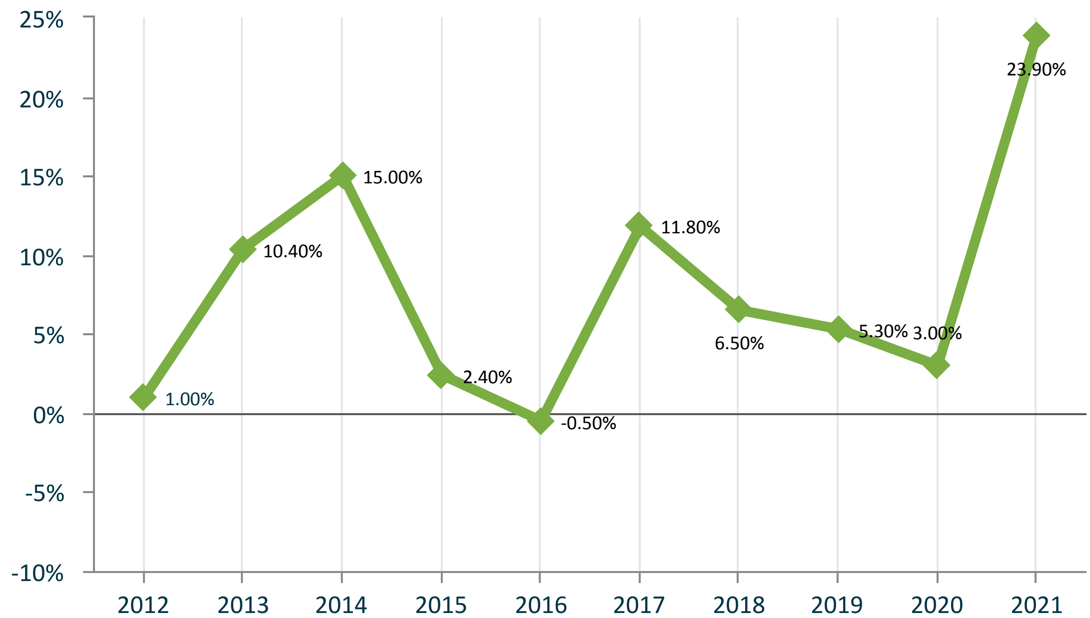
The Board of Retirement adopted the current asset allocation policy in December 2020. KCERA's strategic target asset allocation and actual asset allocation as of June 30, 2021 are as follows:

Asset Class	Actual	Target	Minimum	Maximum
Domestic Equity	22.5%	21.0%	16.0%	27.0%
International Developed Equity	13.1%	12.0%	8.0%	18.0%
Emerging Markets Equity	5.8%	4.0%	1.0%	9.0%
Domestic Fixed Income Core Plus	12.1%	14.0%	12.0%	25.0%
Domestic Fixed Income High Yield	5.9%	6.0%	3.0%	9.0%
Emerging Markets Fixed Income	5.1%	4.0%	1.0%	7.0%
Commodities	5.4%	4.0%	0.0%	6.0%
Hedge Funds	10.8%	10.0%	5.0%	15.0%
Capital Efficiency Alpha Pool	3.9%	5.0%	0.0%	7.0%
Midstream	4.4%	5.0%	0.0%	7.0%
Core Real Estate	5.0%	5.0%	3.0%	7.0%
Opportunistic	1.8%	0.0%	0.0%	10.0%
Private Equity	1.6%	5.0%	0.0%	10.0%
Private Credit	4.2%	5.0%	0.0%	10.0%
Private Real Estate	1.2%	5.0%	0.0%	10.0%
Cash and Equivalents	-2.8%	-5.0%	-5.0%	-7.0%
Total	100.0%	100.0%		

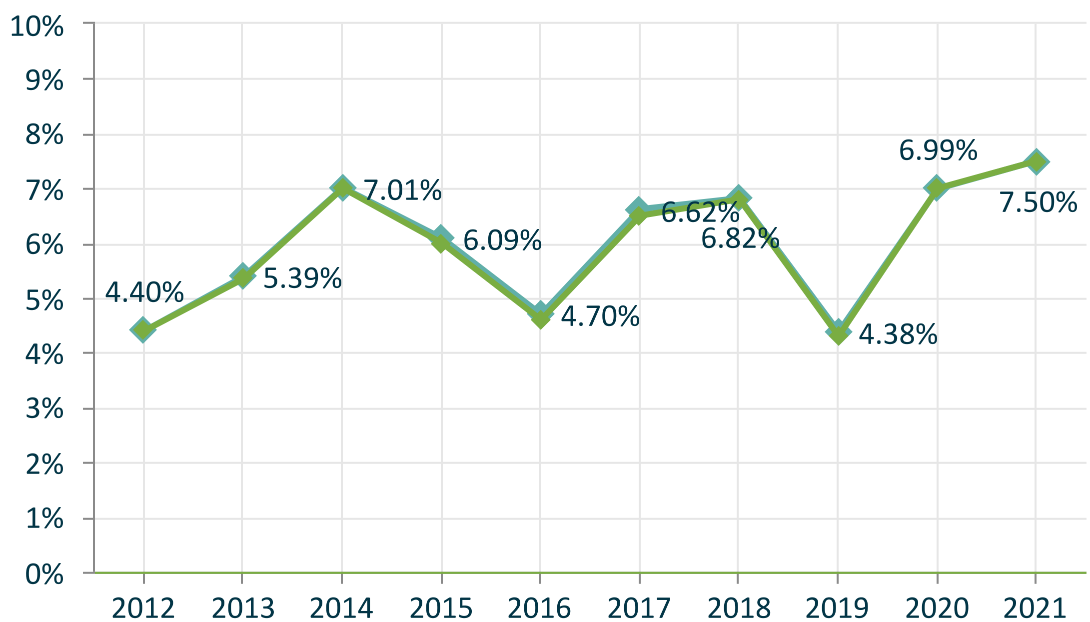
Type of Investment		Fair Value (In thousands)	% of Total Fair Value
Domestic Equity:			
All Cap Passive	$	364,341	6.48 %
Large Cap Enhanced		196,534	3.50 %
Small Cap Growth		56,852	1.01 %
Small Cap Value		95,584	1.70 %
Total Domestic Equities		713,311	12.69 %
International /Global Equity			
Large Cap		264,510	4.71 %
Global		313,376	5.58 %
Small Cap		310,426	5.52 %
Emerging Markets		289,543	5.15 %
Total International Equities		1,177,855	20.96 %
Fixed Income			
Core		180,212	3.21 %
Core Plus		430,548	7.66 %
Structured Debt		130,701	2.33 %
High Yield		181,482	3.23 %
Emerging Markets		276,842	4.93 %
Total Fixed Income		1,199,785	21.36 %
Real Estate			
Core		269,838	4.80 %
Value Added		116,663	2.08 %
Property		3,998	0.07 %
Total Real Estate		390,499	6.95 %
Alternate Investments			
Private Credit		228,159	4.06 %
Private Equities		97,275	1.73 %
Opportunistic		82,523	1.47 %
Hedge Funds		765,727	13.63 %
Commodities		345,848	6.16 %
Total Alternative Investments		1,519,532	27.05 %
Collateral held for Securities Lending		181,519	3.23 %
Cash and Equivalents		436,433	7.76 %
Total Investments	**$**	**5,618,934**	**100.00 %**
KCERA Capital Assets		1,859	
KCERA Receivables/Payables		(203,280)	
Fiduciary Net Position	**$**	**5,417,513**	

