KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

PRUDENT INVESTMENT • QUALITY SERVICE

December 2, 2021

Members, Board of Retirement
Employee Bargaining Units
Requesting News Media
Other Interested Parties

Subject: Meeting of the Kern County Employees' Retirement Association Board of Retirement

Ladies and Gentlemen:

A meeting of the Kern County Employees' Retirement Association Board of Retirement will be held on Wednesday, December 8, 2021 at 8:30 a.m. via teleconference pursuant to Assembly Bill 361, signed into law on September 16, 2021 as urgency legislation, contingent upon Resolution 2021-04 being adopted by the KCERA Board of Retirement at its Special Meeting on December 3, 2021 and Governor Newsom's March 4, 2020 proclaimed State of Emergency, which remains in effect. (Cal. Gov. Code section 54953, as amended by Assembly Bill 361).

If Resolution 2021-04 is not adopted, a meeting of KCERA's Board of Retirement will be held on the above date and time at its offices located at 11125 River Run Boulevard, Board Room, Bakersfield, California.

If you wish to listen to the teleconference meeting, please dial one of the following numbers and enter Meeting ID# 289-998-6429:

- (669) 900-9128
- U.S. Toll-free: (888) 788-0099 or (877) 853-5247

Items of business will be limited to the matters shown on the attached agenda. If you have any questions or require additional service, please contact KCERA at (661) 381-7700 or send an email to administration@kcera.org.

Sincerely,

Dominic D. Brown
Chief Executive Officer

Attachment

AGENDA:

All agenda item supporting documentation is available for public review on KCERA's website at www.kcera.org following the posting of the agenda. Any supporting documentation that relates to an agenda item for an open session of any regular meeting that is distributed after the agenda is posted and prior to the meeting will also be available for review at the same location.

AMERICANS WITH DISABILITIES ACT
(Government Code §54953.2)

Disabled individuals who need special assistance to listen to and/or participate in the teleconference meeting of the Board of Retirement may request assistance by calling (661) 381-7700 or sending an email to administration@kcera.org. Every effort will be made to reasonably accommodate individuals with disabilities by making meeting materials and access available in alternative formats. Requests for assistance should be made at least two (2) days in advance of a meeting whenever possible.

ROLL CALL

MOMENT OF SILENCE

CONSENT MATTERS

ALL ITEMS LISTED WITH AN ASTERISK (*) ARE CONSIDERED TO BE ROUTINE AND NON-CONTROVERSIAL BY STAFF AND WILL BE APPROVED BY ONE MOTION IF NO MEMBER OF THE BOARD OR PUBLIC WISHES TO COMMENT OR ASK QUESTIONS. IF COMMENT OR DISCUSSION IS DESIRED BY ANYONE, THE ITEM WILL BE REMOVED FROM THE CONSENT AGENDA AND WILL BE CONSIDERED IN THE LISTED SEQUENCE WITH AN OPPORTUNITY FOR ANY MEMBER OF THE PUBLIC TO ADDRESS THE BOARD CONCERNING THE ITEM BEFORE ACTION IS TAKEN. STAFF RECOMMENDATIONS ARE SHOWN IN CAPS AFTER EACH ITEM.

*1. Application for service-connected disability pension benefits for Phillip Campas, Sheriff (Safety) – ADOPT RECOMMENDATION OF SDAG TO FIND MEMBER IS ENTITLED TO A SERVICE-CONNECTED DISABILITY RETIREMENT; PROVIDE APPLICABLE BENEFIT OPTIONS TO APPLICANT

*2. Application for service-connected disability pension benefits for James Conner, Sheriff (Safety) – ADOPT RECOMMENDATION OF SDAG TO GRANT SERVICE-CONNECTED DISABILITY PENSION

*3. Summary of proceedings of the following meetings:

- November 3, 2021 Board of Retirement
- November 3, 2021 Nominating Committee

RECEIVE AND FILE

*4. Report from the KCERA office on members retired from service for the month of November 2021 – RATIFY

*5. Report from the KCERA office on deceased retirees for the month of November 2021 – RECEIVE AND FILE

*6. Report of current disability retirement applications and appeals of KCERA Board decisions for the period ending November 30, 2021 – RECEIVE AND FILE

*7. Securities Lending Earnings Summary Report for the period October 1-31, 2021 from Deutsche Bank – RECEIVE AND FILE

*8. KCERA asset allocation, budget status, cash flow position and investment fees status report for the month of October 2021 – RECEIVE AND FILE

*9. Certificate of Achievement for Excellence in Financial Reporting for Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2020 presented by the Government Finance Officers Association (GFOA) – RECEIVE AND FILE

*10. Annual Fee Disclosure Report FY 2020-21 – RECEIVE AND FILE

*11. Annual On-Site Due Diligence Schedule FY 2020-21 – RECEIVE AND FILE

*12. Albourne America On-Site Due Diligence Meeting Summary – RECEIVE AND FILE

*13. Annual Investment Manager Compliance Report FY 2020-21 – RECEIVE AND FILE

*14. Service provider evaluation period initiated pursuant to Evaluation Period Policy – RATIFY

*15. Extension of appointment of Retiree Extra-Help Thad Kennedy, effective January 1, 2022 – APPROVE APPOINTMENT EXTENSION

PUBLIC COMMENTS

16. The public is provided the opportunity to comment on agenda items at the time those agenda items are discussed by the Board. This portion of the meeting is reserved for persons to address the Board on any matter not on this agenda but under the jurisdiction of the Board. Board members may respond briefly to statements made or questions posed. They may ask a question for clarification and, through the Chair, make a referral to staff for factual information or request staff to report back to the Board at a later meeting. Speakers are limited to two minutes. Please state your name for the record prior to making a presentation.

ADMINISTRATIVE MATTERS

17. Presentation on Phase 4 of the *Alameda* decision implementation and actuarial analysis performed by KCERA's Actuary to determine total net impact to the Plan presented by Chief Executive Officer Dominic Brown, Chief Legal Officer Jennifer Zahry, Actuaries Paul Angelo and Molly Calcagno, Segal Consulting, and Tax Counsel Robert L. Gauss, Partner, and Audra Ferguson-Allen, Partner, Ice Miller LLP – HEAR PRESENTATION

INVESTMENT MATTERS

18. Presentation on the Private Markets Performance Report as of June 30, 2021 presented by Andrea Auerbach, Investment Managing Director, Keirsten Lawton, Investment Managing Director, Kelly Jensen, Senior Investment Director, Anelise Hohl, Investment Director, Cambridge Associates[1], Chief Investment Officer Daryn Miller, CFA, and Senior Retirement Investment Officer Brian Long, CFA – RECEIVE AND FILE

19. Trustee education regarding Venture Capital presented by Andrea Auerbach, Investment Managing Director, Kelly Jensen, Senior Investment Director Cambridge Associates, Chief Investment Officer Daryn Miller, CFA, and Senior Retirement Investment Officer Brian Long, CFA – RECEIVE EDUCATIONAL TRAINING (10 MINUTES TRUSTEE EDUCATION CREDIT)

FINANCIAL MATTERS

20. Discussion and appropriate action on review of the actuarial valuation as of June 30, 2021, recommended employer and employee contribution rates for fiscal year 2022-2023, and related reports presented by Actuaries Paul Angelo and Molly Calcagno, Segal – RECEIVE AND FILE; APPROVE THE ACTUARIAL VALUATION, EMPLOYER AND EMPLOYEE CONTRIBUTION RATES, AND RELATED REPORTS FOR FISCAL YEAR 2022-23 RECOMMENDED BY ACTUARY; SEND TO PLAN SPONSORS FOR ADOPTION

1 Written materials and investment recommendations from the consultants, fund managers and KCERA investment staff relating to alternative investments are exempt from public disclosure pursuant to California Government Code §6254.26, §6255, and §54957.5.

21. Discussion and appropriate action on the draft Annual Comprehensive Financial Report (ACFR) for the fiscal year ended June 30, 2021, presented by Auditors Tim Rawal and Jason Ostroski, CliftonLarsonAllen LLP, and Chief Financial Officer Angela Kruger – APPROVE DRAFT ANNUAL COMPREHENSIVE FINANCIAL REPORT (ACFR) FOR THE FISCAL YEAR ENDED JUNE 30, 2021

ADMINISTRATIVE MATTERS (Continued)

22. Slate of nominees for Chair and Vice-Chair for the calendar year 2021 presented by Nominating Committee Chair – ELECT CHAIR AND VICE-CHAIR

23. Presentation of plaque honoring former Chair Dustin Dodgin for his service to the Kern County Employees' Retirement Association Board of Retirement as Chair – MAKE PRESENTATION

24. Presentation of plaque honoring Trustee Bradly Brandon for his service to the Kern County Employees' Retirement Association Board of Retirement – MAKE PRESENTATION

25. Presentation of plaque honoring Trustee Lauren Skidmore for her service to the Kern County Employees' Retirement Association Board of Retirement – MAKE PRESENTATION

STAFF REPORTS

26. Report from Chief Executive Officer

27. Report from Chief Investment Officer

28. Report from Chief Legal Officer

COMMITTEE REPORTS

29. Report from Committee Chairs:

    a. Administrative Committee: Franey
    b. Finance Committee: Whitezell
    c. Investment Committee: Kratt
    d. KCERA Property, Inc. Board: Seibly

CALL FOR PUBLIC COMMENT ON EXECUTIVE SESSION ITEM(S)

EXECUTIVE SESSION

Items 1-2 are withdrawn from Executive Session if approved on the consent agenda:

1. PUBLIC EMPLOYMENT (pursuant to Government Code §54957) Application for service-connected disability pension benefits:

   Phillip Campas Sheriff Safety

2. PUBLIC EMPLOYMENT (pursuant to Government Code §54957) Application for service-connected disability pension benefits:

   James Conner Sheriff Safety

30. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

    Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9: Facts and circumstances that might result in litigation against the local agency but which the local agency believes are not fully known to a potential plaintiff or plaintiffs, which facts and circumstances related to implementation of the *Alameda* decision (approximately 290 potential cases).

31. PUBLIC EMPLOYEE PERFORMANCE EVALUATION (pursuant to GOVERNMENT CODE §54957) – Title: Chief Executive Officer

REFERRALS TO STAFF, ANNOUNCEMENTS OR REPORTS

32. On their own initiative, Board members may make a brief announcement, refer matters to staff, subject to KCERA's rules and procedures, or make a brief report on their own activities.

NEW BUSINESS

33. Consider, discuss, and take possible action to agendize one or more items for future meetings of the Board of Retirement – CONSIDER, DISCUSS, AND TAKE ACTION ON WHETHER TO AGENDIZE PROPOSED ITEMS, IF ANY, FOR A FUTURE MEETING

34. Adjournment

KERN COUNTY EMPLOYEE'S RETIREMENT ASSOCIATION (KCERA)
Board of Retirement

SUMMARY OF PROCEEDINGS

Teleconference Meeting – Board of Retirement Meeting

November 3, 2021

8:32 a.m.

Board Members: Brandon (Alternate), Couch, Franey, Chair Gonzalez, Hughes, Kaufman, Kratt, Nunneley (Alternate), Seibly (Alternate), Skidmore, Whitezell

ROLL CALL

Present: Couch, Franey, Gonzalez, Hughes, Kaufman, Kratt, Nunneley, Seibly, Whitezell

Absent: Brandon, Skidmore

MOMENT OF SILENCE

NOTE: The vote is displayed in bold below each item. For example, Couch-Kaufman denotes Trustee David Couch made the motion and Trustee Jordan Kaufman seconded the motion.

1. Discussion and appropriate action pursuant to California Government Code section 54953 of the Ralph M. Brown Act, as amended by Assembly Bill 361 presented by Executive Director Dominic Brown and Chief Legal Officer Jennifer Zahry – EXECUTIVE DIRECTOR DOMINIC BROWN HEARD; CHIEF LEGAL OFFICER JENNIFER ZAHRY HEARD

   ADOPTED FINDINGS FOR ITSELF AND ALL KCERA STANDING COMMITTEES; APPROVED 30-DAY RESOLUTION

   Kaufman-Franey – 7 Ayes

CONSENT MATTERS

*2. Summary of proceedings of the following meetings:

- October 7, 2021 Administrative Committee
- October 13, 2021 Board of Retirement Meeting

RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

*3. Monthly report from the KCERA office on members retired from service for the month of October 2021 – RATIFIED

Hughes-Whitezell – 7 Ayes

*4. Monthly report from the KCERA office on deceased retirees for the month of October 2021 – RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

*5. Report of current disability retirement applications and appeals of KCERA Board decisions for the period ending October 31, 2021 – RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

*6. Securities Lending Earnings Summary Report for the period September 1-30, 2021 from Deutsche Bank – RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

*7. KCERA asset allocation, budget status, cash flow position and investment fees status report for the month of September 2021 – RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

*8. The KCERA Class Action Proceeds Report from July 1 through September 30, 2021 for the Northern Trust Company – RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

*9. 2021 KCERA Retirement Benefit Statement and Cover Letter Sample – RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

*10. Public Pension Standards Award for Funding and Administration 2021 received from the Public Pension Coordinating Council (PPCC) – RECEIVED AND FILED

Hughes-Whitezell – 7 Ayes

PUBLIC COMMENTS

11. The public is provided the opportunity to comment on agenda items at the time those agenda items are discussed by the Board. This portion of the meeting is reserved for persons to address the Board on any matter not on this agenda but under the jurisdiction of the Board. Board members may respond briefly to statements made or questions posed. They may ask a question for clarification and, through the Chair, make a referral to staff for factual information or request staff to report back to the Board at a later meeting. Speakers are limited to two minutes. Please state your name for the record prior to making a presentation – NONE

INVESTMENT MATTERS

12. Presentation on the 3rd Quarter Investment Performance Review period ending September 30, 2021 presented by Scott Whalen, CFA, Verus – SCOTT WHALEN, CFA, VERUS HEARD; CHIEF INVESTMENT OFFICER DARYN MILLER, CFA, HEARD

    RECEIVED AND FILED

    Couch-Whitezell – 7 Ayes

13. Presentation on the 3rd Quarter 2021 Portfolio Review presented by Spencer Edge, Albourne America[1] – SPENCER EDGE, ALBOURNE AMERICA, HEARD

    RECEIVED AND FILED

    Kaufman-Couch – 7 Ayes

ADMINISTRATIVE MATTERS

14. Discussion and appropriate action regarding Construction Services with Pyramid Construction presented by Executive Director Dominic Brown, Assistant Executive Director Matthew Henry and Administrative Services Manager Thad Kennedy, as approved by the KCERA Property, Inc. Board of Directors, in accordance with the KPI Bylaws – CHAIR JUAN GONZALEZ HEARD; TRUSTEE ROBB SEIBLY HEARD; EXECUTIVE DIRECTOR DOMINIC BROWN HEARD; ASSISTANT EXECUTIVE DIRECTOR MATTHEW HENRY HEARD

    AUTHORIZED EXECUTIVE DIRECTOR TO SIGN, SUBJECT TO LEGAL ADVICE AND REVIEW

    Couch-Franey – 7 Ayes

1 Written materials and investment recommendations from the consultants, fund managers and KCERA investment staff relating to alternative investments are exempt from public disclosure pursuant to California Government Code §6254.26, §6255, and §54957.5.

15. Discussion and appropriate action regarding referral from KCERA Property Inc. (KPI) Board of Directors to investigate the need for a generator presented by KCERA Executive Director Dominic Brown – CHAIR JUAN GONZALEZ HEARD; VICE-CHAIR TYLER WHITEZELL HEARD; TRUSTEES DAVID COUCH, PHIL FRANEY, JORDAN KAUFMAN, RICK KRATT AND ROBB SEIBLY HEARD; EXECUTIVE DIRECTOR DOMINIC BROWN HEARD; ASSISTANT EXECUTIVE DIRECTOR MATTHEW HENRY HEARD; ADMINISTRATIVE SERVICES MANAGER THAD KENNEDY HEARD

DIRECTED STAFF TO RESEARCH OPTIONS FOR A GENERATOR IF NEEDED AND PRESENT TO BOARD OF RETIREMENT

Kratt-Couch – 5 Ayes; 2 Noes (Kaufman, Whitezell)

16. Discussion and appropriate action regarding referral from KCERA Property Inc. (KPI) Board of Directors to research the legal and governance structure and procedural operations of KPI – CHAIR JUAN GONZALEZ HEARD; TRUSTEES PHIL FRANEY; JORDAN KAUFMAN AND ROBB SEIBLY HEARD; EXECUTIVE DIRECTOR DOMINIC BROWN HEARD

DIRECTED STAFF TO LOOK INTO THE LEGAL AND GOVERNANCE STUCTURE OF KCERA PROPERTY, INC. (KPI)

Kaufman-Couch – 7 Ayes

<u>STAFF REPORTS</u>

17. Report from Executive Director

ASSISTANT EXECUTIVE DIRECTOR MATTHEW HENRY REPORTED THE FOLLOWING:

- OFFICE UPDATES
- BOARD ELECTION UPDATE
- FACILITIES UPDATE
- STAFFING UPDATE
- DISABILITIES UPDATE
- SERVICE PURCHASE UPDATE
- OPERATIONS ACTIVITY
- UPCOMING MEETINGS AND EVENTS

EXECUTIVE DIRECTOR DOMINIC BROWN HEARD

18. Report from Chief Investment Officer

CHIEF INVESTMENT OFFICER DARYN MILLER, CFA, REPORTED THE FOLLOWING:

- PORTFOLIO POSITIONING
- GENERAL INVESTMENT CONSULTANT RFP SCHEDULED FOR NOVEMBER 5, 2021 RELEASE
- VIRTUAL ALBOURNE DUE DILIGENCE IN MID-NOVEMBER
- KEY INITIATIVES
- INVESTMENT COMMITTEE MEETING IN DECEMBER

19. Report from Chief Legal Officer

CHIEF LEGAL OFFICER JENNIFER ZAHRY REPORTED THE FOLLOWING:

- NEW AND PENDING LEGISLATION
- ELIGIBILTY FOR PENSION BENEFITS AND CONTRIBUTION REFUNDS
- NOVEMBER 2021 CALENDAR ITEMS

COMMITTEE REPORTS

20. Report from Committee Chairs:

a. Administrative Committee: FRANEY – NONE

b. Finance Committee: WHITEZELL – NONE

c. Investment Committee: KRATT – NONE

d. KCERA Property, Inc.: SEIBLY – NONE

REFERRALS TO STAFF, ANNOUNCEMENTS OR REPORTS

21. On their own initiative, Board members may make a brief announcement, refer matters to staff, subject to KCERA's rules and procedures, or make a brief report on their own activities – NONE

NEW BUSINESS

22. Consider, discuss, and take possible action to agendize one or more items for future meetings of the Board of Retirement – NONE

23. ADJOURNED – 10:21 A.M.

____
Secretary, Board of Retirement

____
Chair, Board of Retirement

KERN COUNTY EMPLOYEE'S RETIREMENT ASSOCIATION (KCERA)
Board of Retirement

SUMMARY OF PROCEEDINGS

Teleconference Meeting – Nominating Committee
November 3, 2021

10:32 a.m.

Committee Members: Hughes, Kaufman, Kratt, Whitezell (Chair)

ROLL CALL

Present: Kaufman, Kratt, Whitezell

Absent: Hughes

NOTE: The vote is displayed in bold below each item. For example, Whitezell-Kaufman denotes Trustee Tyler Whitezell made the motion and Trustee Jordan Kaufman seconded the motion.