*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

	Current Year	Annualized 3-Year	5-Year	10-Year
Total Fund:	23.9	10.3	9.8	7.6
Benchmark: Policy Index*	23.6	10.7	9.8	7.4
Domestic Equity:	43.2	18.2	17.8	—
Benchmark: Russell 3000	44.2	18.7	17.9	—
International Developed Equity:	36.7	8.5	11.2	—
Benchmark: MSCI World ex USA IMI GR	35.4	9.1	11.1	—
Emerging Markets Equity:	39.5	7.0	8.5	—
Benchmark: MSCI EM IMI GR	43.7	11.8	13.3	—
Core Plus Fixed Income:	1.0	6.0	3.8	—
Benchmark: Barclays US Aggregate	-0.3	5.3	3.0	—
High Yield/Specialty Credit	13.1	6.4	6.3	—
Benchmark: ICE BofAML High Yield Master II	15.6	7.1	7.3	—
Emerging Market Debt:	9.1	5.0	3.8	—
Benchmark: **	8.7	5.5	4.2	—
Commodities:	43.2	6.1	5.6	—
Benchmark: Bloomberg Comm. Index	45.6	3.9	2.4	—
Hedge Funds	16.1	8.4	8.0	5.8
Benchmark: ***	12.3	8.0	7.8	6.2
Alpha Pool	14.6	—	—	—
Benchmark: 91-Day T-Bill +4%	4.1	—	—	—
Midstream Energy	—	—	—	—
Benchmark: Alerian Midstream Index	53.0	—	—	—
Core Real Estate:	5.6	4.3	5.2	—
Benchmark: NCREIF-ODCE	8.0	5.5	6.6	9.6
Private Real Estate:	10.9	8.1	7.1	10.3.
Private Equity:	38.0	11.1	11.0	10.0
Private Credit:	3.8	6.3	7.7	—
Opportunistic	52.0	—	—	—
Benchmark: Assumed Rate of Return +3%	10.4	—	—	—

* Total Fund:

37% MSCI ACWI IMI.
6% Ice BofA ML Hogh Yield Master II Index
2% JPM Governmental Bond Index Emerging Markets
7.5% 3-Month T-Bill + 400 bps
1% Actual time-weighted Private Equity Returns
1% Actual time-weighted Private Real Estate Returns
4% Alerian Midstream 1% BBgBarc

14% Barclays US Aggregate
2% JPM Emerging Markets Bond Index Global
4% Bloomberg Commodities
2.5% MSCI ACWI 5% NCREIF-ODCE
4% Actual time-weighted Private Credit Returns
4% MSCI ACWI* 5% Barclays US Aggregate

** 50 JPM EMBI Global Div/50 JPM GBI EM

*** 75% 90Day TBills + 4% / 25% MSCI ACWI

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

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

CONSULTANTS

Abel Noser
Albourne America LLC
Cambridge Associates
Verus Investments

CUSTODIAN

The Northern Trust Company

THIRD-PARTY SECURITIES LENDING

Deutsche Bank

INVESTMENT MANAGERS

Domestic Equity

AllianceBernstein
Geneva Capital Management
Mellon Investment Management
Pacific Investment Management Co

International Developed Equity

American Century Investment Management
BlackRock Financial Management
Cevian Capital
Mellon Investment Management

Emerging Market Equity

AllianceBernstein
Dimensional Fund Advisors
Mellon Investment Management

Core Fixed Income

Mellon Investment Management
Pacific Investment Management Co
Western Asset Management

High Yield Fixed Income

TCW Asset Management
Western Asset Management

Emerging Markets Debt

Pacific Investment Management Co
Stone Harbor Investment Partners

Commodities

Gresham Investment Management
Wellington Trust Company (WTC)

Midstream Energy

Blackstone Harvest
Pacific Investment Management Co

Core Real Estate

ASB Capital Management
J.P. Morgan Asset Management

INVESTMENT MANAGERS (CONT.)

Private Real Estate

Covenant Capital Group
Invesco
KCERA Property
Landmark Partners
Long Wharf Capital

Private Equity

Abbott Capital Funds
Brighton Park Equity
LGT Crown
Pantheon Funds
Vista Equity Partners
Warren Equity

Private Credit

Blue Torch Capital
Brookfield Asset Management
Colony Captial
Fortress Investment Group
H.I.G. Capital
Magnetar Capital
TSSP Adjacent Opportunities Partners

Opportunistic

DB Investors
TAO Contingent

Hedge Funds

Aristeia Capital
Brevan Howard Capital Management
D.E. Shaw & Co
HBK Capital Management
Hudson Bay Capital Management
Indus Capital Partners
Magnetar Capital
Myriad Asset Management
Pacific Investment Management Co
PMF LTD
River Birch Capital
Sculptor Capital Management Group

Alpha Pool

Hudson Bay Capital Management
Davidson Kempner Capital Management
HBK Capital Management

LARGEST STOCK DIRECT HOLDINGS (FAIR VALUE)