1. Discussion and appropriate action regarding nominations of trustees for Chair and Vice-Chair of the Board of Retirement for calendar year 2022 – CHAIR TYLER WHITEZELL HEARD; TRUSTEES JORDAN KAUFMAN AND RICK KRATT HEARD; EXECUTIVE DIRECTOR DOMINIC BROWN HEARD; CHIEF LEGAL OFFICER JENNIFER ZAHRY HEARD

   NOMINATED TRUSTEE JUAN GONZALEZ AS CHAIR CANDIDATE AND TRUSTEE TYLER WHITEZELL AS VICE-CHAIR CANDIDATE FOR 2022 BOARD OF RETIREMENT

   Kratt-Kaufman – 3 Ayes

PUBLIC COMMENTS

2. The public is provided the opportunity to comment on agenda items at the time those agenda items are discussed by the Committee. This portion of the meeting is reserved for persons to address the Committee on any matter not on this agenda but under the jurisdiction of the Committee. Committee members may respond briefly to statements made or questions posed. They may ask a question for clarification and, through the Chair, make a referral to staff for factual information or request staff to report back to the Committee at a later meeting. Speakers are limited to two minutes. Please state your name for the record prior to making a presentation – NONE

   TRUSTEE JOSEPH D. HUGHES ARRIVED AT 10:36 A.M.

REFERRALS TO STAFF, ANNOUNCEMENTS OR REPORTS

3. On their own initiative, Committee members may make a brief announcement, refer matters to staff, subject to KCERA's rules and procedures, or make a brief report on their own activities – NONE

4. ADJOURNED – 10:38 A.M.

____
Secretary, Board of Retirement

____
Chair, Nominating Committee

Kern County Employees' Retirement Association
New Retirees- November 1, 2021 to November 30, 2021

Employer Name: County Of Kern

Member Last Name	Member First Name	Retirement Date	Membership Tier	Department Name
Costa	Janice	09/25/2021	General Tier I	4120 - Behavioral Health & Reco
Elliott	Keith	09/11/2021	Safety Tier I	2415S - Fire
Gholston	Michele	10/09/2021	Safety Tier I	2210S - Sheriff
Hull	William	08/06/2016	Safety Tier I	2210S - Sheriff
Hunting	Paul	10/16/2021	General Tier I	4110F - Health-Promo/ public Info
Jennings	Joshua	10/09/2021	Safety Tier I	2210S - Sheriff
Kelly	Greg	09/23/2021	General Tier I	5120 - Depart Of Human Services
Marquez	Salerino	09/25/2021	Safety Tier I	2210S - Sheriff
McPeak	Denise	10/30/2021	General Tier I	2190 - Public Defender
Moroyoqui	Frances	10/05/2021	Safety Tier I	2210S - Sheriff
Perez	Steve	09/24/2021	General Tier II PEPRA	1610 - General Services Division
Printup	Donald	09/25/2021	Safety Tier I	2415S - Fire
Rebeske	Sandra	03/30/2013	General Tier I	8997 - Kern Medical Center
Valdez	Valerie	09/25/2021	General Tier I	5120 - Depart Of Human Services
Vasquez	James	10/01/2021	Safety Tier I	2210S - Sheriff

Employer Name: KC Superior Court

Member Last Name	Member First Name	Retirement Date	Membership Tier	Department Name
Robins	Lori	10/06/2021	General Tier I	9410 - Superior Court

Member Last Name	Member First Name	Retirement Date	Membership Tier	Department Name
Shaw	Kimberly	10/09/2021	General Tier I	9410 - Superior Court

Employer Name: Kern County Hospital Authority

Member Last Name	Member First Name	Retirement Date	Membership Tier	Department Name
Stinnett	Elaine	10/09/2021	General Tier I	9460 - Kern County Hospital Authority

Employer Name: Kern County Water Agency

Member Last Name	Member First Name	Retirement Date	Membership Tier	Department Name
Aguilar	Victor	10/09/2021	General Tier I	0957 - KERN COUNTY WATER AGENCY

Employer Name: Kern Mosquito & Vec Cntr

Member Last Name	Member First Name	Retirement Date	Membership Tier	Department Name
Wells	Christopher	09/25/2021	General Tier I	0952 - Kern Mosquito and Vector Control

Employer Name: San Joaquin Valley APCD

Member Last Name	Member First Name	Retirement Date	Membership Tier	Department Name
Henry	Gary	09/15/2021	General Tier I	0959 - San Joaquin Valley Air Pollution Control District

Kern County Employees' Retirement Association
Decedents- November 1, 2021 to November 30, 2021

Pre-Retirement Deaths

Last Name	First Name	Membership Type	Employer Name
Green	Michael	General	County Of Kern
Kelly	Deanna	General	County Of Kern
Rodriquez	Jason	General	County Of Kern
Solorio	Irene	General	Kern County Hospital Authority

Post-Retirement Deaths

Last Name	First Name	Membership Type	Employer Name
Anderson	Jack	General	County Of Kern
Bowen	Norman	General	County Of Kern
Brown	Murlene	General	County Of Kern
Buehler	Janet	General	County Of Kern
Cicerchia	Deborah	General	County Of Kern
Coston	Marvin	General	County Of Kern
Cowan	Kelly	General	County Of Kern
De La Rosa Jr	Simon	General	County Of Kern
Edwards	Scott	General	County Of Kern
Fieber	Scott	General	County Of Kern
Funston	Kathleen	General	County Of Kern
Green	William	Safety	County Of Kern
Haenelt	LaRita	General	County Of Kern
Olguin	Julie	General	County Of Kern
Salcido	Sherri	General	County Of Kern
Smith	J	Safety	County Of Kern
Starkey	Odell	Safety	County Of Kern
Sweeney	Nola	General	County Of Kern
White	Chris	General	County Of Kern

KCERA
STATUS OF DISABILITY RETIREMENT APPLICATIONS
AS OF 11/30/21

NAME	DEPARTMENT	DATE FILED	DATE OF LAST CONTACT	NUMBER OF DAYS
Fussel, Kathy	HOSPITAL AUTHORITY	11/03/21	11/18/21	12
Gardner, Stephen	RISK MANAGEMENT	10/29/21	11/03/21	27
Kauffman, Stephen	DISTRICT ATTORNEY	08/16/21	11/23/21	7
Gardner, Stephen	FIRE	07/19/21	09/22/21	69
NAME	**DEPARTMENT**	**DATE FILED**	**MMRO ASSIGNED**	**MMRO RECEIVED**
Campas, Phillip	SHERIFF	08/11/21	10/13/21	11/3/2021
Lucio, Juan	PUBLIC WORKS	07/19/21	10/13/21	
Brannan, Derek	SHERIFF	07/14/21	11/22/21	
Leon, Theresa	HUMAN SERVICES	07/07/21	10/18/21	
Patton, Eric	SHERIFF	06/30/21	11/22/21	
Candelaria, Valerie	HUMAN SERVICES	06/23/21	09/15/21	
Introini, Jessica	SHERIFF	06/18/21	11/22/21	
Williams, Theron	GENERAL SERVICES	05/12/21	09/15/21	
Garcia, Judy	HOSPITAL AUTHORITY	03/29/21	10/18/21	
Smith, Thomas Jr.	SHERIFF	03/16/21	11/08/21	
Brandon, Bradly	SHERIFF	03/04/21	08/20/21	
Bravo, Enrique	SHERIFF	03/01/21	08/20/21	
Sanders-Stubblefield, Misty	AGING AND ADULT SERVICES	02/25/21	08/20/21	
McAdoo, John	SHERIFF	02/24/21	08/20/21	
Bankston, Josh	SHERIFF	02/09/21	08/19/21	
Cushman, Harris	SHERIFF	12/22/20	08/19/21	
Carrillo, Mabelle	ANIMAL CONTROL	11/18/20	04/21/21	
Burchfield, James	PUBLIC WORKS	11/17/20	07/16/21	
Tisinger, Douglas	KERN COUNTY WATER AGENCY	10/05/20	05/21/21	
Fleeman, Justin	SHERIFF	09/17/20	02/08/21	
Diffenbaugh, Anthony	FIRE	06/11/20	04/26/21	
Haight, Anita	COURTS	05/14/20	09/29/20	
Conner, James	SHERIFF	05/14/20	08/31/20	10/21/21
Brown, Michael	SHERIFF	04/14/20	08/31/20	
Baker, Breanne	HUMAN SERVICES	04/02/20	09/29/20	
Terry, Leann	SHERIFF	10/17/19	06/30/20	
Martinez de Moore, Brenda	BEHAVIORAL HEALTH & RECOVERY SERVICES	12/10/18	09/08/20	
Boren, Colleen	RISK MANAGEMENT	08/02/18	09/03/20	
Champlin, Timothy	PROBATION	04/25/18	05/21/20	
Hulsey, Jonathan	PROBATION	04/18/18	04/22/20	
Alaniz, Maria D.	PUBLIC HEALTH	04/13/18	10/17/20	
Coletti, John	SHERIFF	01/30/18	05/20/20	

KCERA
STATUS OF DISABILITY RETIREMENT APPLICATIONS
AS OF 11/30/21

NAME	DEPARTMENT	DATE FILED	MMRO ASSIGNED	MMRO RECEIVED
Tennison, Robyn (McClain)	BEHAVIORAL HEALTH & RECOVERY SERVICES	07/17/17	02/20/20	
Rodriquez, Ted	SHERIFF	06/22/17	02/20/20	
Hsu, Sue	BEHAVIORAL HEALTH & RECOVERY SERVICES	04/05/17	02/06/20	
Paxson, Kalae	SHERIFF	03/15/17	11/05/19	
Carvel, Scott	DISTRICT ATTORNEY	01/27/17	11/05/19	

Criteria for Contacting Applicants for Status Updates:
1) Following SDAG Meeting
2) Following 60-Day Notice letter sent to applicant to notify they have 60 days to provide additional medical records
3) Following 30-Day Notify Letter sent to Applicant to notify there will be a recommendation to deny the application and providing the opportunity to appeal
4) Following 10-Day Notify Letter sent to Applicant to notify there will be a recommendation to grant the application
5) Every three months if no other activity on case

COMPLETED IN 2021

NAME	DEPARTMENT	FILED	DATE COMPLETED
Burgess, Daniel	ANIMAL CONTROL	04/21/20	10/13/21
Chandler, Ian (Melanie Chandler)	SHERIFF	01/06/20	09/08/21
Zdarstek, Derek-ADP	PROBATION	11/22/19	09/08/21
Milton, Dawn	BEHAVIORAL HEALTH & RECOVERY SERVICES	09/19/19	05/05/21
Weiting, Neil	SHERIFF	08/14/19	09/08/21
Day, Lester	SAN JOAQUIN VALLEY AIR POLLUTION CONTROL	08/02/19	06/09/21
Ayon, Saul	SHERIFF	08/01/19	03/10/21
Avila, Andy	SHERIFF	07/05/19	04/14/21
Jefferson, Jill	AGRICULTURE & MEASUREMENT STANDARDS	04/02/19	05/05/21
Wimberly, Laura (Rodriguez)	PROBATION	02/01/19	03/10/21
Snyder, Zachary	FIRE	12/07/18	03/10/21
Ramsey, Denise	SHERIFF	08/13/18	02/10/21
Ashley, James	SHERIFF	07/10/18	02/10/21
Deacon, Pamela	CHILD SUPPORT SERVICES	04/13/18	02/10/21
Herman, Mark	DISTRICT ATTORNEY	04/04/18	09/08/21
Acosta, Timothy	SHERIFF	04/03/18	03/10/21
Gonzalez, Richard	FIRE	02/14/18	04/14/21
VanDoorn, Kimberly	SHERIFF	01/05/18	03/10/21
Houston, Jeffrey	SHERIFF	11/20/17	10/13/21
Rubio-Estaban, Maria	BEHAVIORAL HEALTH & RECOVERY SERVICES	06/21/17	01/21/21
Montoya-Cearley, Durinda	SAN JOAQUIN VALLEY AIR POLLUTION CONTROL	05/23/17	03/10/21
Panero, Paul	KERN HOSPITAL AUTHORITY	05/17/17	01/20/21
Reed, Robert T	SHERIFF	03/22/17	04/14/21
Simmons, Amber	PROBATION	07/21/16	03/10/21

KCERA
APPEALS PENDING
AS OF 11/30/21

ADMINISTRATIVE HEARING	DEPARTMENT	DATE FILED	SDAG RECOMMENDATION	APPEAL RECEIVED	SENT TO COUNTY COUNSEL	HEARING OFFICER ASSIGNED	HEARING DATE
Winn, Jay M.	DISTRICT ATTORNEY	03/16/16	SDAG to deny SCD	05/28/20	06/02/20	06/25/20	11/09/20

WRIT OF MANDATE	DEPARTMENT	DATE FILED	BOARD DECISION
Blue, Michael	SHERIFF	06/14/13	Board denied SCD

COURT OF APPEAL	DEPARTMENT	DATE FILED	BOARD DECISION
Morgan, Gloria	SHERIFF	03/26/15	Board denied SCD

HEARINGS COMPLETED IN 2021			
NAME	**DEPARTMENT**	**DATE FILED**	**DATE COMPLETED**
Barnett, Donald	FIRE	08/23/11	02/10/21
Candler, Laura	SHERIFF	10/13/14	06/09/21
Ashley, Mark	SHERIFF	09/03/15	9/8/2021

SECURITIES LENDING

Deutsche Bank

Summary Earnings Report

Run Time: 08-Nov-2021 14:36 EST
Date Range: 01-OCT-2021 To 31-OCT-2021
Location: Not specified
Currency: Not Specified
Client ID: Not Specified
Master Client: CAKERN
Grouping Type: None
Level: Individually

	Client ID	Average Contract Amount	Gross Earnings	DB Earnings	Client Earnings	Custody Account
New York						
USD						
KNCTY - Harvest Midstream	CAKE18	11,581,520.04	3,995.57	399.56	3,596.02	KNC15
KNCTY - PIMCO Midstream	CAKE19	14,889,817.92	6,525.46	652.55	5,872.91	KNC16
KNCTY PIMCO Core Plus	CAKE07	70,274,221.52	18,195.58	1,819.56	16,376.02	KNC11
KNCTY PIMCO EMD	CAKE08	1,782,773.23	659.40	65.94	593.46	KNC12
KNTCY - Alliance Bernstein	CAKE15	23,528,912.97	7,203.96	720.40	6,483.56	2664130
KNTCY - Geneva	CAKE16	14,467,455.77	4,383.72	438.37	3,945.35	2667336
KNTCY - Western Asset MGMT Co 01	CAKE03	30,681,112.79	8,391.77	839.18	7,552.60	KNC06
KNTCY - Western Asset MGMT Co 02	CAKE04	28,129,362.17	10,792.09	1,079.21	9,712.88	KNC08
	CCY Total USD:	**195,335,176.40**	**60,147.55**	**6,014.75**	**54,132.79**	

KCERA ASSET ALLOCATION*
10/31/2021

Manager Name	Type	$(000)	Current Allocation	Target Percentage	Variance Over Target (Under Target)	Variance Over Target (Under Target) $(000)
AllianceBernstein	Small Cap Value	100,598	1.8%	*Domestic Equity Range 16.0% - 27.0%*		
Geneva Capital	Small Cap Growth	60,006	1.1%			
Mellon Capital Management EB DV	Large Cap Passive	392,133	7.1%			
PIMCO StockPlus	Large Cap Enhanced	121,705	2.2%			
Total Domestic Equity		**$674,442**	**12.2%**	**19.0%**	**(6.8%)**	**($375,789)**
American Century	International Small	100,055	1.8%	*International Developed Equity Range 8.0% - 18.0%*		
Cevian Capital II LP	International Large	33,901	0.6%			
Mellon Capital Management-EB DV	International Large Passive	575,286	10.4%			
Total International Developed Equity		**$709,242**	**12.8%**	**13.0%**	**(0.2%)**	**($9,337)**
AB Emerging Markets Strategic Core	Emerging Markets	106,628	1.9%	*Emerging Market Equity Range 1.0% - 9.0%*		
DFA Emerging Markets Value Portfolio	Emerging Markets	83,972	1.5%			
Mellon Emerging Markets	Emerging Markets	103,444	1.9%			
Total Emerging Market Equity		**$294,044**	**5.3%**	**5.0%**	**0.3%**	**$17,668**
TOTAL EQUITY		**$1,677,728**	**30.4%**	**37.0%**	**(6.6%)**	**($367,458)**
Mellon Capital Management Ag Bond	Core	180,284	3.3%	*Core Range 12.0% - 25.0%*		
PIMCO	Core Plus	231,258	4.2%			
Western Asset Management	Core Plus	237,842	4.3%			
Total Core		**$649,384**	**11.7%**	**14.0%**	**(2.3%)**	**($124,470)**
TCW Securitized Opportunities LP	Securitized Opportunities	132,170	2.4%	*Credit Range 3.0% - 9.0%*		
Western Asset Management	High Yield	189,171	3.4%			
Total Credit		**$321,341**	**5.8%**	**6.0%**	**(0.2%)**	**($10,311)**
PIMCO EM Beta	Emerging Markets	158,411	2.9%	*Emerging Market Debt Range 1.0% - 7.0%*		
Stone Harbor Global Funds	Emerging Markets	107,438	1.9%			
Total Emerging Market Debt		**$265,849**	**4.8%**	**4.0%**	**0.8%**	**$44,748**
TOTAL FIXED INCOME		**$1,236,574**	**22.4%**	**24.0%**	**(1.6%)**	**($90,033)**
Gresham Commodity Builder Fund	Active	98,477	1.8%	*Commodities Range 0.0% - 6.0%*		
Wellington Trust Company (WTC)	Active	206,904	3.7%			
TOTAL COMMODITIES		**$305,381**	**5.5%**	**4.0%**	**1.5%**	**$84,280**
Aristeia International Ltd	Hedge Fund - Direct	66,436	1.2%	*Hedge Fund Range 5.0% - 15.0%*		
Brevan Howard Fund Limited	Hedge Fund - Direct	67,721	1.2%			
D.E. Shaw Composite Fund	Hedge Fund - Direct	56,909	1.0%			
HBK Multi-Strategy Fund	Hedge Fund - Direct	58,416	1.1%			
Hudson Bay Enhanced Fund LP	Hedge Fund - Direct	72,350	1.3%			
Indus Pacific Opportunities Fund	Hedge Fund - Direct	40,365	0.7%			
Magnetar Structured Credit Fund	Hedge Fund - Direct	10,557	0.2%			
Myriad Opportunities Offshore Fund	Hedge Fund - Direct	9,733	0.2%			
PIMCO Commodity Alpha Fund LLC	Hedge Fund - Direct	61,736	1.1%			
PMF LTD	Hedge Fund - Direct	65,533	1.2%			
River Birch International Ltd	Hedge Fund - Direct	830	0.0%			
Sculptor Enhanced LP (Formerly OZ Domestic)	Hedge Fund - Direct	56,097	1.0%			
TOTAL HEDGE FUND		**$566,683**	**10.3%**	**10.0%**	**0.3%**	**$13,930**
ASB Capital Management	Core	166,125	3.0%	*Core Real Estate Range 3.0% - 7.0%*		
JPMCB Strategic Property Fund	Core	120,435	2.2%			
TOTAL CORE REAL ESTATE		**$286,560**	**5.2%**	**5.0%**	**0.2%**	**$10,184**
Davidson Kempner	Hedge Fund - Direct	54,479	1.0%	*CE Alpha Pool Range 0.0% - 7.0%*		
Garda Fixed Income	Hedge Fund - Direct	50,000	0.9%			
HBK Multi-Strategy Fund	Hedge Fund - Direct	50,599	0.9%			
HBK Spac Fund	Hedge Fund - Direct	50,488	0.9%			
Hudson Bay Enhanced Fund LP	Hedge Fund - Direct	54,909	1.0%			
TOTAL CE ALPHA POOL		**$260,475**	**4.7%**	**5.0%**	**(0.3%)**	**($15,901)**
Harvest Midstream	Midstream	151,287	2.7%	*Midstream Energy Range 0.0% - 7.0%*		
PIMCO Midstream	Midstream	134,321	2.4%			
TOTAL MIDSTREAM ENERGY		**$285,608**	**5.2%**	**0.0%**	**5.2%**	**$285,608**
Aristeia Select Opportunities II LP	Opportunistic	48,429	0.9%	*Opportunistic Range 0.0% - 10.0%*		
DB Investor's Fund IV	Opportunistic	37,176	0.7%			
TSSP Adjacent Opportunities Partners (D)	Opportunistic	60,512	1.1%			
TOTAL OPPORTUNISTIC		**$146,117**	**2.6%**	**0.0%**	**2.6%**	**$146,117**
Abbott Capital Funds	Private Equity Fund of Funds	34,195	0.6%	*Private Equity Range 0.0% - 10.0%*		
Brighton Park	Private Equity	18,306	0.3%			
LGT Crown Global	Private Equity	9,828	0.2%			
Pantheon Funds	Private Equity Fund of Funds	14,039	0.3%			
Peak Rock	Private Equity	4,400	0.1%			
Vista	Private Equity	9,102	0.2%			
Warren Equity Partners	Private Equity	8,576	0.2%			
TOTAL PRIVATE EQUITY		**$98,446**	**1.8%**	**5.0%**	**(3.2%)**	**($177,930)**
Blue Torch Credit Opportunites	Private Credit	13,806	0.2%	*Private Credit Range 0.0% - 10.0%*		
Brookfield Real Estate Finance Fund V	Private Credit	25,753	0.5%			
Colony Distressed Credit Fund	Private Credit	50,998	0.9%			
Fortress Credit Opportunities Fund V	Private Credit	6,435	0.1%			
Fortress Lending Fund II (A)	Private Credit	28,781	0.5%			
H.I.G Bayside Loan Opportunity Fund	Private Credit	32,243	0.6%			
Magnetar Constellation Fund V	Private Credit	39,103	0.7%			
TSSP Adjacent Opportunities Partners (B)	Private Credit	38,386	0.7%			
TOTAL PRIVATE CREDIT		**$235,505**	**4.3%**	**5.0%**	**(0.7%)**	**($40,871)**
Covenant Apartment Fund	Private Real Estate	17,345	0.3%	*Private Real Estate Range 0.0% - 10.0%*		
Invesco Real Estate Funds III & IV	Private Real Estate	15,421	0.3%			
KCERA Property	Private Real Estate	4,629	0.1%			
Landmark Real Estate Partners VIII	Private Real Estate	19,045	0.3%			
Long Wharf Real Estate Partners VI	Private Real Estate	12,612	0.2%			
Singerman Real Estate Opportunity Fund IV	Private Real Estate	184	0.0%			
TOTAL PRIVATE REAL ESTATE		**$69,236**	**1.3%**	**5.0%**	**(3.7%)**	**($207,140)**
Northern Trust STIF	Short Term	27,818	0.5%	*Cash Range 0.0% - 5.0%*		
BlackRock Short Duration	Short Term	119,707	2.2%			
Parametric	Overlay	207,770	3.8%			
Treasurers Pooled Cash	Short Term	2,060	0.0%			
Wells Fargo Bank	Short Term	1,372	0.0%			
TOTAL CASH AND OVERLAY		**$358,727**	**6.5%**	**0.0%**	**6.5%**	**$358,727**
Transition Accounts	Liquidation	489	0.0%			
Other		**$489**	**0.0%**	**0.0%**	**0.0%**	**$489**
As Allocated to Managers **		**$5,527,529**	**100.0%**	**100.0%**	**0.0%**	**$0**

*This report reflects the strategic asset allocation policy adopted by the Board of Retirement April 2020.

****Physical securities market value only. Does not include notional market values of the overlay or capital efficiency program**

KCERA
Operating Expense Budget Status Report
For the Month Ended October 31, 2021

Expense Type	Budget FY 2021/22	Expenses	Over (Under)
Staffing			
Salaries	$ 3,000,135	$768,064	$ (2,232,071)
Benefits	2,098,829	473,733	(1,625,096)
Temporary staff	100,000	12,428	(87,572)
Staffing Total	**5,198,964**	**1,254,225**	**(3,944,739)**
Staff Development			
Education & Professional Development	57,500	5,559	(51,941)
Staff Appreciation	2,500	486	(2,014)
Staff Development Total	**60,000**	**6,045**	**(53,955)**
Professional Fees			
Actuarial fees	190,000	21,769	(168,231)
Audit fees	49,000	28,812	(20,188)
Consultant fees	125,000	10,250	(114,750)
Legal fees	80,000	4,136	(75,864)
Professional Fees Total	**444,000**	**64,967**	**(379,033)**
Office Expenses			
Building expenses	72,000	34,279	(37,721)
Communications	33,100	5,524	(27,576)
Equipment lease	13,000	3,840	(9,160)
Equipment maintenance	2,000	2,000	-
Memberships	16,000	8,770	(7,230)
Office supplies & misc. admin.	54,540	15,771	(38,769)
Payroll & accounts payable fees	22,800	2,961	(19,839)
Other Services - Kern County	100,000	5,586	(94,414)
Postage	25,000	1,423	(23,577)
Subscriptions	13,500	1,941	(11,559)
Utilities	50,000	13,795	(36,205)
Office Expense Total	**401,940**	**95,889**	**(306,051)**
Insurance	**138,385**	**146,228**	**7,843**
Member Services			
Disability- legal fees	50,000	1,181	(48,819)
Disability – professional services	45,000	8,050	(36,950)
Disability- administration MMRO	130,800	-	(130,800)
Member communications	20,000	1,528	(18,472)
Member Services Total	**245,800**	**10,759**	**(235,041)**
Systems			
Audit – security & vulnerability scan	15,000	-	(15,000)
Business continuity expenses	14,700	8,740	(5,960)
Hardware	35,775	3,417	(32,358)
Licensing & support	138,415	113,636	(24,779)
Software	95,500	74,335	(21,165)
Website design & hosting	64,700	390	(64,310)
Systems Total	**364,090**	**200,519**	**(163,571)**
Board of Retirement			
Board compensation	12,000	2,049	(9,951)
Board conferences & training	30,000	2,360	(27,640)
Board elections	35,000	-	(35,000)
Board meetings	3,500	40	(3,460)
Board of Retirement Total	**80,500**	**4,450**	**(76,050)**
Depreciation / Amortization	**646,908**	**215,029**	**(431,879)**
Total Operating Expenses	**$ 7,578,087**	**$ 1,998,110**	**$ (5,579,977)**

KCERA
CASH FLOW POSITION
October, 2021

TREASURERS POOLED CASH

Beginning Cash Balance:			**$ 1,165,074**
Employer Contributions		22,174,629	
Employee Contributions		3,121,125	
Service Purchases		130,226	
Miscellaneous - Including erroneous deposit		52,789	
Total Receipts:			**25,478,768**
Operating Expenses		(522,518)	
Investment Expenses		(561,565)	
Transfers-out		(23,500,000)	
Total Disbursements:			**(24,584,083)**
Ending Cash Balance			**$ 2,059,759**

NORTHERN TRUST

Beginning Cash Balance:			**17,565,227**
Private Equity - Distributions		850,000	
Commingled Funds - Distributions		13,379,783	
Hedge Funds - Distributions		2,798,926	
Redemption	PIMCO StockPlus	28,000,000	
Redemption	Myriad	16,319,950	
Class Action Proceeds		37,397	
Interest		7,049	
Securities Lending Earnings (NET)		50,723	
Total Receipts:			**61,443,829**
Capital Calls	Warren	(2,268,180)	
Capital Calls	Covenant	(1,800,000)	
Capital Calls	Crown Global	(4,937,851)	
Capital Calls	Singerman	(183,750)	
Capital Calls	TSSP	(3,136,000)	
Capital Calls	Blue Torch	(2,779,843)	
Capital Calls	Brighton Park	(4,081,782)	
Contribution	BlackRock Short Duration	(20,000,000)	
Contribution	Parametric	(3,000,000)	
Other Expenses		(5,081)	
Transfers-out		(9,000,000)	
Total Disbursements:			**(51,192,486)**
Ending Cash Balance			**$ 27,816,570**

WELLS FARGO BANK

Beginning Cash balance:			**$ 1,372,017**
Transfer-In		32,500,000	
Total Receipts:			**32,500,000**
Pension Payments		(32,339,799)	
Lump Sum Payments		(568,250)	
Bank Service Charges		(1,564)	
Cash Clearing (NET) *		152,371	
Total Disbursements:			**(32,757,242)**
Ending Cash Balance			**$ 1,114,775**

KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
INVESTMENT FEES CASH FLOW REPORT
FOR THE MONTH ENDED OCTOBER, 2021

Description	July	August	September	October	Total
Investment Base Fees:					
Domestic Equity:					
AllianceBernstein	$ 221,668				$ 221,668
Henderson Geneva Capital		124,076			124,076
Mellon Capital	135,800				135,800
International Equity:					
BlackRock			65,882		65,882
Fidelity Institutional Asset Management					-
Fixed Income:					
Mellon Capital (Ag Bond)	11,876				11,876
Pacific Investment Management Company		284,673			284,673
Western Asset Management			219,911		219,911
Commodities:					
Wellington Trust Company		364,698			364,698
Real Estate:					
ASB Capital Management		242,926			242,926
Midstream Energy:					-
Harvest Midstream	187,309			233,264	420,573
Overlay					
Parametric				77,171	
Subtotal	**556,653**	**1,016,373**	**285,794**	**310,435**	**2,169,255**
Investment Professional Fees:					
Consulting:					
Abel Noser			7,500	7,500	
Albourne America LLC	33,333	33,333	33,333	33,333	133,333
Cambridge Associates				168,750	168,750
Glass, Lewis & Co.					-
Verus	34,167	34,167	34,167	34,167	136,667
Custodial:					
The Northern Trust Co.	228,542		111,875		340,417
Legal:					
Foley & Lardner LLP					-
Hanson Bridgett LLP			2,220	7,380	9,600
Nossaman LLP	1,148		28,137		29,285
Due Diligence / Investment-Related Travel:					-
Subtotal	**297,190**	**67,500**	**217,232**	**251,130**	**833,051**
Total Investment Fees	**$ 853,843**	**$ 1,083,873**	**$ 503,025**	**$ 561,565**	**$ 3,002,306**

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

GOVERNMENT FINANCE OFFICERS ASSOCIATION

NEWS RELEASE

FOR IMMEDIATE RELEASE

6/24/2021

For more information contact:
Michele Mark Levine, Director/TSC
Phone: (312) 977-9700
Fax: (312) 977-4806
Email: mlevine@gfoa.org

(Chicago, Illinois)—Government Finance Officers Association of the United States and Canada (GFOA) has awarded the Certificate of Achievement for Excellence in Financial Reporting to **Kern County Employees' Retirement Association** for its comprehensive annual financial report for the fiscal year ended June 30, 2020. The report has been judged by an impartial panel to meet the high standards of the program, which includes demonstrating a constructive "spirit of full disclosure" to clearly communicate its financial story and motivate potential users and user groups to read the report.

The Certificate of Achievement is the highest form of recognition in the area of governmental accounting and financial reporting, and its attainment represents a significant accomplishment by a government and its management.

Government Finance Officers Association (GFOA) advances excellence in government finance by providing best practices, professional development, resources, and practical research for more than 21,000 members and the communities they serve.

Date: December 8, 2021

To: Trustees, Board of Retirement

From: Daryn Miller, Chief Investment Officer

Subject: **Annual Fee Disclosure FY 2020-2021**

The following report provides fee disclosure information for the Kern County Employees' Retirement Association alternative investments for the 2020-2021 fiscal year, and fulfills the reporting requirement under California Government Code Section ("Section") 7514.7.

As background, on September 14, 2016, Assembly Bill 2833 was signed into law, and went into effect on January 1, 2017 as Section 7514.7. The purpose of the law was to increase fee transparency of alternative investments for public pension plans. The law requires that at least annually public pension plans disclose the fees and expenses paid to alternative investment managers for new alternative investment contracts or new capital commitments made after January 1, 2017. In addition, investment information per Section 6254.26 which was previously disclosable, is to be reported in the annual fee disclosure.

The report in Appendix A is the fiscal year 2020-2021 annual fee disclosure report for the Kern County Employees' Retirement Association.

Appendix A

Kern County Employees' Retirement Association
Alternative Investment Fees and Expenses
Fiscal Year 2020-2021

Investment Name	Address
§6254.26(b)(1)	§6254.26(b)(1)
Abbott Capital Private Equity Fund IV	1290 Avenue of the Americas, 9th Floor, New York, NY, 10104, United States
Abbott Capital Private Equity Fund V	1290 Avenue of the Americas, 9th Floor, New York, NY, 10104, United States
Abbott Capital Private Equity Fund VI	1290 Avenue of the Americas, 9th Floor, New York, NY, 10104, United States
Aristeia International Limited	One Greenwich Plaza, Third Floor, Greenwich, CT, 06830, United States
Blue Torch Credit Opportunities Fund II	430 Park Avenue, Suite 1202, New York, 10022, NY, United States
Brevan Howard Fund Limited	37 Esplanade, 6th Floor, Channel Islands, Saint Helier, JE2 3QA, Jersey
Brighton Park Capital Fund I	330 Railroad Ave, Suite 200, Greenwich, CT, 06830, United States
Brookfield Real Estate Finance Fund V	Brookfield Place, 250 Vesey Street, 15th Floor, New York, NY, 10281, United States
Cevian Capital Fund II LP	4 Bond Street, Saint Helier, Jersey
Colony Distressed Credit and Special Situations Fund IV	590 Madison Avenue, 34th Floor, New York, NY, 10022, United States
Covenant Apartment Fund X	4515 Harding Road, Suite 210, Nashville, 37205, TN, United States
Crown Global Secondaries V	Schützenstrasse 6, P.O. Box, Pfäffikon, CH-8808, Switzerland
Davidson Kempner Inst Partners LP	520 Madison Avenue, 30th Floor, NY, 10022, United States
DB Investors Fund IV LP	655 Third Avenue, 11th Floor, New York, NY, 10017, United States
DE Shaw Composite Fund LLC	1166 Avenue of the Americas, Ninth Floor, New York, NY, 10036, United States
Fortress Credit Opportunities Fund V Expansion	5221 North O'Conner Boulevard, Irving, TX, 75039, United States
Fortress Lending Fund II	5221 North O'Conner Boulevard, Irving, TX, 75039, United States
HBK Multi-Strategy Fund LP	North Filed Street, Suite 2200, Dallas, TX, 75201, United States
HBK Opportunities Platform L.P	North Filed Street, Suite 2200, Dallas, TX, 75201, United States
HIG Bayside Loan Opportunity Fund V (Europe)	1450 Brickell Avenue, 31st Floor, Miami, FL, 33131, United States
Hudson Bay Cap Structure Arbitrage	777 Third Avenue, 35th Floor, New York, NY, 10017, United States
Indus Pacific Opportunities Fund LP	888 Seventh Avenue, 26th Floor, New York, NY, 10019, United States
Invesco Real Estate Fund III, L.P.	Two Peachtree Pointe, Suite 1800, Atlanta, GA, 30309, United States
Invesco Real Estate Fund IV	2001 Ross Avenue, Suite 3400, Dallas, TX, 75201, United States
Landmark Real Estate Fund VIII	10 Mill Pond Lane, Simsbury, CT, 06070, United States
Long Wharf Real Estate Partners VI	One Federal Street, 26th Floor, Boston, MA, 02110, United States
Magnetar Constellation Fund V	1603 Orrington Avenue, 13th Floor, Evanston, IL, 60201, United States
Magnetar Structured Credit Fund LP	1603 Orrington Avenue, 13th Floor, Evanston, IL, 60201, United States
Myriad Opportunities Offshore Fund Limited	50 Connaught Road Central, Agricultural Bank of China Tower, 15th Floor, HK
Pantheon Global Secondary Fund III	10 Finsbury Square, 4th Floor, London, EC2A 1AF, United Kingdom
Pantheon USA Fund III	600 Montgomery Street, 23rd Floor, San Francisco, CA 94111, CA, United States
Pantheon USA Fund V	600 Montgomery Street, 23rd Floor, San Francisco, CA, 94111, United States
Pantheon USA Fund VI	600 Montgomery Street, 23rd Floor, San Francisco, CA, 94111, United States
Pantheon USA Fund VII	600 Montgomery Street, 23rd Floor, San Francisco, CA, 94111, United States
Peak Rock Capital Fund III	13413 Galleria Circle, Suite Q-300, Austin, 78738, TX, United States
Pharo Macro Fund	1370 Avenue of the Americas, Floor 26, New York, NY, 10019, United States
PIMCO Commodity Alpha Fund LLC	650 Newport Center Drive, Newport Beach, CA, 92660, United States
River Birch International Ltd	1114 Avenue of the Americas, 41st Floor, New York, NY, 10036, United States
Sculptor Enhanced Domestic Partners LP	9 West 57th Street, 39th Floor, New York, NY, 10019, United States
Systematica Trend Following Fund LP	29 Esplanade, Saint Helier, JE2 3QA, Jersey
TSSP Adjacent Opportunities Partners (B)	345 California Street, Suite 3300, San Francisco, CA, 94104, United States
TSSP Adjacent Opportunities Partners [D]	345 California Street, Suite 3300, San Francisco, CA, 94104, United States
Vista Foundation Fund IV	401 Congress Avenue, Suite 3100, Austin, 78701, TX, United States
Warren Equity Partners Fund III	1030 2nd Street South, Suite 201, Jacksonville Beach, FL, 32250, United States

Includes data calculated by KCERA or a third party.