Shares	Stocks	Fair Value
260,950	CHENIERE ENERGY INC COM NEW	22,634,803
763,515	MLP MPLX LP COM UNIT REPSTG LTD PARTNER	22,607,679
780,774	MLP ENTERPRISE PRODS PARTNERS L P COM	18,840,077
1,676,161	MLP ENERGY TRANSFER LP COMMON UNITS REP	17,817,591
541,154	WILLIAMS CO INC COM	14,367,639
543,467	WESTERN MIDSTREAM PARTNERS L P COM UNITS	11,641,063
247,033	TARGA RES CORP COM	10,980,617
329,275	PEMBINA PIPELINE CORPORATION COMMON	10,464,580
205,072	ENBRIDGE INC COM	8,211,083
597,605	PLAINS GP HLDGS L P LTD PARTNER INT CL ANEW	7,135,404

LARGEST BOND DIRECT HOLDINGS (FAIR VALUE)

Par	Bonds	Fair Value
14,950,000	UNITED STATES OF AMER TREAS BONDS DTD	16,251,863
10,300,000	FNMA SINGLE FAMILY MORTGAGE 2% 30 YEARS	10,353,109
7,400,000	FNMA SINGLE FAMILY MORTGAGE 4% 30 YEARS	7,921,469
6,940,000	USA TREASURY NTS USA TREAS NTS 2.75%	7,321,667
6,500,000	UTD STATES TREAS 1.375% DUE 08-31-2026	6,890,699
6,200,000	UNITED STATES TREAS NTS 2.125% 03-31-2024	6,131,800
6,240,000	UNITED STATES TREAS BDS 1.875% DUE	5,701,953
5,820,000	US TREASURY N/B 2% DUE 02-15-2050 REG	6,095,007
5,130,000	UNITED STATES TREAS BDS 1.875% DUE 02-15-2041	4,845,759
4,600,000	FNMA SINGLE FAMILY MORTGAGE 3% 30 YEARS	4,781,844

A complete list of portfolio holdings is available upon request.

for the years ended June 30, 2021 and 2020

(In thousands)

Asset Classes	2021	2020
Domestic Equity	$ 912,614	$ 1,013,064
International / Global Equity	976,498	680,776
Fixed Income	1,201,840	1,408,007
Real Estate	390,499	278,658
Hedge Funds	852,051	548,866
Private Credit	216,110	159,225
Private Equity	105,524	84,435
Commodities	345,848	220,590
Investments at Fair Value	**5,000,984**	**4,393,621**
Cash & Short-Term Investments	436,433	163,251
Investments Sold / Purchased	(43,788)	(138,866)
Investment Income & Other Liabilities	23,051	22,557
Total Assets Under Management	**5,416,680**	**4,440,563**
KCERA Capital Assets	1,692	2,345
KCERA Prepaid Expenses	165	38
KCERA Accruals	(1,024)	(4,152)
Fiduciary Net Position	**$ 5,417,513**	**$ 4,438,794**

for the years ended June 30, 2021 and 2020

Investment Manager Fees	2021	2020
Domestic Equity		
AllianceBernstein Trust Company	$ 779,571	$ 537,539
Henderson Geneva Capital Management	527,076	477,432
Mellon Capital Management (Dynamic US Equity)	367,416	359,899
Mellon Capital Management (US Equity)	52,629	54,874
Pacific Investment Management Company	532,868	207,014
Sustainable Growth Advisors	—	571,167
Total Domestic Equity Managers	**2,259,560**	**2,207,925**
International / Global Equity		
American Century	104,639	—
BlackRock Institutional Trust Company	260,196	261,805
Cevian Capital II SP	345,122	301,704
Dodge & Cox Funds	—	608,395
Pyramis Global Advisors (Small Cap)	271,048	451,595
Mellon Int'l (Canada Stock & Int'l Stock)	81,998	43,088
Total International Equity Managers	**1,063,003**	**1,666,587**
Emerging Markets Managers		
AllianceBernstein Trust Company	695,100	563,662
Dimensional Fund Advisors	433,555	459,818
MCM DB SL Emerging Markets Sock Index Fund	40,067	272
Total Emerging Markets Managers	**1,168,722**	**1,023,752**
Total Core		
Mellon Capital Management (Fixed Income)	52,887	92,979
Pacific Investment Management Company	180,336	247,261
Western Asset Management Company	535,270	553,272
Total Core Managers	**768,493**	**893,512**
Total Credit		
TCW Securitized Opportunities	931,114	791,042
Western Asset Management Company	449,605	371,584
Total Credit Managers	**1,380,719**	**1,162,626**
Total Emerging Markets Debt		
PIMCO EB Beta	1,307,159	116,158
Gramercy Funds Management	—	234,993
Stone Harbor Investment Partners	407,319	309,659
Total Emerging Markets Debt Managers	**1,714,478**	**660,810**

(Schedule of Investment Fees continued on next page)

Investment Manager Fees	2021	2020
Commodities		
Gresham Investment Management	380,756	330,489
Wellington Trust Company	1,076,764	699,191
Total Commodity Managers	**1,457,520**	**1,029,680**
Hedge Funds		
Aristeia International Ltd	3,578,377	1,399,278
Systematica Blue Trend	15,375	94,649
Brevan Howard Multi-Strategy Fund	2,206,490	2,213,877
D.E. Shaw Composite Fund	5,257,062	2,569,621
HBK Multi-Strategy Fund	2,061,218	827,260
Hudson Bay Cap Structure Arbitrage	7,451,652	4,741,043
Indus Pacific Opportunities Fund	2,956,868	370,271
Magnetar Structured Credit Fund	868,828	739,188
Myriad Opportunities Offshore Fund	1,405,790	404,302
Pacific Investment Management Company	1,190,635	1,109,779
Sculptor Capital (Formerly OZ Domestic Partners II)	2,864,941	1,379,090
River Birch International Ltd	6,647	21,184
PMF (Pharo)	2,575,829	—
Total Hedge Fund Managers	**32,439,712**	**15,869,542**
Core Real Estate		
ASB Real Estate Investors	941,421	910,140
J.P. Morgan Chase Bank (Strategic Property Fund)	(489,756)	1,449,326
Total Core Real Estate Managers	**451,665**	**2,359,466**
CE Alpha Pool		
Davidson Kempner Institutional Partners	453,808	—
HBK Milti-Strategy Fund - Alpha Pool	979,866	—
HBK SPAC Series	249,183	—
Total CE Alpha Pool Managers	**1,682,857**	**—**
Midstream Energy		
Harvest Midstream	287,610	—
PIMCO Midstream	237,888	—
Total Midstream Energy Managers	**525,498**	**—**
Opportunistic		
DB Investors	—	—
TSSP Adjacent Opportunities Partners (D)	3,258,096	712,957
Total Opportunistic Managers	**3,258,096**	**712,957**