Appendix A, continued

Kern County Employees' Retirement Association
Alternative Investment Fees and Expenses
Fiscal Year 2020-2021

Investment Name	Vintage Year	Commitment	Contributions	Distributions	Distributions & remaining value
			since inception	*fiscal year*	
§6254.26(b)(1)	§6254.26(b)(1)	§6254.26(b)(2)	§6254.26(b)(3)	§6254.26(b)(4)	§6254.26(b)(5)
Abbott Capital Private Equity Fund IV	2001	50,000,000	49,650,000	0	86,828,655
Abbott Capital Private Equity Fund V	2005	65,000,000	62,790,000	3,769,575	94,052,442
Abbott Capital Private Equity Fund VI	2009	50,000,000	49,750,000	11,742,284	97,954,215
Aristeia International Limited	2014	47,000,002	47,000,002	0	66,028,661
Blue Torch Credit Opportunities Fund II	2020	20,000,000	9,200,176	1,073,562	9,591,575
Brevan Howard Fund Limited	2015	50,361,120	50,361,120	0	67,194,167
Brighton Park Capital Fund I	2019	30,000,000	13,727,310	628,113	16,465,164
Brookfield Real Estate Finance Fund V	2016	50,000,000	37,272,929	6,371,649	42,405,579
Cevian Capital Fund II LP	2015	21,000,000	21,000,000	0	33,776,678
Colony Distressed Credit and Special Situations Fund IV	2015	60,000,000	73,340,099	0	75,001,153
Covenant Apartment Fund X	2020	30,000,000	11,100,000	0	11,057,480
Crown Global Secondaries V	2020	50,000,000	4,250,000	0	6,950,589
Davidson Kempner Inst Partners LP	2020	50,000,000	21,000,000	0	54,575,257
DB Investors Fund IV LP	2020	20,000,000	20,000,000	0	38,888,067
DE Shaw Composite Fund LLC	2013	22,500,000	22,500,000	0	58,336,522
Fortress Credit Opportunities Fund V Expansion	2020	40,000,000	6,000,000	0	6,434,771
Fortress Lending Fund II	2020	40,000,000	16,000,000	357,068	16,831,643
HBK Multi-Strategy Fund LP	2013	42,400,000	42,400,000	0	54,491,317
HBK Opportunities Platform L.P	2021	50,000,000	50,000,000	0	50,773,052
HIG Bayside Loan Opportunity Fund V (Europe)	2018	60,000,000	31,619,236	2,732,049	40,092,629
Hudson Bay Cap Structure Arbitrage	2019	120,000,000	120,000,000	-20,000,000	144,576,519
Indus Pacific Opportunities Fund LP	2014	22,000,000	22,000,000	0	40,202,150
Invesco Real Estate Fund III, L.P.	2012	60,000,000	55,519,583	8,434,726	81,575,410
Invesco Real Estate Fund IV	2014	50,000,000	43,637,717	3,557,424	58,914,329
Landmark Real Estate Fund VIII	2016	60,000,000	28,588,360	4,426,453	34,129,787
Long Wharf Real Estate Partners VI	2019	50,000,000	16,650,149	5,748,266	18,871,528
Magnetar Constellation Fund V	2017	60,000,000	61,898,469	17,615,054	73,194,923
Magnetar Structured Credit Fund LP	2014	17,000,000	17,000,000	-2,910,929	26,339,681
Myriad Opportunities Offshore Fund Limited	2016	55,000,000	55,000,000	-31,404,700	65,978,193
Pantheon Global Secondary Fund III	2006	50,000,000	47,300,000	500,000	52,826,168
Pantheon USA Fund III	1998	7,500,000	7,335,000	0	8,251,434
Pantheon USA Fund V	2002	25,000,000	24,350,000	0	38,386,219
Pantheon USA Fund VI	2004	35,000,000	33,075,000	1,680,000	51,186,130
Pantheon USA Fund VII	2006	50,000,000	46,600,000	5,950,001	87,065,449
Peak Rock Capital Fund III	2020	30,000,000	1,002,347	0	860,276
Pharo Macro Fund	2020	50,000,000	50,000,000	0	66,180,117
PIMCO Commodity Alpha Fund LLC	2016	50,000,000	50,000,000	-17,000,000	80,253,692
River Birch International Ltd	2015	26,000,000	26,000,000	-151,286	27,663,087
Sculptor Enhanced Domestic Partners LP	2018	42,542,726	42,542,726	-5,000,000	60,115,203
Systematica Trend Following Fund LP	2018	21,181,604	21,181,604	-12,020,382	22,020,382
TSSP Adjacent Opportunities Partners (B)	2014	150,000,000	71,271,093	19,514,968	83,778,385
TSSP Adjacent Opportunities Partners [D]	2014	50,000,000	62,259,107	15,211,684	73,082,714
Vista Foundation Fund IV	2019	25,000,000	7,243,695	0	6,513,991
Warren Equity Partners Fund III	2020	32,500,000	6,729,903	0	6,020,389

Includes data calculated by KCERA or a third party.

Appendix A, continued

Kern County Employees' Retirement Association
Alternative Investment Fees and Expenses
Fiscal Year 2020-2021

Investment Name	Cash profit received	Investment multiple %	Net IRR	Gross IRR	Net management fees
	fiscal year	*since inception*	*since inception*	*since inception*	*fiscal year*
§6254.26(b)(1)	§6254.26(b)(9)	§6254.26(b)(7)	§6254.26(b)(6) §7514.7(b)	§7514.7(b)	§6254.26(b)(8) §7514.7(a)(1)
Abbott Capital Private Equity Fund IV	-113,824	174.9%	11.1%	12.9%	398
Abbott Capital Private Equity Fund V	2,636,254	149.8%	7.0%	8.4%	36,291
Abbott Capital Private Equity Fund VI	13,724,636	196.9%	13.9%	16.2%	376,553
Aristeia International Limited	11,732,360	140.5%	5.8%	8.3%	645,164
Blue Torch Credit Opportunities Fund II	391,401	104.3%	12.6%	17.2%	29,039
Brevan Howard Fund Limited	3,613,542	133.4%	7.3%	11.1%	997,490
Brighton Park Capital Fund I	2,737,854	119.9%	28.7%	49.5%	900,748
Brookfield Real Estate Finance Fund V	1,985,818	113.8%	8.2%	11.1%	396,861
Cevian Capital Fund II LP	10,762,198	160.8%	7.9%	10.7%	345,123
Colony Distressed Credit and Special Situations Fund IV	-5,338,222	102.3%	1.0%	3.0%	799,056
Covenant Apartment Fund X	-42,520	99.6%	-1.1%	4.6%	265,625
Crown Global Secondaries V	2,700,589	163.5%	0.0%	0.0%	145,833
Davidson Kempner Inst Partners LP	4,575,257	259.9%	16.2%	22.3%	453,808
DB Investors Fund IV LP	18,955,275	194.4%	55.8%	61.2%	0
DE Shaw Composite Fund LLC	8,680,091	259.3%	12.9%	20.7%	1,540,023
Fortress Credit Opportunities Fund V Expansion	434,771	107.2%	33.9%	49.4%	12,800
Fortress Lending Fund II	831,643	105.2%	12.4%	17.9%	66,436
HBK Multi-Strategy Fund LP	5,424,658	128.5%	4.3%	9.5%	706,053
HBK Opportunities Platform L.P	773,052	101.5%	29.2%	35.0%	112,763
HIG Bayside Loan Opportunity Fund V (Europe)	7,462,701	126.8%	56.7%	24.6%	413,560
Hudson Bay Cap Structure Arbitrage	14,721,593	120.5%	14.8%	22.4%	1,142,397
Indus Pacific Opportunities Fund LP	11,067,219	182.7%	10.2%	14.3%	513,740
Invesco Real Estate Fund III, L.P.	5,105,700	146.9%	13.6%	17.6%	26,235
Invesco Real Estate Fund IV	2,598,207	135.0%	12.1%	15.8%	356,377
Landmark Real Estate Fund VIII	2,673,864	119.4%	16.4%	26.0%	600,000
Long Wharf Real Estate Partners VI	3,360,090	113.3%	17.5%	38.8%	748,967
Magnetar Constellation Fund V	7,127,693	118.2%	8.0%	10.7%	690,456
Magnetar Structured Credit Fund LP	3,579,142	154.9%	9.1%	12.4%	141,987
Myriad Opportunities Offshore Fund Limited	14,282,761	120.0%	5.3%	8.2%	503,945
Pantheon Global Secondary Fund III	-39,500	111.7%	2.0%	4.4%	6,094
Pantheon USA Fund III	-5,050	112.5%	1.9%	3.7%	0
Pantheon USA Fund V	-33,322	157.6%	9.0%	11.4%	0
Pantheon USA Fund VI	39,635	154.8%	6.8%	8.5%	3,964
Pantheon USA Fund VII	5,620,039	186.8%	10.3%	12.4%	233,497
Peak Rock Capital Fund III	-142,071	85.8%	0.0%	0.0%	74,997
Pharo Macro Fund	1,734,716	132.4%	2.7%	6.6%	1,154,491
PIMCO Commodity Alpha Fund LLC	8,770,626	160.5%	10.2%	14.1%	1,041,731
River Birch International Ltd	24,123	106.4%	-0.3%	1.2%	6,647
Sculptor Enhanced Domestic Partners LP	8,635,018	141.3%	14.8%	19.5%	706,186
Systematica Trend Following Fund LP	-80,283	104.0%	2.1%	2.6%	15,376
TSSP Adjacent Opportunities Partners (B)	11,448,690	117.5%	33.9%	53.2%	1,257,807
TSSP Adjacent Opportunities Partners [D]	5,876,074	117.4%	12.8%	19.4%	528,008
Vista Foundation Fund IV	-729,704	89.9%	0.0%	0.0%	674,297
Warren Equity Partners Fund III	-709,514	89.5%	-38.2%	0.0%	280,937

Includes data calculated by KCERA or a third party.

Appendix A, continued

Kern County Employees' Retirement Association
Alternative Investment Fees and Expenses
Fiscal Year 2020-2021

Investment Name §6254.26(b)(1)	**Fund expenses** *fiscal year* §6254.26(b)(8) §7514.7(a)(2)	**Profit sharing** *fiscal year* §7514.7(a)(3)	**Fund-level fees and expenses paid to manager** *fiscal year* §7514.7(a)(4)	**Inv-level fees and expenses paid to manager** *fiscal year* §7514.7(a)(4)
Abbott Capital Private Equity Fund IV	2,436	0	398	0
Abbott Capital Private Equity Fund V	9,767	162,333	36,291	0
Abbott Capital Private Equity Fund VI	9,230	1,249,866	376,553	0
Aristeia International Limited	179,949	2,774,726	0	0
Blue Torch Credit Opportunities Fund II	36,462	0	29,039	0
Brevan Howard Fund Limited	378,818	2,888,911	0	0
Brighton Park Capital Fund I	178,164	61,496	1,021,552	5,586
Brookfield Real Estate Finance Fund V	65,513	0	396,861	0
Cevian Capital Fund II LP	15,153	0	0	0
Colony Distressed Credit and Special Situations Fund IV	34,958	0	799,056	0
Covenant Apartment Fund X	76,086	0	265,625	0
Crown Global Secondaries V	471,716	0	145,833	0
Davidson Kempner Inst Partners LP	23,856	242,685	0	0
DB Investors Fund IV LP	96,040	246,339	0	0
DE Shaw Composite Fund LLC	110,481	3,564,743	0	0
Fortress Credit Opportunities Fund V Expansion	66,952	0	12,800	0
Fortress Lending Fund II	377,059	0	66,436	0
HBK Multi-Strategy Fund LP	134,093	879,517	0	0
HBK Opportunities Platform L.P	100,413	0	0	0
HIG Bayside Loan Opportunity Fund V (Europe)	162,400	159,143	413,560	0
Hudson Bay Cap Structure Arbitrage	472,599	6,999,488	0	0
Indus Pacific Opportunities Fund LP	66,161	1,630,620	0	0
Invesco Real Estate Fund III, L.P.	53,557	5,430,649	26,235	0
Invesco Real Estate Fund IV	41,362	0	356,377	0
Landmark Real Estate Fund VIII	15,397	0	600,000	0
Long Wharf Real Estate Partners VI	44,124	0	748,967	0
Magnetar Constellation Fund V	227,704	0	690,456	0
Magnetar Structured Credit Fund LP	48,783	357,753	0	0
Myriad Opportunities Offshore Fund Limited	78,123	198,236	0	0
Pantheon Global Secondary Fund III	23,491	0	6,094	0
Pantheon USA Fund III	4,593	0	0	0
Pantheon USA Fund V	74	0	0	0
Pantheon USA Fund VI	20,523	0	3,964	0
Pantheon USA Fund VII	17,494	0	233,497	0
Peak Rock Capital Fund III	67,074	0	74,997	0
Pharo Macro Fund	41,921	1,607,635	0	0
PIMCO Commodity Alpha Fund LLC	138,715	1,499,847	0	0
River Birch International Ltd	18,266	0	0	0
Sculptor Enhanced Domestic Partners LP	459,064	2,185,236	0	0
Systematica Trend Following Fund LP	0	0	0	0
TSSP Adjacent Opportunities Partners (B)	292,669	305,607	1,288,588	0
TSSP Adjacent Opportunities Partners [D]	90,936	405,058	541,243	0
Vista Foundation Fund IV	51,004	0	674,297	0
Warren Equity Partners Fund III	144,622	0	620,944	0

Includes data calculated by KCERA or a third party.

Kern County Employees' Retirement Association
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TTY Relay (800) 735-2929
www.kcera.org

Date: December 8, 2021

To: Trustees, Board of Retirement

From: Daryn Miller, Chief Investment Officer

Subject: **Annual On-Site Due Diligence Schedule**

The KCERA Due Diligence & Service Provider Selection Policy requires that "Staff shall annually provide the Board with a three-year calendar of scheduled on-site due diligence visits, and shall ensure the Board is provided a summary report on the results of each such visit." *Due Diligence & Service Provider Selection Policy, page 2, item 9.*

Per the policy, on-site due diligence is required for investment consultants every five years, and for "other service providers--as deemed necessary by Staff or the Board".

The Plan currently has three investment consultants, Albourne (hedge funds), Cambridge Associates (private markets), and Verus (general investment consultant).

Investment Consultant	Planned On-Site Due Diligence	Location
Albourne	2026 calendar year	San Francisco
Cambridge Associates	2024 calendar year	Boston
Verus	2021 calendar year	Los Angeles or Seattle

Note: On-site due diligence may have complications due to COVID-19 restrictions, in which case virtual video conference due diligence meetings may be utilized.

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www.kcera.org

Date: December 8, 2021

To: Trustees, Board of Retirement

From: Daryn Miller, Chief Investment Officer

Subject: **On-Site Due Diligence – Albourne America**

Executive Summary:

Per the Due Diligence & Service Provider Selection Policy, investment staff is required to complete on-site due diligence once every five years for all investment consultants. Due to COVID-19 travel restrictions, on November 18, 2021, staff met virtually with multiple Albourne team members. Staff's opinion is that Albourne America is a leader in the hedge fund space was reaffirmed during our meeting.

Background:

Albourne has been KCERA's hedge fund consultant since 2012. Albourne advises on two portions of KCERA's portfolio, Hedge Funds and Alpha Pool. These two allocations are an important component of the overall KCERA investment program, which includes a target allocation of 10% to Hedge Funds and a 5% allocation to the Alpha Pool.

Albourne Partners Limited was established in London in 1994, as an independent specialist consultant focused on alternative investments. Albourne America LLC was incorporated in California in 2001. The firm is one of the largest independent alternatives consultants, with 11 locations worldwide, over 300 clients, and a staff of approximately 500 employees. Albourne clients include public pension plans, endowments, foundations, corporate pension plans, sovereign wealth funds, family offices, insurance companies and financial intermediaries in 29 countries – and have over $600bn invested in alternatives.

Albourne is 100% owned by employees and the Albourne Employee Benefit Trust. The firm follows a purely fixed fee non-discretionary business model, which they have remained committed to since firm founding. There has been no change in ownership, aside from increased distribution of shares to employees, or philosophy and none is planned. Albourne states that their intention is to remain an independent firm providing high-quality research and advice on complicated assets.

Meeting Summary:

Staff met with the following Albourne team members over the two-and-a-half-hour virtual diligence session; John Claisse (CEO), Travis Williamson (Head of Hedge Fund Investment Due Diligence-IDD), Adrian Sales (Head of Operational Due Diligence-ODD), Christina Panayi-Stavrinides (Head of Quantitative Due Diligence-QDD), James Walsh (Head of Portfolio Group).

Overarching comments were that Albourne continues to grow as a firm—adding headcount over the past twelve months to ensure they have the appropriate level of resources to handle their growing client needs and to be able to continue to be a leader in the alternatives research space.

Highlights of Individual Conversations:

<u>John Claisse (CEO)</u> – John stressed collegiality and teamwork being key components of the Albourne culture. They employ approximately 500 total employees, which includes roughly 90 hired in the last 18 months. They continue to expand in all areas with a focus on quantitative analysts as they continue to build robust analytics systems. John stressed the firm's 100% focus on clients and believes their model of a flat fee structure aligns with their clients and allows the firm to focus on client results and not on firm asset growth.

<u>Travis Williamson (Head of Hedge Fund IDD)</u> – Virtual due diligence has become a viable alternative to on-site due diligence, and the organization will be using a hybrid approach going forward. Albourne reiterated that while some intangibles are lost with virtual due diligence, more is gained due to their ability to include additional experts into each due diligence meeting. Albourne employs 77 IDD team members.

<u>Adrian Sales (Head of ODD)</u> – They continue to add headcount to the department as the firm continues to expand their private markets research. They currently have 128 ODD analysts and will look to continue to expand the group to ensure they have the appropriate level of resources.

<u>Christina Panayi-Stavrinides (Head of QDD)</u> – The quantitative diligence group continues to be at the forefront of quantitative diligence. They are able to gather, review, and analyze vast amounts of data from managers and produce relevant analysis. They provide a wide range of quantitative tools that clients can access and analyze their individual portfolios. They have 37 QDD analysts and two partners.

<u>James Walsh (Head of Portfolio Group)</u> – They have 37 Portfolio analysts that focus on a wide range of topics that help support clients and internal consultants. James stated that half the time they are assisting clients in various aspects of their portfolios. The remainder of their time is focused on assisting colleagues with various projects or client analysis and reporting.

Albourne Team Biographies:

John Claisse – Chief Executive Officer for the Albourne Group, Portfolio Analyst for Albourne America LLC

Education:

Dr. Claisse received a PhD in Applied Mathematics from Sussex University (UK) in 2000 and Bachelor of Science in Mathematics from Sussex University (UK) in 1996.

Business Background:

Albourne Group – Chief Executive Officer from 2015 to present
Albourne America LLC (USA) – Head of Portfolio Group 2011 to 2015
Albourne America LLC (USA) – Portfolio Analyst from 2003 to present
Albourne Partners Limited (UK) – Strategy Analyst from 1996 to 2003

Travis Williamson – Head of Hedge Fund Research, Hedge Fund Investment Due Diligence Analyst for Albourne America LLC

Education:

Mr. Williamson received a Bachelor of Arts in Economics from Lafayette College (USA) in 2001 and a Master of Business Administration from the University of Connecticut School of Business (USA) in 2008.

Professional Designations:

Mr. Williamson has earned the Chartered Alternative Investment Analyst (CAIA) designation. The CAIA designation is a professional certification offered by the CAIA Association to candidates who complete two examinations. In order to qualify for the CAIA designation candidates must pass two four-hour exams and have over one year of professional experience and a U.S. bachelor's degree (or equivalent) or four years of professional experience. In addition, CAIA designation holders agree to abide by a membership agreement, which among requirements obligates holders to abide by professional standards of conduct.

Business Background:

Albourne America LLC (USA) – Head of Hedge Fund Research from 2019 to present
Albourne America LLC (USA) – Hedge Fund Investment Due Diligence Analyst from 2013 to present
Federal Reserve Bank of New York (USA) – Senior Markets & Policy Associate from 2011 to 2013
Morgan Stanley Smith Barney (USA) – Research and Trading, Middle Markets from 2010 to 2011
Royal Bank of Canada (USA) – Senior Trader, Proprietary Trading Group from 2009 to 2010

Adrian Sales – Head of Operational Due Diligence for Albourne America LLC

Education:

Mr. Sales received a Bachelor of Arts in English Language and Literature from the University of Manchester (UK) in 1985.