(Schedule of Investment Fees continued on next page)

for the years ended June 30, 2021 and 2020

Investment Manager Fees	2021	2020
Private Equity		
Abbott Capital Management (Fund V)	121,642	234,604
Abbott Capital Management (Fund VI)	327,014	280,484
Brighton Park Capital	282,133	—
LGT Crown Global	611,722	—
Pantheon Ventures, Inc. (Fund VI)	3,964	127,842
Pantheon Ventures, Inc. (Fund VII)	92,106	260,156
Pantheon Ventures, Inc. (Secondary Fund III)	—	200,133
Vista Equity Partners	674,297	—
Warren Equity Partners Fund III	407,635	—
Total Private Equity Managers	**2,520,513**	**1,103,219**
Private Credit		
Blue Torch Credit Opportunities	142,615	—
Brookfield Real Estate Finance Fund V	518,561	563,297
Colony Capital Credit IV, LLC	834,014	1,003,743
Fortress Credit Opportunity Fund V	79,752	—
Fortress Lending Fund II (A)	656,583	—
HIG	1,299,245	428,473
Magnetar Constellation Fund V	690,455	—
TSSP Adjacent Opportunities Partners (B)	1,582,927	—
Total Private Credit Managers	**5,804,152**	**1,995,513**
Private Real Estate		
Long Wharf Real Estate Partners (FREG Fund III)	837,961	751,032
Invesco Real Estate (Fund III)	26,235	102,452
Invesco Real Estate (US Value-Add Fund IV)	356,377	398,758
Landmark Real Estate Partners VIII	600,000	600,000
Covenant Apartment Fund X	265,625	—
Total Real Estate Managers	**2,086,198**	**1,852,242**
Cash and Overlay		
Parametric Overlay	301,265	—
Total Overlay Managers	**301,265**	**—**
Total Investment Managers' Fees	**$ 58,882,451**	**$ 32,537,831**

(Schedule of Investment Fees continued on next page)

for the years ended June 30, 2021 and 2020

Other Investment Expenses	2021	2020
Custodial Fees		
The Northern Trust Company	$536,729	$480,000
Actuarial Fees		
Segal Company	130,576	113,871
Investment Consultant Fees		
Abel Noser	30,000	0
Albourne America LLC	409,450	503,950
Glass, Lewis & Co.	7,294	14,588
Verus	400,000	380,000
Cambridge Associates	799,451	250,549
Legal Fees		
Foley & Lardner LLP	54,011	15,955
Hanson Bridgett LLP	26,400	30,020
Nossaman LLP	227,758	50,571
Due Diligence Travel Expenses		
Trustees / KCERA Management	—	9,021
Real Estate Expenses		
KCERA Property Inc.	45,600	20,194
Total Other Investment Expenses	**2,667,269**	**1,868,719**
Total Investment Expenses	61,549,720	34,406,550
Security Lending Bank Fees		
Deutsche Bank	40,503	55,392
Total Investment Fees and Services	**$61,590,223**	**$34,461,942**

ACTUARIAL SECTION

Segal

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

Via Email

August 17, 2021

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

Re: Kern County Employees' Retirement Association (KCERA)
June 30, 2020 Actuarial Valuation for Funding Purposes

Dear Members of the Board:

Segal prepared the June 30, 2020 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, 2020 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 market 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).

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Board of Retirement
August 17, 2021
Page 2

The UAAL as of June 30, 2011 is amortized as a level percentage of payroll over a 15.5-year closed period as of June 30, 2020. 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 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, 2020 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 Comprehensive Annual Financial Report (Annual Report) is provided below. Unless otherwise stated, the schedules were prepared based on the results of the actuarial valuation as of June 30, 2020 for funding purposes. In particular, we have excluded the benefits, assets and liabilities associated with the Supplemental Retiree Benefit Reserve (SRBR) when preparing the schedules. The notes to the financial section and Required Supplementary Information were prepared by the Association based on the results of the Governmental Accounting Standards (GAS) 67 actuarial valuation as of June 30, 2021 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, 2019 Actuarial Experience Study.

As we disclosed in our June 30, 2020 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

Board of Retirement
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Page 3

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 actuarial accrued liability (AAL) measured in this valuation using a 7.25% investment return assumption from $7.01 billion to $7.26 billion (for a difference of about $259 million) and would increase the employer's contribution rate by about 4.1% of payroll.

It is our opinion that the assumptions used in the June 30, 2020 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, 2019 with those assumptions first being implemented in the June 30, 2020 actuarial valuation.

In the June 30, 2020 valuation, the ratio of the valuation assets to actuarial accrued liabilities (funded percentage) decreased slightly from 64.8% to 64.4%. The aggregate employer contribution rate has increased from 47.09% of payroll to 49.16% of payroll, while the aggregate employee rate has increased from 6.67% of payroll to 6.74% of payroll.

Under the asset smoothing method, the total unrecognized investment losses are $196 million as of June 30, 2020. 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 $196 million represent about 4.4% of the market value of assets as of June 30, 2020. Unless offset by future investment gains or other favorable experience, the recognition of the $196 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 64.4% to 61.6%.
- If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 49.16% to 51.76% of payroll.

The actuarial calculations were directed under the supervision of Mark Hamwee, FSA, MAAA, Enrolled Actuary. 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	Molly Calcagno, ASA, MAAA, EA
Senior Vice President & Actuary	Actuary

JAC/bbf
Enclosures

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Segal

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, 2020. The most recently updated Summary of Actuarial Assumptions and Methods was adopted by the Board of Retirement on August 3, 2020.

Economic Assumptions

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

Salary Increases: Rates vary by service as shown in Table 1 on page 87

Inflation Assumption: 2.75% 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, 2020, the remaining amortization period for all UAAL as of June 30, 2011 was 15.5 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:	Headcount-Weighted 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:	70% of male active members and 60% 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 88.
Reciprocal Agency:	For current active members, the probability of joining a reciprocal agency immediately after terminating is 45% for General members and 60% for Safety members.
Deferred Retirement Age for Vested Termination	Age 57 for General members. Age 53 for Safety members.