Business Background:

Albourne America LLC (USA) – Head of Operational Due Diligence from 2010 to present

Albourne Partners Limited (UK) – CFO and Head of Operational Due Diligence from 2001 to 2010
Viacom Group (UK) – Finance Director, Director of International Planning, Planning and Operations Manager, Financial Controller Paramount Home Entertainment and CIC Video International from 1993 to 2000

Christina Panayi-Stavrinides – Head of Quantitative Due Diligence, Director for Albourne Partners (Cyprus) Limited

Education:
Ms. Panayi-Stavrinides received a Masters of Commerce in Economics from Randy Afrikaans University (South Africa) in 2002, a Bachelor of Commerce in Economics from Rand Afrikaans University (South Africa) in 1998 and a Bachelor of Commerce from the University of South Africa (South Africa) in 1997.
Business Background:
Albourne Partners (Cyprus) Limited (Cyprus) – Head of Quantitative Due Diligence from 2021 to present
Albourne Partners (Cyprus) Limited (Cyprus) – Director from 2018 to present
Albourne Partners (Cyprus) Limited (Cyprus) – Risk Analyst Coordinator from 2009 to 2020
Albourne Partners (Cyprus) Limited (Cyprus) – Risk Analyst from 2004 to 2009
Onyx Capital Asset Management (Cyprus) – Operational Manager, Treasury Control from 2002 to 2003
Midrand University (South Africa) – Lecturer from 2001 to 2002
Investec Bank Securities (South Africa) – Operational Risk Administrator from 1999 to 2000
Alexander Forbes (South Africa) – Head of Office Accounts from 1998 to 1999

James Walsh – Head of Portfolio Group, Portfolio Analyst for Albourne America LLC

Education:
Mr. Walsh received a Bachelor of Science in Economics from Brunel University (UK) in 1989 and a Master of Science in Economics from Birkbeck College at University of London (UK) in 1991.
Professional Designations:
Mr. Walsh has earned the Chartered Alternative Investment Analyst (CAIA) designation. The CAIA designation is a professional certification offered by the CAIA Association to candidates who complete two examinations. In order to qualify for the CAIA designation candidates must pass two four-hour exams and have over one year of professional experience and a U.S. bachelor's degree (or equivalent) or four years of professional experience. In addition, CAIA designation holders agree to abide by a membership agreement, which among requirements obligates holders to abide by professional standards of conduct.
Business Background:
Albourne America LLC (USA) – Portfolio Analyst from 2015 to present
Albourne America LLC (USA) – Head of Portfolio Group from 2014 to present
Albourne Partners Limited (UK) – Portfolio Analyst from 2012 to 2015
Cayuga Capital Partners LLP (UK) – CEO and CIO from 2010 to 2012
Cornell University (USA) – Chief Investment Officer from 2006 to 2010

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Date: December 8, 2021

To: Trustees, Board of Retirement

From: Daryn Miller, Chief Investment Officer

Subject: **Annual Investment Manager Compliance Report FY 2020-2021**

The KCERA Monitoring and Reporting Policy requires that on an annual basis the Plan's investment managers which oversee separately managed accounts, affirm they are "investing the plan assets in accordance with their mandate, investment management agreement, and regulatory requirements." *Monitoring and Reporting Policy, page 2, item 8.*

As of June 30, 2021, the Plan had 9 active separately managed accounts, managed by 6 investment managers. They include:

Investment Manager	Mandate
Alliance Bernstein	US Small Cap Value
Geneva Capital Management	US Small Cap Growth
Harvest Fund Advisors (Blackstone)	Midstream
Pacific Investment Management Company	Core Plus
Pacific Investment Management Company	Emerging Market Debt
Pacific Investment Management Company	Midstream
Parametric Portfolio Associates	Overlay and Capital Efficiency
Western Asset Management Company	Core Plus Portfolio
Western Asset Management Company	US High Yield Portfolio

Each of the firms above provided a letter certifying compliance for the 2020-2021 fiscal year. For reference, the letters are included in the Appendix. The letters may include instances where the account was not in compliance and provides the rationale for those situations.

APPENDIX

ALLIANCEBERNSTEIN®

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

September 15, 2021

Dear KCERA Board of Retirement,

AllianceBernstein L.P., as investment manager to the KCERA US Small Cap Value Separately Managed Account and Emerging Markets Strategic Core Equity Collective Investment Trust, hereby certificates the Funds were in compliance with their mandates, investment management agreements, and regulatory requirements during the period July 1, 2020 through June 30, 2021.

Best Regards,

Kyle DiGangi
Senior Vice President, Chief Compliance Officer and Counsel

Geneva

August 31, 2021

Kern County Employees' Retirement Association
Board of Retirement
1 1125 River Run Blvd.
Bakersfield, CA 93311

Compliance Certification

Dear Board of Retirement:

Please accept this certification as confirmation that Geneva Capital Management invested the plan assets it manages for the Kern County Employees' Retirement Association in compliance with the Association's investment mandate, investment management agreement and regulatory requirements during the fiscal year July 1, 2020 through June 30, 2021.

Please contact me if you have any further questions

Best regards,

Stephen J. Shenkenberg
Principal, General Counsel and Chief Compliance Officer

Cc Daryn Miller, CFA
Chief Investment Officer
Kern County Employees' Retirement Association

Matthew Pistorio, CFA
Principal, Client Portfolio Manager
Geneva Capital Managemt LLC

Blackstone Harvest

September 1, 2021

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

Re: Investment Manager Compliance – Annual Affirmation

To Whom It May Concern:

I am writing in connection with the September 18, 2020 Discretionary Advisory Agreement for Publicly Traded Midstream Energy investments as between the Kern County Employees' Retirement Association (hereinafter "KCERA") and Harvest Fund Advisors LLC (hereinafter "Harvest").

Please let this letter serve as formal affirmation that during the 2020-21 fiscal year (July 1, 2020 to June 30, 2021), Harvest invested KCERA assets in accordance with the mandate, the Discretionary Advisory Agreement, and applicable regulatory requirements.

Do not hesitate to contact me if you have any questions regarding this Affirmation.

Best regards,

Anthony Merhige
Senior Managing Director, COO

PIMCO

September 22, 2021

To: Kern County Employees' Retirement Association, Board of Retirement

Re: Kern County Employees' Retirement Association PIMCO Accounts #7350, #11148, #11178

For the 2020-2021 fiscal year (the period from 7/1/20 to 6/30/21), the accounts managed by PIMCO on behalf of the Kern County Employees' Retirement Association were invested in accordance with the mandate, IMA and regulatory requirements.

Sincerely,

____

Summer Jarratt

SVP, Account Manager

Pacific Investment Management Company LLC

PARAMETRIC

Kern County Employees Retirement Association
Annual Statement of Compliance Year Ended June 30, 2021

Parametric Portfolio Associates LLC, hereby certifies that to the best of its knowledge the investment portfolio(s) managed on behalf of Kern County Employees Retirement Association are in compliance with all investment guidelines in place for the year ending June 30, 2021.

Dated: 9/10/2021

Parametric Portfolio Associates LLC

By: Name: Ben Hammes

Title: Chief Compliance Officer, Derivatives

3600 MINNESOTA DRIVE
SUITE 325
MINNEAPOLIS, MN 55435
P 952 767 7700
F 952 767 7701
parametricportfolio.com

September 1, 2021

Kern County Employees' Retirement Association
11125 River Run Blvd.
Bakersfield, CA 93311

Re: Kern County ERA (1464)

To: Kern County Employees' Retirement Association, Board of Retirement

This letter is to certify that, to the best of our knowledge, the investment portfolio managed on behalf of the Kern County Employees' Retirement Association was in compliance with the stated mandate, investment management agreement, and regulatory requirements during 2020-21 fiscal year (07/01/2020 to 06/30/2021).

Please contact your Client Service Representative if you have any further questions.

Sincerely,

Julie H. Lai
Compliance Officer

Western Asset Management Company
385 East Colorado Blvd. Pasadena, CA 91101 • Tel: (626) 844-9400 • Fax: (626) 844-9450

September 1, 2021

Kern County Employees' Retirement Association
11125 River Run Blvd.
Bakersfield, CA 93311

Re: Kern County High Yield (1669)

To: Kern County Employees' Retirement Association, Board of Retirement

This letter is to certify that, to the best of our knowledge, the investment portfolio managed on behalf of Kern County (High Yield) was in compliance with the stated mandate, investment management agreement, and regulatory requirements during 2020-21 fiscal year (07/01/2020 to 06/30/2021).

Please contact your Client Service Representative if you have any further questions.

Sincerely,

Julie H. Lai
Compliance Officer

Western Asset Management Company
385 East Colorado Blvd. Pasadena, CA 91101 • Tel: (626) 844-9400 • Fax: (626) 844-9450

Memorandum from the
Office of the Chief Executive Officer
Dominic D. Brown

Date: December 8, 2021

To: Trustees, Board of Retirement

From: Dominic D. Brown, Chief Executive Officer

Subject: Initiation of Service Provider Evaluation Period

The Board of Retirement's Evaluation Period Policy was established to help ensure that decisions involving the selection, retention, or termination of KCERA service providers are consistent with fiduciary standards of conduct, and that service providers being considered by KCERA are treated fairly.

An "evaluation period" may be initiated by the Chief Executive Officer ("CEO") when, as here, a request for proposals (RFP) has been issued by KCERA. The CEO has initiated an evaluation period during the search for a new General Investment Consultant, as he believes it is prudent to limit communications between current or prospective service providers and KCERA board members during this time. (See Due Diligence and Service Provider Selection Policy).

Trustees are required to comply with the evaluation period restrictions upon notice of the evaluation period. (See Board Communications Policy).

> During evaluation periods, trustees shall not communicate with the specified service providers, except during board meetings, committee meetings, or KCERA-authorized due diligence visits; nor shall they accept meals, travel, hotel, or other types of gifts from the specified service providers. Notwithstanding the above, Trustees who need to communicate with such service providers for reasons unrelated to KCERA business agree to disclose such need to the Board beforehand. If circumstances do not permit timely disclosure to the Board, the trustee shall provide disclosure of the intended communication to the CEO and to the Chair or Vice-Chair.
>
> Service providers that breach this policy may be terminated by KCERA or disqualified from consideration in a search process. Board members who breach this policy may be sanctioned in accordance with the KCERA Code of Conduct.

(See Evaluation Period Policy).

Pursuant to the aforementioned policies, staff recommends your Board ratify the evaluation period instituted by Chief Executive Officer Dominic Brown and delivered to the Board on November 12, 2021.

Date: December 8, 2021

To: Trustees, Board of Retirement

From: Dominic D. Brown, Chief Executive Officer

Subject: **Retiree Appointment Extension**

This request is coming before the Board of Retirement to approve an extension of the appointment of an employee who is also a retiree of the retirement system. Your Board approved the original appointment at the regular meeting held on February 10, 2021, for a period ending on December 31, 2021. As the need for this retiree employee to continue working for KCERA still exists, an extension of the original appointment is necessary.

Operational Justification

KCERA continues to have a critical need to implement safety and security measures that were recommended to the Board of Retirement by a security consultant. In addition, the employee will continue to provide services related to the development of a comprehensive staff training plan. This particular individual worked in a safety position, but also a management position, and was previously a field training officer. These skills are essential to protect KCERA assets, as well as assist in the continuing development of a training plan that will be essential to continue to provide mission-critical services to our members during our busiest time of the year. This particular individual is uniquely suited to accomplish the objectives required by KCERA.

During the original appointment period, this individual created a draft training plan for the Member Services Division. The perimeter fencing project was also completed as part of the security recommendations. In the new extended period, this individual will finalize and implement a robust Member Services training program. Additional recommended security measures that were delayed due to permitting issues will also be finished. The employee will complete the solar and patio building projects as well. This request for an extension of the appointment is necessary to meet each of these important KCERA initiatives.

Legal Background

PEPRA generally requires retirees (who return to work for a public employer in the same retirement plan as the plan from which the retiree receives their pension benefit), resume retirement contributions and suspend their retirement benefit before being re-hired, unless the requirements and restrictions in PEPRA are met. (California Government Code section 7522.56).

PEPRA allows retirees to serve the public employer without reinstatement upon "appointment by the appointing power" of a public employer either during an emergency to prevent the stoppage of public business or because the retiree has skills need to perform work of limited duration. (Cal.Gov. Code section 7522.56(c). PEPRA also sets forth time, manner, and salary restrictions for such re-hired retirees. (Cal.Gov. Code section 7522.5(c).

When Governor Gavin Newson declared the March 4, 2020 State of Emergency due to COVID-19, he suspended several of these PEPRA restrictions. The Governor's current Executive Order, EO-N-12-21, suspends PEPRA's annual limit on hours worked and the 180-day sit-out period. Although the requirement that re-hired retirees only perform work of "limited duration" remains in effect, the recommended extension of this appointment will not exceed the two-year "limited duration" time frame.

Recommendation

Staff recommends that the Board of Retirement approve the appointment extension for Thad Kennedy in the classification of Retirement Administrative Services Manager for the remainder of the fiscal year.

Implementation of *Alameda* Decision Phase 4 – Final Analysis

KCERA | DOMINIC D. BROWN, CEO | DECEMBER 8, 2021

Phases of *Alameda* Decision Project

- Phase 1 – Resolution by Board of Retirement to implement the California Supreme Court decision. (Completed August 24, 2020)
- Phase 2 – Review all special pay allowances used by all KCERA plan sponsors and make changes to designations based on *Alameda* Decision. (Completed December 9, 2020)
- Phase 3 – Make appropriate adjustments, including Corrective Distributions, to all active and deferred member contribution accounts impacted by the *Alameda* decision. Adjust pensions for retired members on a go-forward basis.
  - Pending issues for members who retired between January 1, 2013 and August 30, 2020 with PEPRA exclusions
    - What should be done about overpaid benefits (pensions) during that time period?
    - What should be done about overpaid contributions during that time period?
- Phase 4 – Perform actuarial analysis to determine total net impact to Plan and whether any further action is necessary.

Phase 3 Status

- Much of the work for this phase is complete. However, there are repayment plans for underpaid contributions and overpaid benefits that will extend into future years.
  - Corrective Distributions (Contribution Refunds) – 1,926 processed, 132 in progress.
  - Collection of Overpaid Contributions – 1,778 processed, 283 in progress.
  - Staff prioritized members with larger corrections and those entering retirement.
  - IRS guidelines and KCERA policy, do not require repayment of overpaid contributions under $10 or recovery of overpaid benefits under $250.
  - Letters were sent to applicable members with the opportunity to change tax withholdings before payments were issued.
  - Per IRS requirements, 1099s will be issued for Corrective Distributions (refunded contributions).
- Pensions have been adjusted on a go-forward basis, for all but approximately 50 retired members (who should be adjusted by December 31, 2021).

Elements of Phase 4

- Segal has conducted actuarial analysis of the impact of the *Alameda* Decision and has issued a letter to KCERA, which is attached.
- Note: For purposes of this analysis, Segal assumed that KCERA would net overpaid contributions against overpaid benefits for members retired between January 1, 2013 and August 30, 2020 and issue net refunds in the form of Corrective Distributions, but <u>not</u> collect net benefit overpayments.
- Total Actuarial Impact of the *Alameda* Decision:
  - Total Actuarial Accrued Liability <u>reduced</u> by ~$29,000,000
  - Total Valuation Value of Assets <u>reduced</u> by ~$2,200,000
  - Funded Ratio <u>increased</u> by .23% from 64.36% to 64.59%

Phase 4 Impacts to Members

- 292 members retired between January 1, 2013 and August 30, 2020 are impacted by the *Alameda* Decision:
  - Members with net benefit overpayments:
    - Total: 259 members, $2,117,815 (Average $8,177)
      - 1 - >$100,000
      - 7 - $50,000 - $100,000
      - 52 - $10,000 - $50,000
      - 199 - $0 - $10,000
  - Members with net overpaid contributions:
    - Total: 33 members, $30,531 (Average $925)
      - 1 - >15,000
      - 0 - $2,000 - $15,000
      - 5 - $1,000 - $2,000
      - 27 - $0 - $1,000

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

November 19, 2021

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

**Re: Kern County Employees' Retirement Association (KCERA)
Phase 4 of Alameda Decision Project – Actuarial Analysis (REVISED)**

Dear Dominic:

On July 30, 2020, the California Supreme Court issued a decision in the case of Alameda County Deputy Sheriffs' Association et al. v. Alameda County Employees' Retirement Association (ACERA) and Board of Retirement of ACERA. That decision has important implications for KCERA and its members as the decision requires pension systems like KCERA to exclude certain pay items from a legacy member's compensation earnable. In the June 30, 2020 actuarial valuation, neither the assets provided by KCERA nor the liabilities Segal calculated using the membership data provided by KCERA reflected the financial impact of the California Supreme Court decision. We have been asked to calculate the impact as of June 30, 2020 based on additional financial and demographic information provided by KCERA.

Background

As part of Phase 1 of KCERA's Alameda decision project, the Board of Retirement approved a resolution on August 24, 2020 setting forth guidance for KCERA staff to implement the Alameda decision.

In Phase 2, all special pay allowances used by KCERA plan sponsors were reviewed and changes to pay code designations were made. As part of that review, changes were made as to whether certain pay codes are included or excluded in Compensation Earnable for Legacy members (membership date on or before December 31, 2012) and in Pensionable Compensation for PEPRA members (membership date on or after January 1, 2013). The changes to pay code designations were approved by the Board of Retirement at the December 9, 2020 meeting.

Phase 3 dealt with member contributions already made. As contributions are collected only on pay codes included as either Compensation Earnable for Legacy members or Pensionable Compensation for PEPRA members, adjustments were approved for all active and deferred member contribution accounts impacted by the Alameda decision. KCERA staff estimated that

$2.7 million in contributions were due from KCERA to active and deferred members as a result of certain pay codes being excluded from Compensation Earnable and Pensionable Compensation. In addition, $0.5 million in contributions were due to KCERA as a result of certain pay codes being included. Thus Phase 3 as outlined by KCERA resulted in a net $2.2 million in contribution overpayments.

KCERA staff also estimated the impact of corrections for member contributions made and member benefits paid to current payees. For payees whose net adjustment for member contributions and member benefits resulted in the member being overpaid, KCERA is proposing that the net overpayment be forgiven. KCERA staff estimated the amount of net overpayments to be forgiven to be $2.1 million. For payees whose net adjustment for member contributions and member benefits resulted in KCERA over collecting from the member, KCERA intends to refund the net over collection. KCERA staff estimated the amount of net over collections to be $30.6 thousand. In the attachments, we have only shown the impact of the $30.6 thousand that will be refunded to current payees as that is the proposed resolution for these members.

Finally, Phase 4 of the Alameda decision project is to perform an actuarial analysis to determine the total net impact to KCERA plan sponsors, to assess whether any further action would be necessary. We have calculated the impact based on data provided by KCERA reflecting the pay code reclassifications as well as the contribution adjustments also provided by KCERA. Exhibit A details the net impact of the changes in pay code reclassifications from Phase 2 and the contribution corrections from Phase 3. There was a decrease in the Unfunded Actuarial Accrued Liability (UAAL) of $26.8 million, and the ratio of the Valuation Value of Assets (VVA) to the Actuarial Accrued Liability (AAL) increased slightly from 64.36% to 64.59%.[1] The aggregate employer contribution rate decreased from 49.16% of payroll to 49.07% of payroll.[2,3] The change to the aggregate employee rate was determined to be immaterial.

Unless otherwise noted, all of the above calculations are based on the June 30, 2020 actuarial valuation results including the participant data and actuarial assumptions on which that valuation was based. That valuation and these calculations were completed under the supervision of Mark Hamwee, FSA, MAAA, Enrolled Actuary.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

1 If KCERA were to collect the $2.1 million in net overpayments from current payees, the ratio of the VVA to the AAL would increase further, from 64.59% to 64.62%.

2 We have amortized the change in UAAL over a separate 15-year declining period based on KCERA's Actuarial Funding Policy for plan amendments.

3 If KCERA were to collect the $2.1 million in net overpayments from current payees, the aggregate employer contribution rate would decrease further, from 49.07% to 49.03% of payroll.

Segal

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

Please let us know if you have any questions.

Sincerely,

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

Molly Calcagno, ASA, MAAA, EA
Actuary

MYM/hy
Enclosure

Summary of Key Valuation Results as of June 30, 2020

		Before Reflecting Impact of Alameda Decision ($ in '000s)	After Reflecting Impact of Alameda Decision ($ in '000s)	Difference ($ in '000s)
Actuarial Accrued Liability:[1]	Retired members and beneficiaries	$4,591,235	$4,583,151	-$8,084
	Inactive vested members[2]	231,940	229,821	-2,119
	Active members	2,182,414	2,163,620	-18,794
	Total Actuarial Accrued Liability	$7,005,589	$6,976,592	-$28,997
	Normal Cost for plan year beginning June 30	$128,583	$127,608	-$975
Assets:	Market Value of Assets (MVA)[3]	$4,312,314	$4,310,118	-$2,196
	Valuation Value of Assets (VVA)	$4,508,548	$4,506,352	-$2,196
Funded status:	Unfunded Actuarial Accrued Liability on Market Value of Assets basis	$2,693,275	$2,666,474	-$26,801
	Funded percentage on MVA basis	61.56%	61.78%	+0.22%
	Unfunded Actuarial Accrued Liability on Valuation Value of Assets basis	$2,497,041	$2,470,240	-$26,801
	Funded percentage on VVA basis	64.36%	64.59%	+0.23%

[1] Excludes liabilities associated with benefits paid by the Supplemental Retiree Benefits Reserve.
[2] Includes inactive members due a refund of member contributions.
[3] Excludes non-valuation reserves.

Summary of Key Valuation Results as of June 30, 2020 (continued)

		Before Reflecting Impact of Alameda Decision		After Reflecting Impact of Alameda Decision		Difference	
		Total Rate	**Estimated Annual Dollar Amount[1] ($ in '000s)**	**Total Rate**	**Estimated Annual Dollar Amount[1] ($ in '000s)**	**Total Rate**	**Estimated Annual Dollar Amount ($ in '000s)**
Employer Contribution Rates:[2]	• County General without Courts	40.38%	$170,942	40.29%	$169,260	-0.09%	-$1,682
	• Courts	40.28%	13,201	40.20%	13,096	-0.08%	-105
	• County Safety[3]	78.08%	108,481	77.84%	108,076	-0.24%	-405
	• District Category I	53.16%	3,265	52.80%	3,201	-0.36%	-64
	• District Category II	50.57%	1,295	50.12%	1,287	-0.45%	-8
	• District Category III	46.46%	13,407	45.99%	12,634	-0.47%	-773
	• District Category V	43.86%	618	43.54%	613	-0.32%	-5
	• District Category VI	60.43%	223	60.03%	221	-0.40%	-2
	• Declining Employers[4]	317.37%	530	317.37%	530	0.00%	0
	All Categories Combined	**49.16%**	**$311,962**	**49.07%**	**$308,918**	**-0.09%**	**-$3,044**

1 Based on projected annual compensation for each scenario.

2 In practice, these blended employer contribution rates for combined Tier I, Tier IIA, Tier IIB and Tier III (as applicable) are used for each category (with the exception of District Category III).

3 These contribution rates are before adjustments to phase-in over three years the UAAL contribution rate impact of new assumptions adopted for the June 30, 2020 valuation.

4 The two employers that were previously in District Category IV are now declining employers. Those employers will contribute based on the dollar contribution amounts shown (not rates).

ALTERNATIVE INVESTMENTS RECORDS

EXEMPT FROM PUBLIC DISCLOSURE

(CA Gov. Code §6254.26)
(CA Gov. Code §6255)
(CA Gov. Code §54957.5)

DO NOT REPRODUCE

DO NOT DISTRIBUTE

KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

INTRODUCTION TO VENTURE CAPITAL

PRESENTED BY ANDREA AUERBACH, INVESTMENT MANAGING DIRECTOR AND KELLY JENSEN, SENIOR INVESTMENT DIRECTOR

CAMBRIDGE ASSOCIATES

DECEMBER 2021

INTRODUCTION TO VENTURE CAPITAL

CAMBRIDGE ASSOCIATES

Why invest in venture capital?

DEFINITION

- VC represents investments made in start-up, early stage, and emerging companies and entrepreneurs
- A spectrum of opportunities exists within venture, given the potential to invest at various stages of a nascent company's development
- VC managers receive equity, or ownership stakes, in the business and provide guidance to founding teams

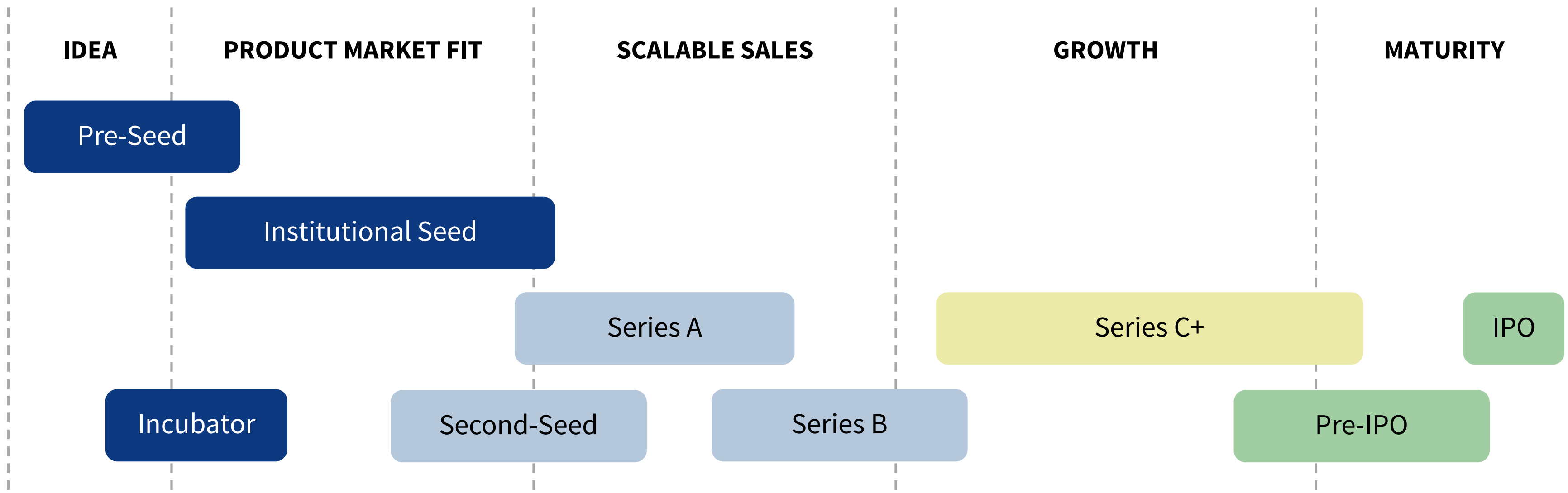
HIGH RETURN POTENTIAL

- VC continues to offer the greatest potential for outperformance relative to other illiquid asset categories
- Chances of not meeting return expectations, or even losses, are extremely high on an individual deal basis
- Funds offer improved risk dynamics with the chance for breakout portfolio companies to drive meaningful outperformance

DIFFERENTIATED EXPOSURE

- Early-stage VC can prove an effective diversifier for a portfolio, less correlated to other financial assets
- Enables access to innovation and to the most disruptive new technology and business models
- Technology and healthcare are major sectors of investment; both remain important and pervasive secular investment themes

The spectrum of opportunities within venture capital is wide



Seed-Stage

- Pre-revenue
- Business still in conceptual stages with little existing organizational structure
- Financing needed to turn idea into product or service

Early-Stage

- Pre-revenue/early revenue
- Company has been formed; product may still be in development stages; operations are still several years away
- Investments fund development of innovative ideas or technology

Late-Stage

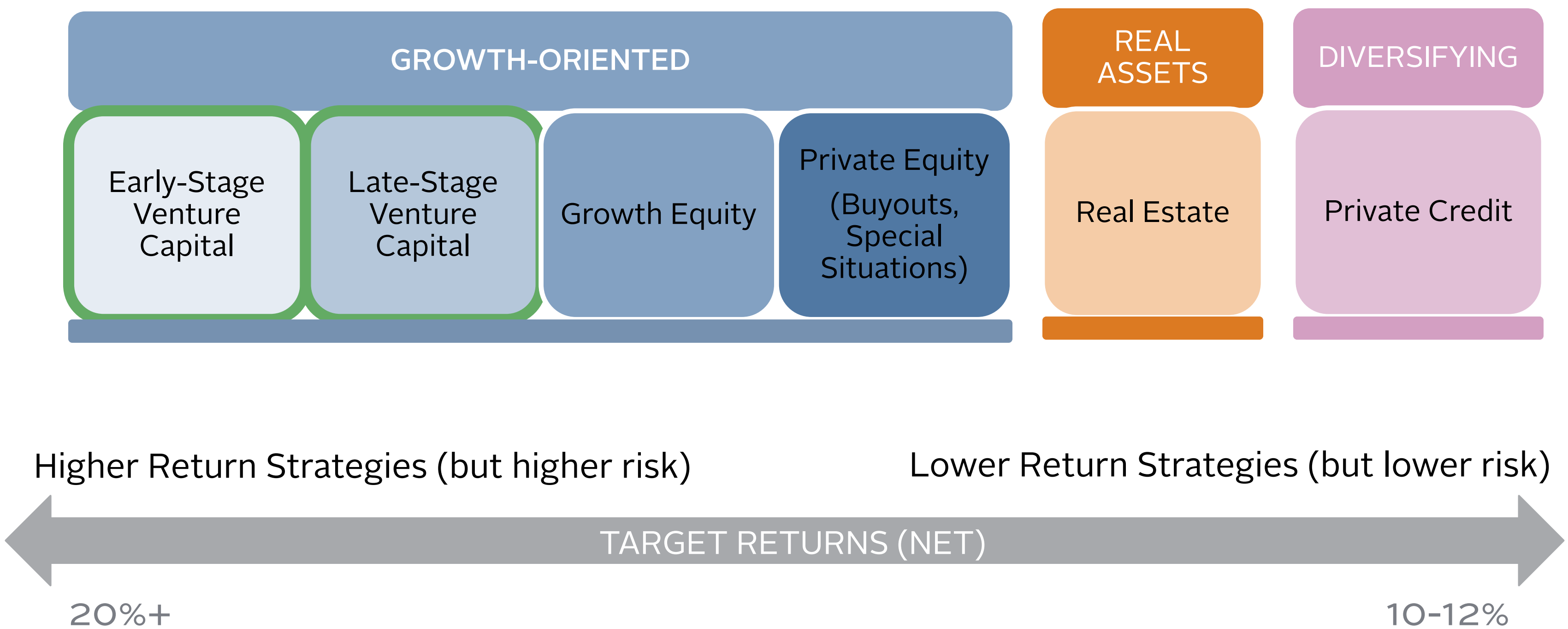
- Revenue generating but typically loss-making
- Valuations highest at this stage with VC firms hoping for a quicker return on investment relative to earlier stages
- Investments often fund build out of management and business

Growth Equity

- Healthy, profitable companies
- Often first institutional capital in “boot-strapped” companies
- Company is still private but has an operating history; company is on the verge of going public or being acquired

Source: Cambridge Associates LLC and Pear Ventures

Venture capital serves as the ultimate growth driver of a portfolio



Source: Cambridge Associates LLC
Note: KCERA's private equity portfolio targets a 12-15% net IRR, private real estate portfolio targets a 10-14% net IRR, and private credit portfolio targets a 10-12% net IRR.

Many opportunities in venture capital, but with some considerations

OPPORTUNITIES

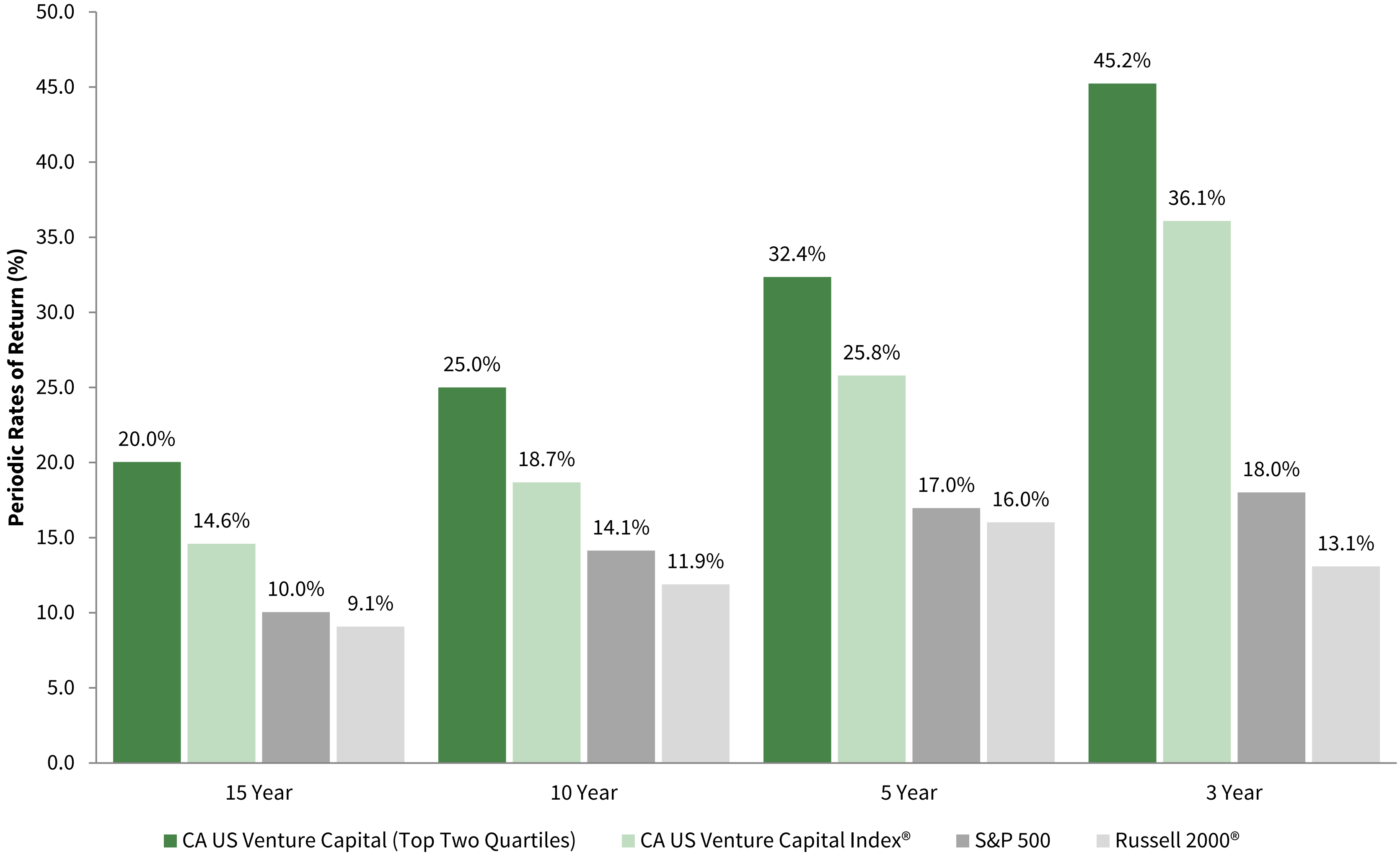
HIGH RETURN POTENTIAL	DIFFERENTIATED EXPOSURE	EXPANDED OPPORTUNITY SET	GLOBAL OPPORTUNITIES
▪ Strong aggregate returns relative to public markets and other private investment strategies over the short- and long-term (20-25 years)	▪ Waves of technology, disruption, and consumer preferences are constant and accelerating ▪ No asset class taps innovation more effectively than VC	▪ Increasing convergence among public and private technology markets, global companies, and investments with impact themes in the VC market, creating an expanded opportunity set	▪ VC industry now truly global ▪ Sustained growth and promising outlook for technology, healthcare, and education sectors, especially among sector experts

CONSIDERATIONS

LIQUIDITY RISK	RISK OF CAPITAL LOSS	VALUATION/PRICING RISK	FEES / ACCESS
▪ Early-stage companies necessitate longer-term company formation, increasing hold periods ▪ Companies are also staying private for longer; this creates a richer growth-stage market but can delay traditional exit timelines	▪ VC carries high potential for capital loss, as new company formation is difficult and costly ▪ It is not uncommon for a few investments to return a fund	▪ Pre-money valuations have significantly increased since 2006, making top performing companies costly to acquire	▪ Premium fees not uncommon ▪ Limited access to top brand firms, although less of a concern than perceived

Venture capital investments stand tall (if you know where to look)

US VENTURE CAPITAL: PERIODIC RATES OF RETURN
As of June 30, 2021

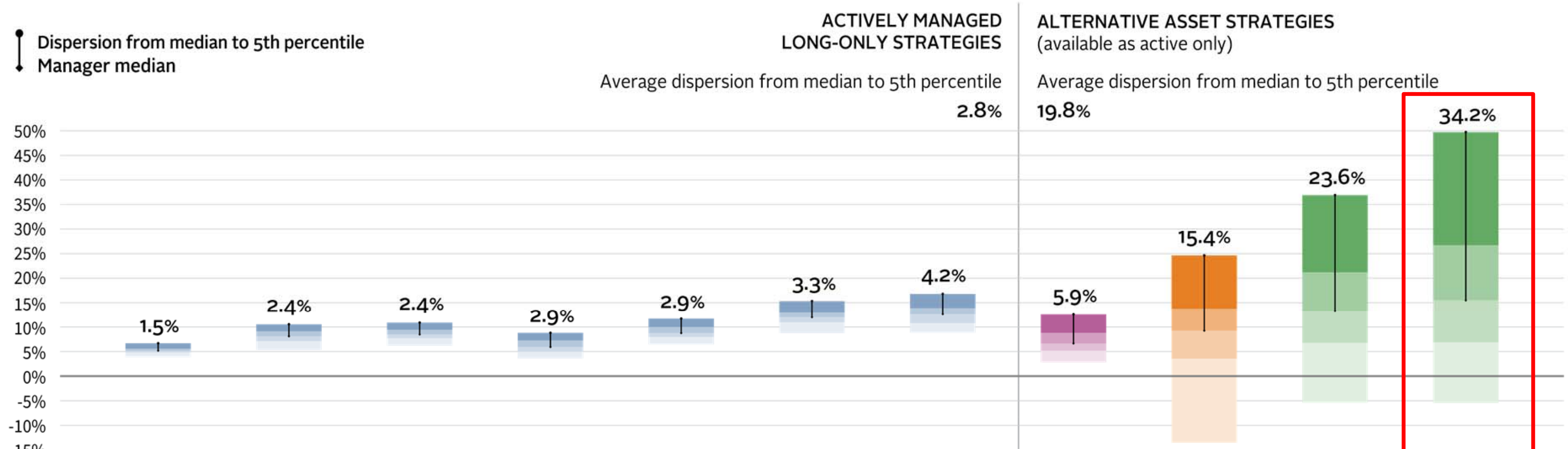


Sources: Cambridge Associates LLC Private Investments Database, Frank Russell Company, Standard & Poor's and Thomson Reuters Datastream.
Notes: Pooled private investment periodic returns are net of fees, expenses, and carried interest. Multi-year annualized returns are generated for time periods ending June 30, 2021.