Annual Rate of Compensation Increase

Years of Service	General Members	Safety Members
Less than 1	5.50	8.75
1 - 2	4.50	7.00
2 - 3	4.00	5.50
3 - 4	3.50	5.00
4 - 5	3.00	4.50
5 - 6	2.50	4.00
6 - 7	2.25	3.50
7 - 8	1.75	2.50
8 - 9	1.50	1.50
9 - 10	1.25	1.25
10 - 11	1.15	1.00
11 - 12	1.05	0.80
12 - 13	0.95	0.75
13 - 14	0.85	0.70
14 - 15	0.75	0.65
15 - 16	0.75	0.60
16 - 17	0.75	0.55
17 - 18	0.75	0.50
18 - 19	0.75	0.50
19 - 20	0.75	0.50
20 & Over	0.75	0.50

The chart above depicts annual increases in salary before wage inflation. Inflation is 2.75% per year, plus "across the board" real salary increases of 0.50% per year; plus the merit and promotion increases.

(Rates in percentages)

Mortality Rates : Pre-Retirement

Age	General		Safety	
	Male	Female	Male	Female
25	0.03	0.01	0.03	0.02
30	0.04	0.01	0.04	0.02
35	0.05	0.02	0.04	0.03
40	0.07	0.04	0.05	0.04
45	0.10	0.06	0.07	0.06
50	0.15	0.08	0.10	0.08
55	0.22	0.12	0.15	0.11
60	0.32	0.19	0.23	0.14
65	0.47	0.30	0.35	0.20

Disability Incidence Rates

Age	General*	Safety*
20	0.02	0.05
25	0.03	0.07
30	0.04	0.10
35	0.07	0.19
40	0.09	0.28
45	0.13	0.39
50	0.18	1.08
55	0.26	2.55
60	0.36	3.70
65	0.40	4.00
70	0.00	0.00

Termination Rates			Electing a Refund upon Termination	
Years of Service	General	Safety	General	Safety
Less than 1	17.00	9.00	100.00	100.00
1 - 2	13.00	8.00	100.00	100.00
2 - 3	10.00	7.00	100.00	100.00
3 - 4	9.00	6.00	100.00	100.00
4 - 5	8.50	5.00	100.00	100.00
5 - 6	8.00	4.00	36.00	44.00
6 - 7	7.00	3.50	34.00	40.00
7 - 8	6.00	3.25	32.00	38.00
8 - 9	5.00	3.00	30.00	32.00
9 - 10	4.00	2.60	28.00	30.00
10 - 11	3.75	2.20	26.00	26.00
11 - 12	3.50	1.80	25.00	25.00
12 - 13	3.25	1.60	24.00	21.00
13 - 14	3.00	1.40	23.00	18.00
14 - 15	2.75	1.20	22.00	15.00
15 - 16	2.50	1.00	21.00	12.00
16 - 17	2.30	0.90	18.00	10.00
17 - 18	2.10	0.75	16.00	8.00
18 - 19	1.90	0.75	14.00	6.00
19 - 20	1.70	0.75	13.00	4.00
20 - 21	1.50	0.00	12.00	0.00
21 - 22	1.30	0.00	11.00	0.00
22 - 23	1.10	0.00	10.00	0.00
23 - 30	1.00	0.00	<8.00	0.00
30 & Over	0.00	0.00	0.00	0.00

**Disability 50% of General member disabilities are assumed to be service-connected, and the other 50% are assumed to be nonservice-connected. Furthermore, 90% of Safety member disabilities are assumed to be service-connected.*

Retirement Rates							
	General Tier I				Safety Tier I		
Age	<25 Years of Service	>25 Years of Service	General Tiers IIA and IIB	General Tier III	<25 Years of Service	>25 Years of Service	Safety Tier IIA and IIB
45 - 48	0.00	0.00	0.00	0.00	5.00	5.00	0.00
49	0.00	0.00	0.00	0.00	25.00	25.00	0.00
50	10.00	10.00	5.00	0.00	10.00	30.00	3.00
51	6.00	6.00	3.00	0.00	8.00	24.00	3.00
52	6.00	12.00	3.00	3.00	8.00	24.00	3.00
53	6.00	12.00	3.00	3.00	8.00	24.00	5.00
54	6.00	12.00	3.50	3.50	12.00	24.00	11.00
55	6.00	12.00	4.00	4.00	14.00	28.00	13.00
56	6.00	14.00	4.50	4.50	14.00	28.00	12.00
57	6.00	16.00	5.00	5.00	8.00	28.00	12.00
58	9.00	18.00	6.50	6.50	8.00	28.00	12.00
59	16.00	24.00	11.00	11.00	14.00	28.00	12.00
60	20.00	35.00	12.00	12.00	25.00	28.00	12.00
61	16.00	28.00	13.00	13.00	25.00	50.00	12.00
62	20.00	35.00	20.00	20.00	25.00	50.00	25.00
63 - 64	20.00	30.00	20.00	20.00	25.00	50.00	25.00
65 - 68	35.00	35.00	35.00	35.00	100.00	100.00	100.00
69	40.00	40.00	40.00	40.00	100.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Valuation Date	Plan Type	Members	Annual Payroll	Annual Average Pay	Increase in Average Pay
6/30/2011	General	6,487	$ 404,729,012	$ 62,391	0.2 %
	Safety	1,700	$ 135,105,643	$ 79,474	(0.5)%
	Total	**8,187**	**$ 539,834,655**	**$ 65,938**	**0.1 %**
6/30/2012	General	6,494	$ 406,039,414	$ 62,525	0.2 %
	Safety	1,759	$ 137,518,061	$ 78,180	(1.6)%
	Total	**8,253**	**$ 543,557,475**	**$ 65,862**	**(0.1)%**
6/30/2013	General	6,619	$ 410,905,480	$ 62,080	(0.7)%
	Safety	1,866	$ 144,847,330	$ 77,625	(0.7)%
	Total	**8,485**	**$ 555,752,810**	**$ 65,498**	**(0.6)%**
6/30/2014	General	6,629	$ 410,350,884	$ 61,902	(0.3)%
	Safety	1,883	$ 145,284,147	$ 77,156	(0.6)%
	Total	**8,512**	**$ 555,635,031**	**$ 65,277**	**(0.3)%**
6/30/2015	General	6,637	$ 411,427,313	$ 61,990	0.1 %
	Safety	1,844	$ 145,396,935	$ 78,849	2.2 %
	Total	**8,481**	**$ 556,824,248**	**$ 65,655**	**0.6 %**
6/30/2016	General	6,788	$ 421,043,714	$ 62,028	0.1 %
	Safety	1,839	$ 146,217,425	$ 79,509	0.8 %
	Total	**8,627**	**$ 567,261,139**	**$ 65,754**	**0.2 %**
6/30/2017	General	6,966	$ 431,532,274	$ 61,948	(0.1)%
	Safety	1,762	$ 140,549,312	$ 79,767	0.3 %
	Total	**8,728**	**$ 572,081,586**	**$ 65,546**	**(0.3)%**
6/30/2018	General	7,106	$ 443,482,638	$ 62,410	0.7 %
	Safety	1,761	$ 140,698,321	$ 79,897	0.2 %
	Total	**8,867**	**$ 584,180,959**	**$ 65,883**	**0.5 %**
6/30/2019	General	7,433	$471,228,860	$63,397	1.6 %
	Safety	1,764	$141,048,417	$79,959	0.1 %
	Total	**9,197**	**$612,277,277**	**$66,574**	**1.0 %**
6/30/2020	General	7,641	$495,639,348	$64,866	2.3 %
	Safety	1,685	$138,930,289	$82,451	3.1 %
	Total	**9,326**	**$634,569,637**	**$68,043**	**2.2 %**

KCERA 2021 - 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*
2011	6,199	569	198	6,570	$27,159,926	$3,568,064	$204,969,766	13.0%	$31,198
2012	6,570	499	179	6,890	$24,783,041	$3,411,092	$226,341,715	10.4%	$32,851
2013	6,890	468	187	7,171	$22,305,618	$3,825,313	$244,822,020	8.2%	$34,141
2014	7,171	442	216	7,397	$19,663,621	$4,173,211	$260,312,430	3.1%	$35,192
2015	7,397	440	238	7,599	$20,734,025	$5,817,539	$275,229,096	5.7%	$36,219
2016	7,599	454	206	7,847	$20,236,339	$5,034,075	$290,431,360	5.5%	$37,012
2017	7,847	501	255	8,093	$22,566,737	$6,358,810	$306,639,287	5.6%	$37,889
2018	8,093	426	218	8,301	$22,799,714	$6,125,093	$323,313,908	5.4%	$38,949
2019	8,301	402	208	8,495	$25,086,184	$5,533,123	$342,866,969	6.0%	$40,361
2020	8,495	405	233	8,667	$24,009,780	$6,538,327	$360,338,422	5.1%	$41,576

* *Excludes SRBR amounts*

Schedule of Funded Liabilities by Type

	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)
6/30/2011	$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%	0%
6/30/2013	$244,832	$3,153,966	$1,709,821	$5,108.619	$3,120,632	100%	91%	0%
6/30/2014	$268,826	$3,446,962	$1,776,652	$5,492.44	$3,342,122	100%	89%	0%
6/30/2015	$295,447	$3,607,511	$1,754,215	$5,657.173	$3,529,786	100%	90%	0%
6/30/2016	$320,400	$3,766,875	$1,725,817	$5,813.092	$3,685,447	100%	89%	0%
6/30/2017	$351,592	$4,093,826	$1,746,015	$6,191.433	$3,913,073	100%	87%	0%
6/30/2018	$387,376	$4,288,475	$1,722,963	$6,398.814	$4,163,476	100%	88%	0%
6/30/2019	$414,082	$4,513,958	$1,694,455	$6,622.495	$4,291,573	100%	86%	0%
6/30/2020	$461,921	$4,823,175	$1,720,493	$7,005.589	$4,508,548	100%	84%	0%

Actuarial Analysis of Financial Experience (In thousands)

Investment Performance	June 30, 2020	June 30, 2019	June 30, 2018
Asset Return Greater			
(Less) than Expected	$ (65,123)	$ (110,973)	$ (5,686)
Salary Increase Less			
(Greater) than Expected	$ 13,666	$ 34,965	$ 47,018
Other Experience			
Including Demographic Changes	$ (506)	$ (42,967)	$ (14,367)
Change in Assumptions/Methodology	$ (146,618.00)	$ —	$ —
Plan Changes	$ —	$ —	$ —
Composite Gain (or Loss) During Year	**$ (198,581)**	**$ (118,975)**	**$ 26,965**

SCHEDULE OF FUNDING PROGRESS*						(Dollars in thousands)
Actuarial Valuation Date (1)	**Actuarial Accrued Liability** (2)	**Valuation Value of Assets** (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)
6/30/2011	$4,672,348	$2,839,747	$1,832,601	60.8 %	$539,836	339.5%
6/30/2012	$4,894,990	$2,960,507	$1,934,483	60.5 %	$543,558	355.9%
6/30/2013	$5,108,619	$3,120,632	$1,987,987	61.1 %	$555,752	357.7%
6/30/2014	$5,492,440	$3,342,122	$2,150,318	60.8 %	$555,634	387.0%
6/30/2015	$5,657,173	$3,529,786	$2,127,387	62.4 %	$556,824	382.1%
6/30/2016	$5,813,092	$3,685,447	$2,127,645	63.4 %	$567,261	375.1%
6/30/2017	$6,191,433	$3,913,073	$2,278,360	63.2 %	$572,081	398.3%
6/30/2018	$6,398,814	$4,163,476	$2,235,338	65.1 %	$584,180	382.6%
6/30/2019	$6,622,495	$4,291,573	$2,330,992	64.8 %	$612,277	380.7%
6/30/2020	$7,005,589	$4,508,548	$2,497,041	64.4 %	$634,570	393.5%

** 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**
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%
2019	$229,120	100%
2020	$273,909	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 Community Services District still have Government Code Section 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.

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, Tier 4 and death benefits approved through the June 30, 2019 Actuarial Valuation.