Good fund selection is key, especially in venture capital

AVERAGE ANNUAL MANAGER RETURNS BY ASSET CLASS

January 1, 2006–December 31, 2020



	Core/ Core Plus Bonds	Emerging Markets	US Large Cap Value	Global ex US Equity	US Small Cap Value	US Large Cap Growth	US Small Cap Growth	Hedge Funds	Global Real Estate	Global Private Equity	Global Venture Capital
n	*147*	*43*	*201*	*130*	*131*	*163*	*102*	*250*	*770*	*1,179*	*1,031*
5th Percentile	6.7%	10.5%	10.9%	8.8%	11.7%	15.3%	16.8%	12.6%	24.7%	36.9%	49.7%
Median	5.2%	8.1%	8.5%	5.9%	8.8%	12.0%	12.6%	6.7%	9.3%	13.3%	15.5%
Dispersion	1.5%	2.4%	2.4%	2.9%	2.9%	3.3%	4.2%	5.9%	15.4%	23.6%	34.2%

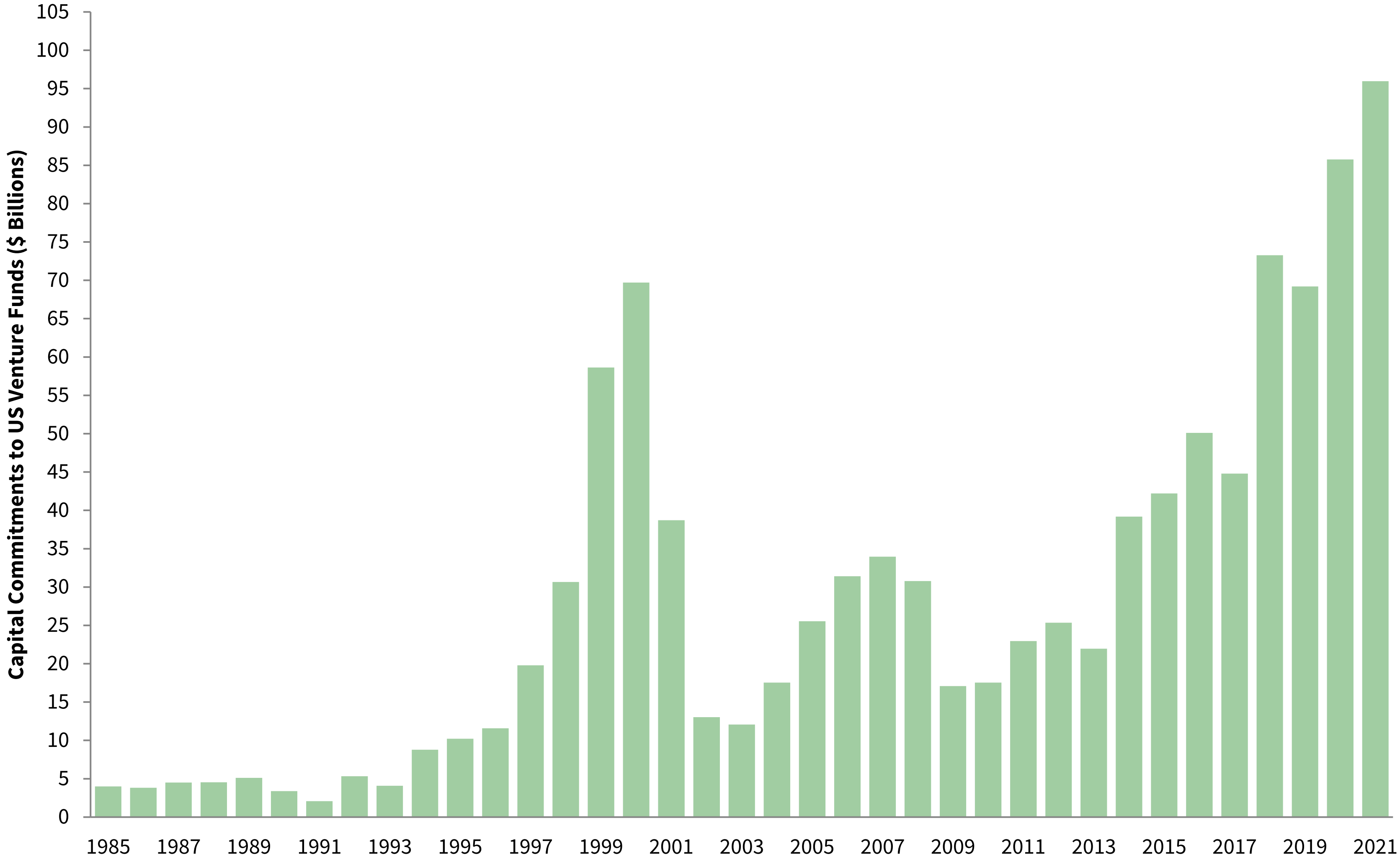
Source: Cambridge Associates LLC.
Notes: Returns for bond, equity, and hedge fund managers are average annual compound returns (AACRs) for the fifteen years ended December 31, 2020, and only managers with performance available for the entire period are included. Returns for private investment managers are horizon internal rates of return (IRRs) calculated since inception to December 31, 2020. Time-weighted returns (AACRs) and money-weighted returns (IRRs) are not directly comparable. Cambridge Associates LLC's (CA) bond, equity, and hedge fund manager universe statistics are derived from CA's proprietary Investment Manager Database. Managers that do not report in US dollars, exclude cash reserves from reported total returns, or have less than $50 million in product assets are excluded. Performance of bond and public equity managers is generally reported gross of investment management fees. Hedge fund managers generally report performance net of investment management fees and performance fees. CA derives its private benchmarks from the financial information contained in its proprietary database of private investment funds. The pooled returns represent the net end-to-end rates of return calculated on the aggregate of all cash flows and market values as reported to Cambridge Associates by the funds' general partners in their quarterly and annual audited financial reports. These returns are net of management fees, expenses, and performance fees that take the form of a carried interest. Vintage years include 2006–2017.

CURRENT ENVIRONMENT

CAMBRIDGE ASSOCIATES

Venture capital fundraising has been increasing since the Dot Com Crash

CAPITAL COMMITMENTS TO US VENTURE FUNDS
1984–2021 • US$B



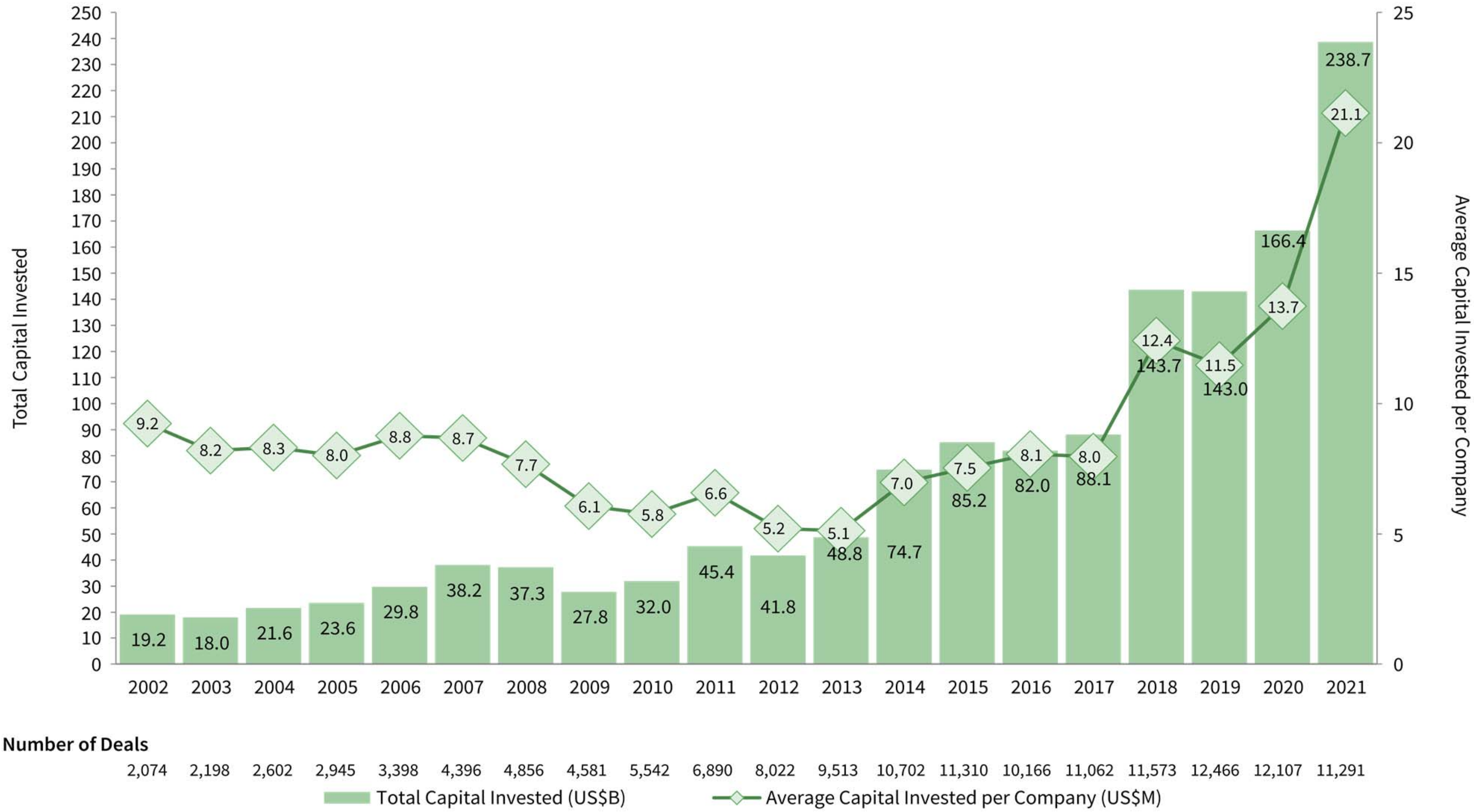
Sources: National Venture Capital Association, PitchBook, and Thomson Reuters.
Notes: Data prior to 2000 are from National Venture Capital Association and Thomson Retuers; data from 2000 through 2005 are from PitchBook; and data from 2006 to present are from National Venture Capital Association and PitchBook. Data for 2021 are as of September 30.

202a

Both the number and size of venture capital investments has grown

US VENTURE CAPITAL INVESTMENTS

2002–21



Sources: National Venture Capital Association and PitchBook.

Note: Data for 2021 are through September 30.

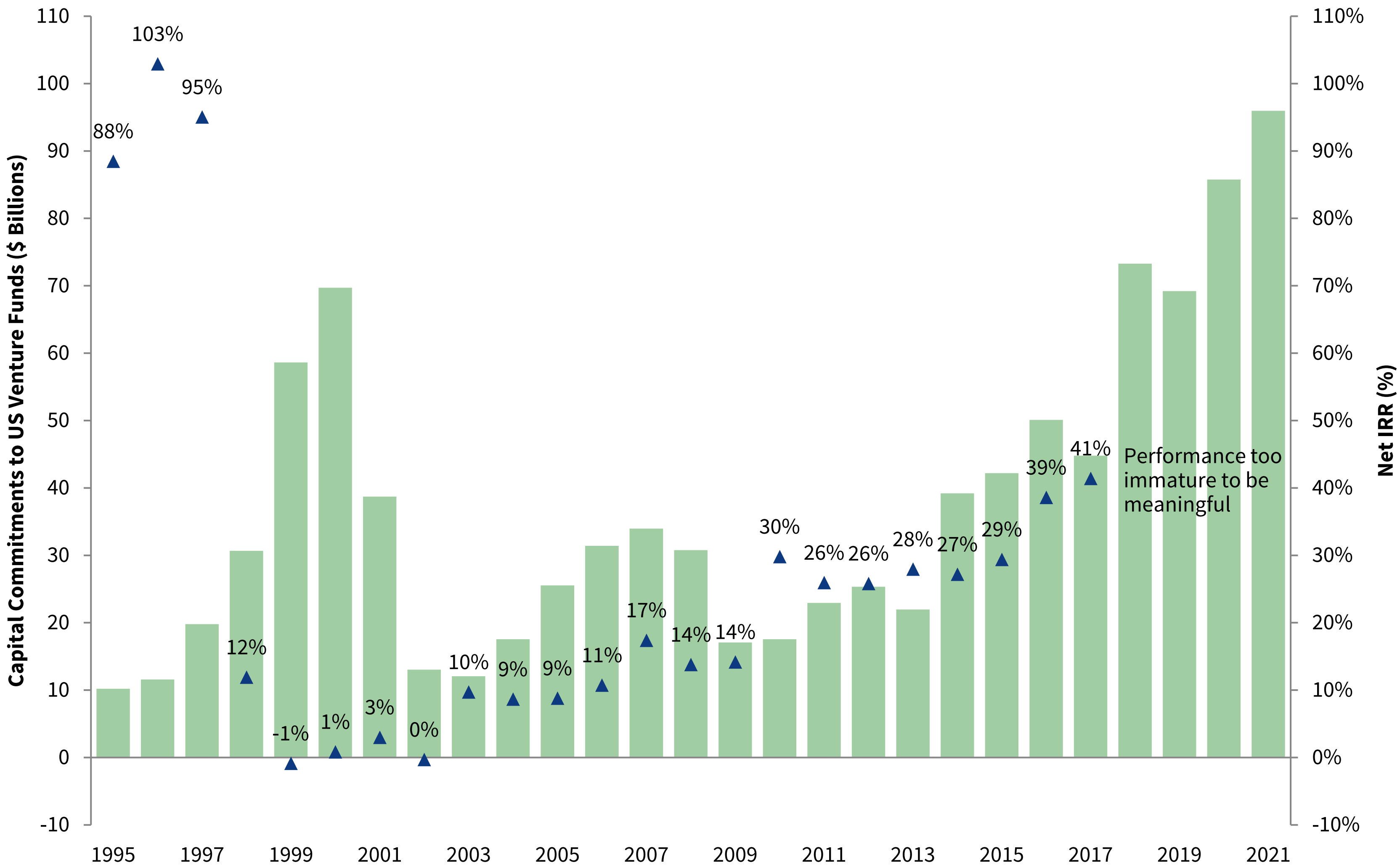
206a

Venture capital returns have steadily improved since the Dot Com Crash

Improved returns driven in part driven by high valuations, but also by secular trends around the adoption of technology and the outsourcing of innovation from corporations

US VENTURE CAPITAL: ANNUAL FUNDRAISING VS. RESPECTIVE VINTAGE YEAR RETURNS

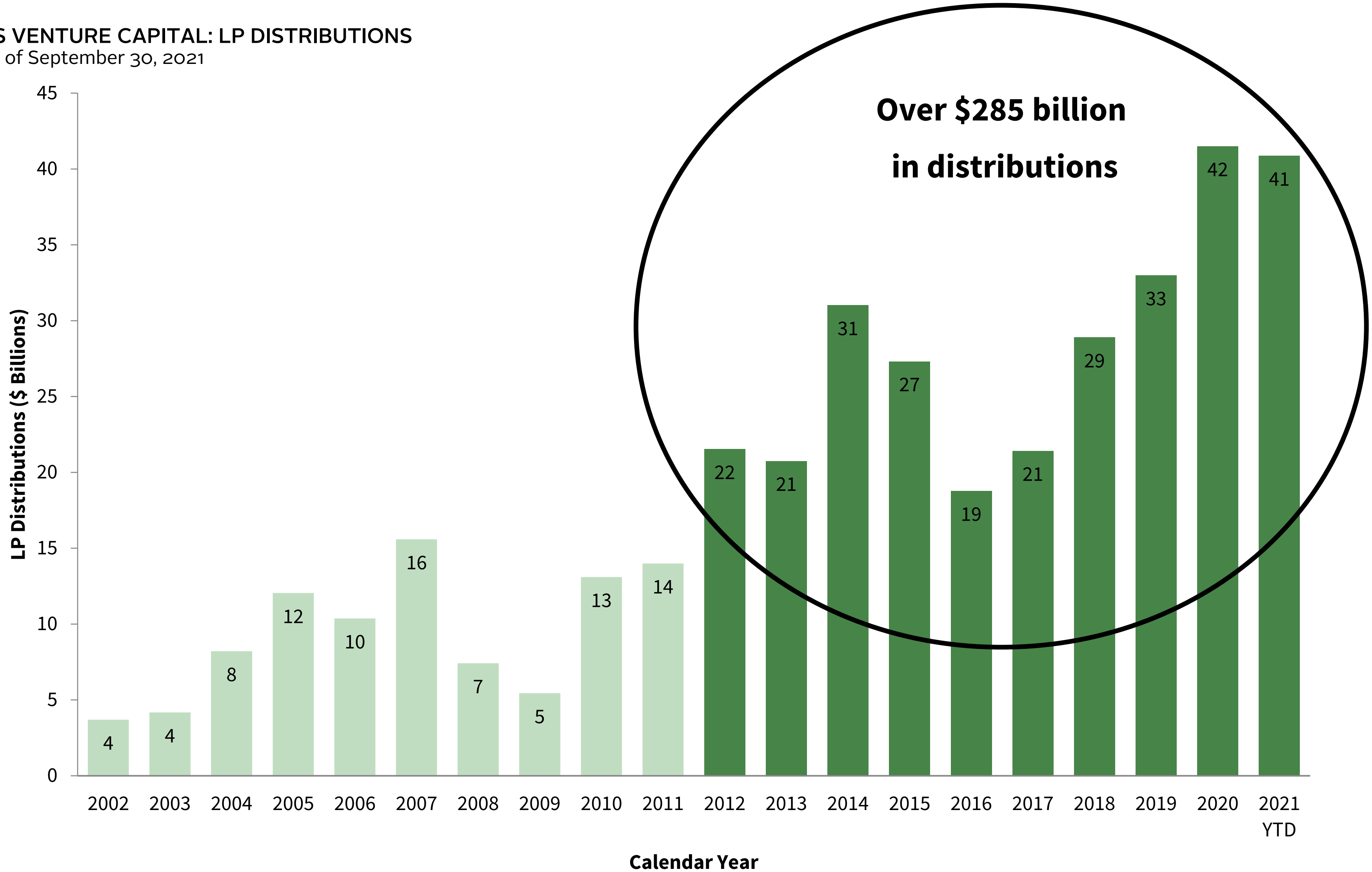
1995–2021 • US$B



Sources: Cambridge Associates, National Venture Capital Association, PitchBook, and Thomson Retuers.
Notes: Fundraising data prior to 2000 are from National Venture Capital Association and Thomson Retuers; data from 2000 through 2005 are from PitchBook; and data from 2006 to present are from National Venture Capital Association and PitchBook. Capital Commitment data for 2021 is as of September 30. Net IRR data is since vintage year inception and as of June 30, 2021. Data represents the Cambridge Associates US Venture Capital Benchmark.