Post-Retirement Cost-of-Living Benefits

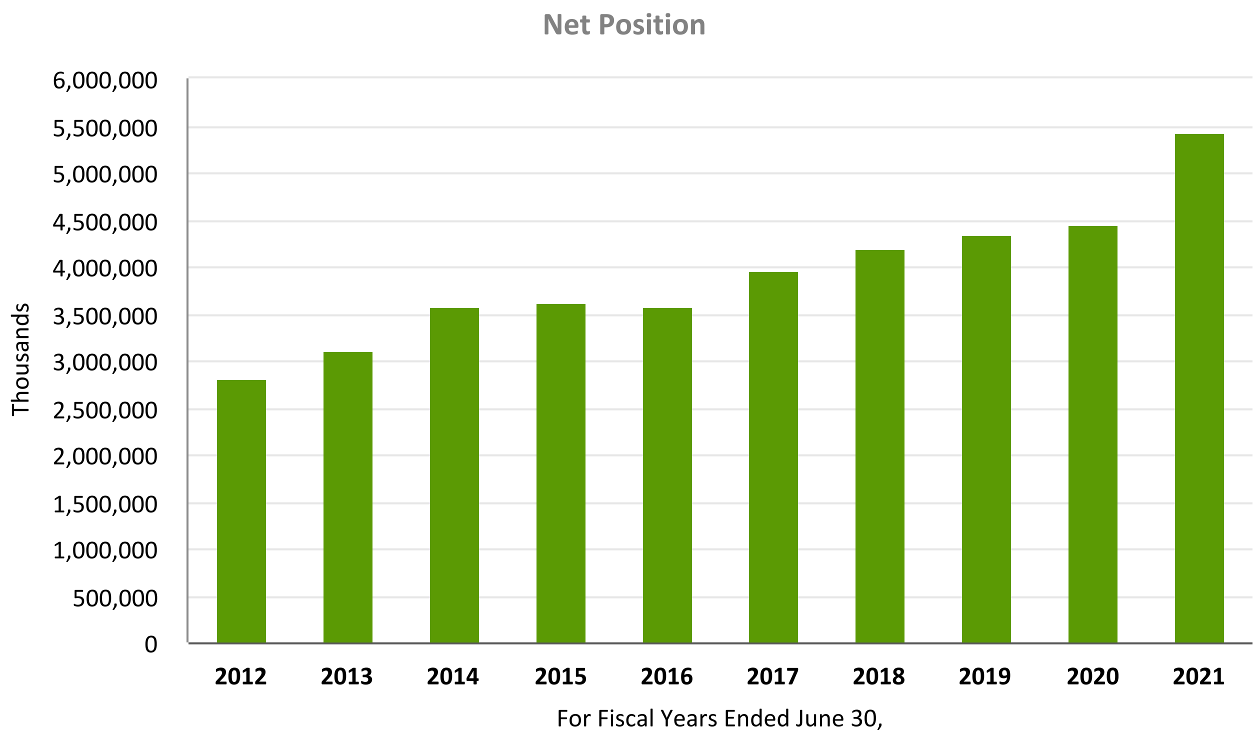
Each April 1, retiree benefits are adjusted by the percentage change in the Consumer Price Index for the preceding calendar year (capped at 2.5%).

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.
	Tier 4:	Hired on or before July 1, 2018.
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.
	Tier 4:	$21.00 per month, not subject to cost-of-living adjustments.
	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)

	2012	2013	2014	2015	2016
Additions					
Employer Contributions	$ 189,837	$ 211,677	$ 220,393	$ 215,477	$ 234,714
Member Contributions	18,720	20,283	25,810	30,325	33,278
Net Investment Income (Loss)	21,150	319,264	487,494	81,930	(27,535)
Total Additions	**229,707**	**551,224**	**733,697**	**327,732**	**240,457**
Deductions					
Total Benefit Expenses**	222,140	242,630	257,495	273,865	288,738
Administrative Expenses	3,469	3,848	4,860	4,886	5,225
Miscellaneous					
Total Deductions	**225,609**	**246,478**	**262,355**	**278,751**	**293,963**
Change in Fiduciary Net Position	**$ 4,098**	**$ 304,746**	**$ 471,342**	**$ 48,981**	**$ (53,506)**

(In thousands)

	2017	2018	2019	2020	2021
Additions					
Employer Contributions*	$ 241,112	$ 242,534	$ 229,120	$ 273,909	$ 268,625
Member Contributions*	34,649	52,503	50,132	57,862	53,789
Net Investment Income (Loss)	426,607	267,659	214,244	127,861	1,043,361
Total Additions	**702,368**	**562,696**	**493,496**	**459,632**	**1,365,775**
Deductions					
Total Benefit Expenses**	305,817	321,613	341,774	361,094	380,996
Administrative Expenses	5,243	5,116	4,804	5,523	6,061
Miscellaneous					
Total Deductions	**311,060**	**326,729**	**346,578**	**366,617**	**387,057**
Change in Fiduciary Position	**$ 391,308**	**$ 235,967**	**$ 146,918**	**$ 93,015**	**$ 978,718**

** The 2018, 2019, 2020 and 2021 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)

	2012	2013	2014	2015	2016
Service Retirement Benefits					
General	$ 114,742	$ 127,139	$ 137,993	$ 148,697	$ 159,101
Safety	62,207	68,078	68,705	72,097	74,978
Total	176,949	195,217	206,698	220,794	234,079
Service-Connected Disability (SCD) Benefits					
General	7,947	8,064	8,331	8,422	8,260
Safety	15,145	15,495	20,565	21,222	21,676
Total	23,092	23,559	28,896	29,644	29,936
Beneficiary Benefits					
General	10,353	11,152	10,660	11,186	12,261
Safety	8,231	8,602	7,565	7,881	8,393
Total	18,584	19,754	18,225	19,067	20,654
Lump Sum Death Benefits	433	606	564	862	787
Total Benefit Payments	**219,058**	**239,136**	**254,383**	**270,367**	**285,456**
Refunds					
General	2,408	2,973	2,762	2,876	2,563
Safety	674	521	350	622	719
Total	3,082	3,494	3,112	3,498	3,282
Total Benefit Expenses	**$ 222,140**	**$ 242,630**	**$ 257,495**	**$ 273,865**	**$ 288,738**

(In thousands)

	2017	2018	2019	2020	2021
Service Retirement Benefits					
General	$ 169,370	$ 179,977	$ 193,308	$ 206,802	$ 217,511
Safety	78,453	81,806	86,007	91,880	96,306
Total	247,823	261,783	279,315	298,682	313,817
Service-Connected Disability (SCD) Benefits					
General	8,411	8,647	8,479	8,451	8,567
Safety	22,207	22,842	22,596	23,548	24,388
Total	30,618	31,489	31,075	31,999	32,955
Beneficiary Benefits					
General	13,579	14,136	14,903	14,818	15,944
Safety	8,979	9,612	10,719	10,046	10,757
Total	22,558	23,748	25,622	24,864	26,701
Lump Sum Death Benefits	894	903	1,025	1,097	1,010
Total Benefit Payments	**$ 301,893**	**$ 317,923**	**$ 337,037**	**$ 356,642**	**$ 374,483**
Refunds					
General	2,718	2,966	3,519	3,126	5,207
Safety	1,206	724	1,218	1,326	1,307
Total	3,924	3,690	4,737	4,452	6,514
Total Benefit Expenses	**$ 305,817**	**$ 321,613**	**$ 341,774**	**$ 361,094**	**$ 380,997**

KCERA 2021 - Schedule of Retired Members by Type of Benefit

Amount of Monthly Benefit	Number of Retirants	Type of Retirement								
		1	2	3	4	5	6	7	8	9
$1-500	374	258	2	0	0	53	8	0	5	48
$501-1,000	896	619	28	1	0	140	19	2	22	65
$1,001-1,500	970	689	61	35	0	115	24	0	11	35
$1,501-2,000	886	607	44	79	0	87	20	0	20	29
$2,001-3,000	1611	1,125	19	218	0	143	11	1	55	39
$3,001-4,000	1210	884	6	166	0	107	4	6	25	12
$4,001-5,000	777	646	3	51	0	58	1	0	9	9
$5,001-6,000	517	462	3	22	0	18	2	0	10	0
Over $6,000	1594	1,409	8	128	0	28	1	0	18	2
Totals	**8,835**	**6,699**	**174**	**700**	**0**	**749**	**90**	**9**	**175**	**239**

Amount of Monthly Benefit	Number of Retirants	Option Selected						
		Option 1	Option 2	Option 2	Option 4	Unmodified		
						A	B	C
$1-500	374	9	33	0	0	111	0	221
$501-1,000	896	6	69	5	0	314	1	501
$1,001-1,500	970	6	69	5	0	354	15	521
$1,501-2,000	886	8	47	2	0	337	46	446
$2,001-3,000	1611	10	75	12	5	589	147	773
$3,001-4,000	1210	6	55	1	2	484	119	543
$4,001-5,000	777	4	36	3	2	400	38	294
$5,001-6,000	517	2	30	5	2	310	15	153
Over $6,000	1594	3	63	4	3	1064	115	342
Totals	**8,835**	**54**	**477**	**37**	**14**	**3,963**	**496**	**3,794**

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

KCERA 2021 - Schedule of Average Benefit Payment Amounts by Year of Retirement

	Years of Retirement Service Credit						
	0-5	**5-10**	**10-15**	**15-20**	**20-25**	**25-30**	**30+**
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 ($)	9,447	5,590	5,082	5,403	5,829	6,988	7,301
Number of Active Retirants	16	27	67	41	49	68	46
Fiscal Year 2015							
Average Annual Benefit ($)	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

KCERA 2021 - Schedule of Average Benefit Payment Amounts by Year of Retirement

	Years of Retirement Service Credit						
	0-5	**5-10**	**10-15**	**15-20**	**20-25**	**25-30**	**30+**
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 ($)	8,677	5,975	5,921	6,001	6,427	6,558	7,230
Number of Active Retirants	17	46	76	65	68	60	55
Fiscal Year 2018							
Average Annual Benefit ($)	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 ($)	10,168	5,109	5,776	5,712	6,780	8,308	7,905
Number of Active Retirants	15	33	67	46	57	53	54
Fiscal Year 2020							
Average Annual Benefit ($)	9,646	10,796	23,160	35,576	43,723	66,222	81,158
Average Monthly Benefit ($)	804	900	1,930	2,965	3,644	5,518	6,763
Average Final Monthly Salary ($)	9,952	5,387	5,954	6,075	5,893	6,941	7,150
Number of Active Retirants	9	31	62	51	62	66	40
Fiscal Year 2021							
Average Annual Benefit ($)	8,904	13,003	22,720	36,782	52,449	61,735	83,240
Average Monthly Benefit ($)	742	1,084	1,893	3,065	4,371	5,145	6,937
Average Final Monthly Salary ($)	9,812	6,752	6,420	6,360	7,326	6,669	7,434
Number of Active Retirants	12	35	51	44	83	52	48

	2012	2013	2014	2015	2016
County of Kern					
General Members	5,632	5,873	5,833	6	5,937
Safety Members	1,762	1,873	1,886	2	1,840
Total	7,394	7,746	7,719	8	7,777
Participating Agencies (General Membership):					
Berrenda Mesa Water District	10	10	10	9	6
Buttonwillow Recreation and Park District	6	6	4	5	4
East Kern Cemetery District	1	1	1	1	2
Inyokern Community Services District	1	1	1	1	1
Kern County Water Agency	71	65	68	67	62
Kern Mosquito & Vector Control District	19	18	18	18	18
North of the River Sanitation District	11	13	12	13	13
San Joaquin Valley Air Pollution Control District	281	281	276	264	269
Shafter Recreation and Park District	—	—	—	—	—
West Side Cemetery District	6	6	6	6	6
West Side Mosquito & Vector Control Dist.	7	7	10	10	9
West Side Recreation and Park District	10	10	11	11	11
Kern County Superior Court	443	353	389	414	457
	866	771	806	819	858
Total Active Membership:					
General Members	6,498	6,644	6,639	6,645	6,795
Safety Members	1,762	1,873	1,886	1,847	1,840
Total	8,260	8,517	8,525	8,492	8,635

	2017	2018	2019	2020	2021
County of Kern:					
General Members	4,720	4,818	5,014	5,091	4,891
Safety Members	1,767	1,771	1,773	1,685	1,690
Total	6,487	6,589	6,787	6,776	6,581
Participating .Agencies (General Membership):					
Berrenda Mesa Water District	6	4	3	3	3
Burtonwillow Recreation and Park District	3	2	1	1	1
East Kern Cemetery District	2	2	2	2	2
Inyokern Commnunity Services District	—	—	—	—	—
Kern County Hospital Authority	1,374	1,446	1,550	1,621	1,605
Kern County Water Agency	60	59	55	53	51
Kern Mosquito & Vector Control District	18	19	18	22	21
North of the River Sanitation District	13	18	18	20	17
San Joaquin Valley Air Pollution Control District	273	275	289	303	296
Shafter Recreation and Park District	1	3	2	4	4
West Side Cemetery District	6	6	6	5	4
West Side Mosquito & Vector Control Dist.	8	8	8	6	5
West Side Recreation and Park District	9	8	7	6	5
Kern County Superior Court	478	483	519	504	477
	2,251	**2,333**	**2,478**	**2,550**	**2,491**
Total Active Membership:					
General Members	6,971	7,151	7,492	7,641	7,382
Safety Members	1,767	1,771	1,773	1,685	1,690
Total	**8,738**	**8,922**	**9,265**	**9,326**	**9,072**