2021 set to outpace 2020 distributions driven by strong exit markets

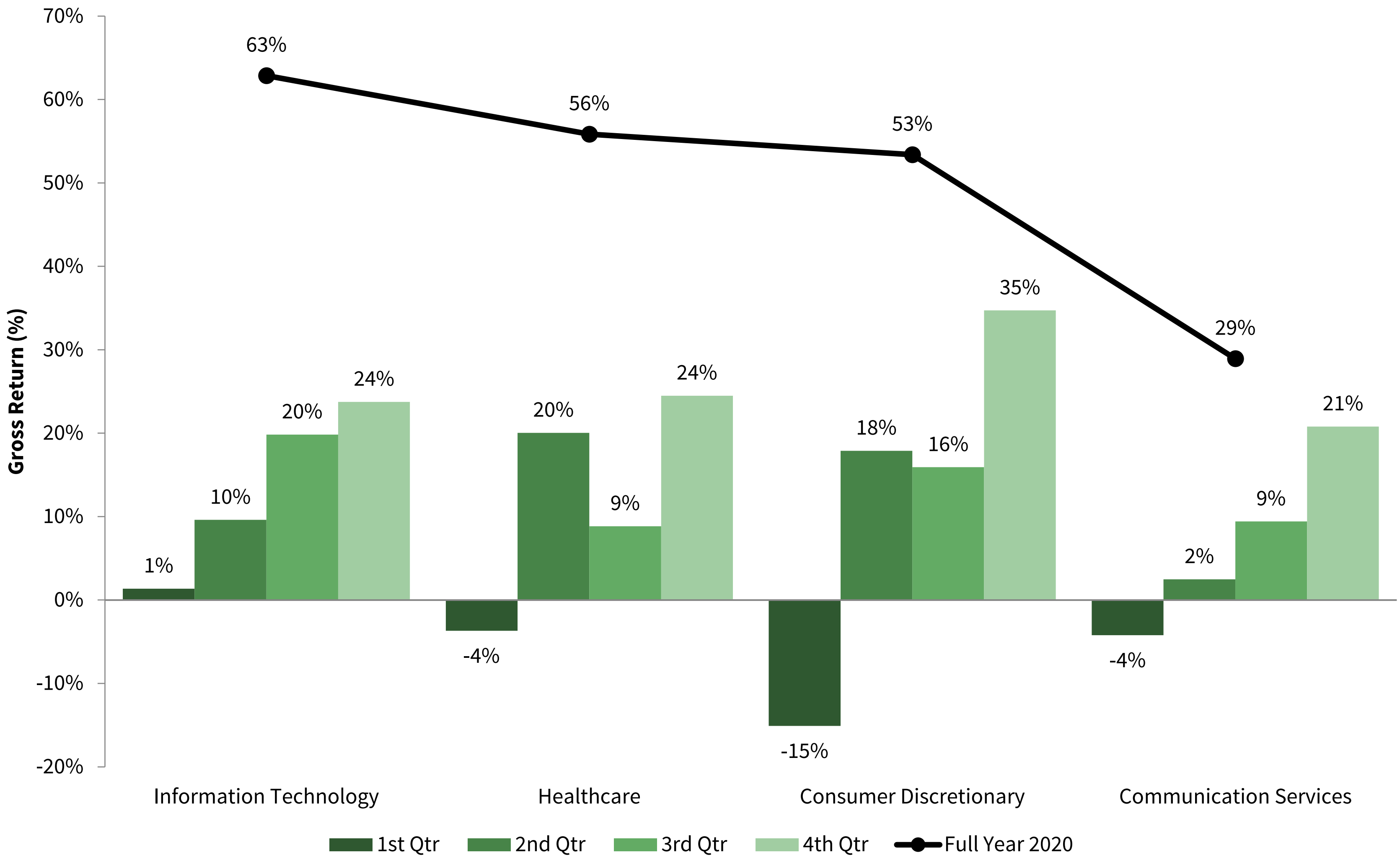
US VENTURE CAPITAL: LP DISTRIBUTIONS
As of September 30, 2021



Source: Cambridge Associates LLC Private Investments Database.
Note: Distributions are net of recallable returns of capital. 2021 data are through September 30, 2021 and are annualized. Data for Q3 2021 is preliminary and not fully updated.

In US venture capital, three sectors posted returns higher than 50% in 2020

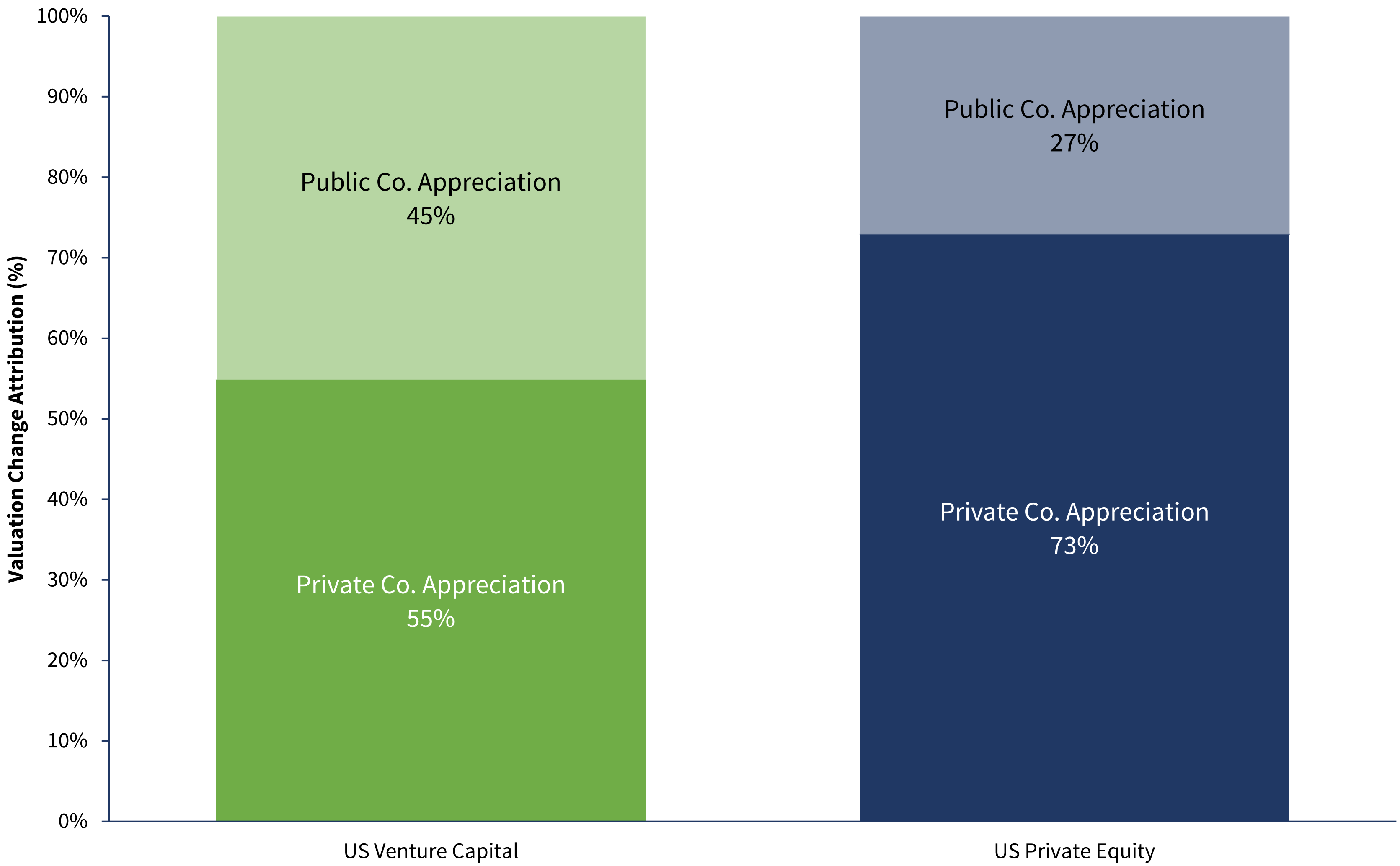
US VENTURE CAPITAL: GROSS PERIODIC RATES OF RETURN BY GICS SECTOR
January 1, 2020 – December 31, 2020



Source: Cambridge Associates LLC.
Notes: Pooled private investment periodic returns are gross of fees, expenses and carried interest. The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a service mark of MSCI Inc. and S&P Global Market Intelligence LLC and is licensed for use by Cambridge Associates LLC.

Companies that were public as of year-end played a key role in 2020 performance

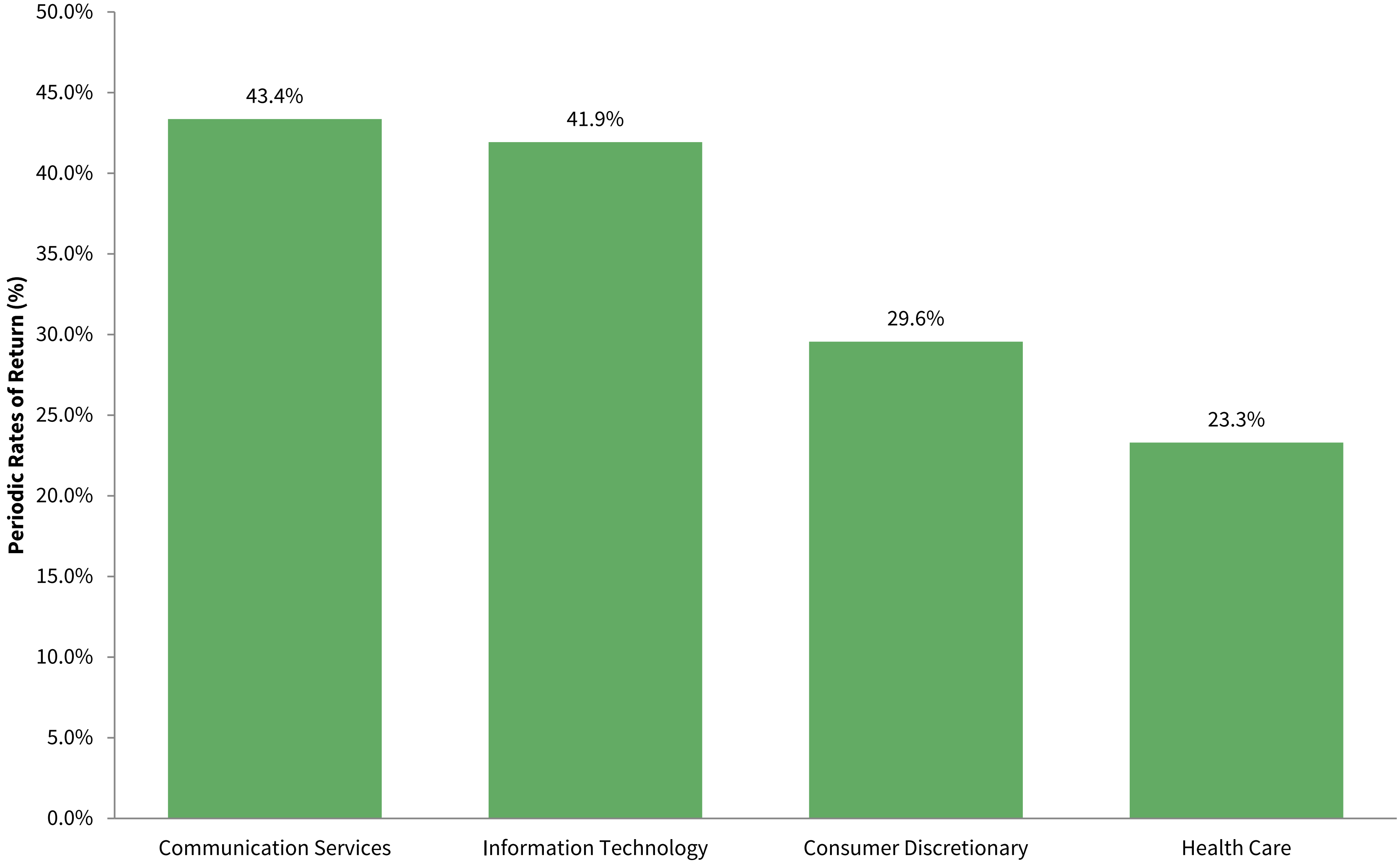
US PRIVATE EQUITY AND VENTURE CAPITAL: COMPANY-LEVEL NET VALUATION CHANGE
As of December 31, 2020 • Calendar Year 2020



Source: Cambridge Associates LLC.
Notes: Data represent the net appreciation change in 2020 for companies in the US private equity and US venture capital indices. The “public appreciation” includes companies that were public as of December 31, 2020. The private equity sample includes investments made by buyout and growth equity funds.

Communication services and IT are the leading sectors in the first half of 2021

US VENTURE CAPITAL: GROSS PERIODIC RATES OF RETURN BY GICS SECTOR
January 1, 2021 – June 30, 2021

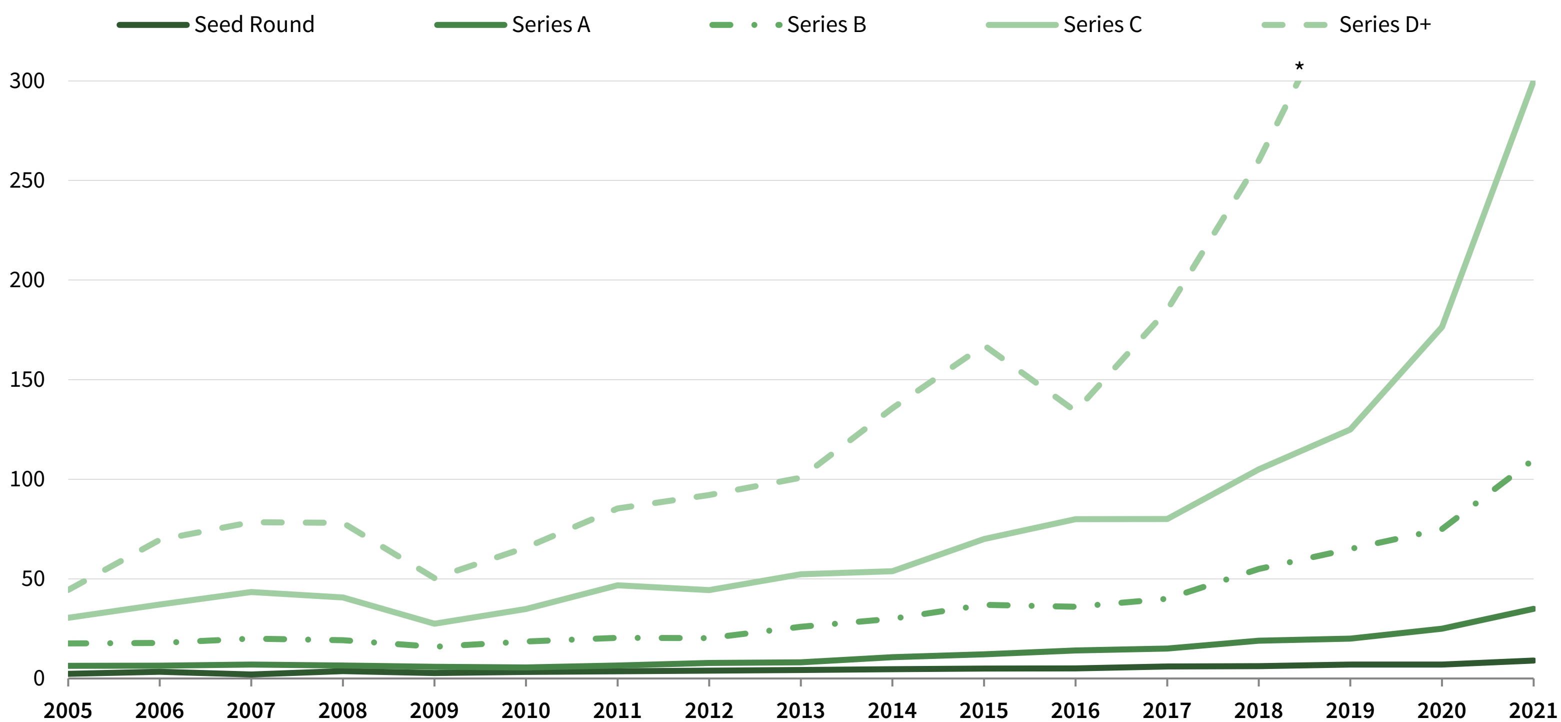


Source: Cambridge Associates LLC.
Notes: Pooled private investment periodic returns are gross of fees, expenses and carried interest. The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a service mark of MSCI Inc. and S&P Global Market Intelligence LLC and is licensed for use by Cambridge Associates LLC.

Valuation frenzy in venture capital concentrated at the late stage

US VENTURE CAPITAL: MEDIAN PRE-MONEY VALUATIONS BY STAGE

As of September 30, 2021 • USD Millions



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Seed Round	2.3	3.4	2.1	3.7	2.8	3.3	3.6	4.0	4.3	4.7	5.0	5.1	6.0	6.2	7.0	7.0	9.0
Series A	6.4	6.5	7.0	6.5	5.9	5.6	6.5	7.8	8.1	10.7	12.1	14.1	15.0	19.0	20.0	25.0	35.0
Series B	17.6	17.9	20.0	19.2	16.0	18.5	20.4	20.2	26.0	30.0	37.0	36.0	40.0	55.0	65.0	75.0	110.0
Series C	30.5	37.1	43.4	40.7	27.5	34.9	46.8	44.4	52.4	53.9	70.0	80.0	80.1	105.0	125.0	176.5	300.0
Series D+	44.5	69.6	78.4	78.1	50.4	65.8	85.4	92.1	100.8	135.7	167.3	134.1	185.0	260.0	352.5	430.0	1000.0

Source: PitchBook Data, Inc.
Notes: Y-axis capped for graphing purposes.

IMPLEMENTATION

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Nuances of venture capital investing

- **Manager selection**
  - Manager selection is critical to success in venture capital; median returns do not compensate investors for risk
  - Sector specialists have a proven edge over generalist competitors, particularly in healthcare
- **Portfolio construction**
  - Portfolio build-out requires thoughtful planning – venture portfolios often contain more manager relationships given inherent asset class risk, and those managers tend to raise capital at a faster clip than their buyout counterparts
- **Access & commitment sizing**
  - Need to balance offers of sub-scale initial commitment sizes with likelihood of building long-term substantial relationships over time, and relative fundraising paces
- **Emerging managers often outperform**
  - Need to balance the halo effect of sourcing and pattern recognition amongst established firms versus succession issues and hunger and relevance of emerging managers
- **Market environment**
  - There are similarities between the late 1990s and today (particularly the fundraising environment), but company fundamentals are generally more supportive today and business models are more robust
  - Still, investors must remain prudent and avoid overheated areas
  - Valuations at the early stages are more reasonable than those at the later stages

APPENDIX

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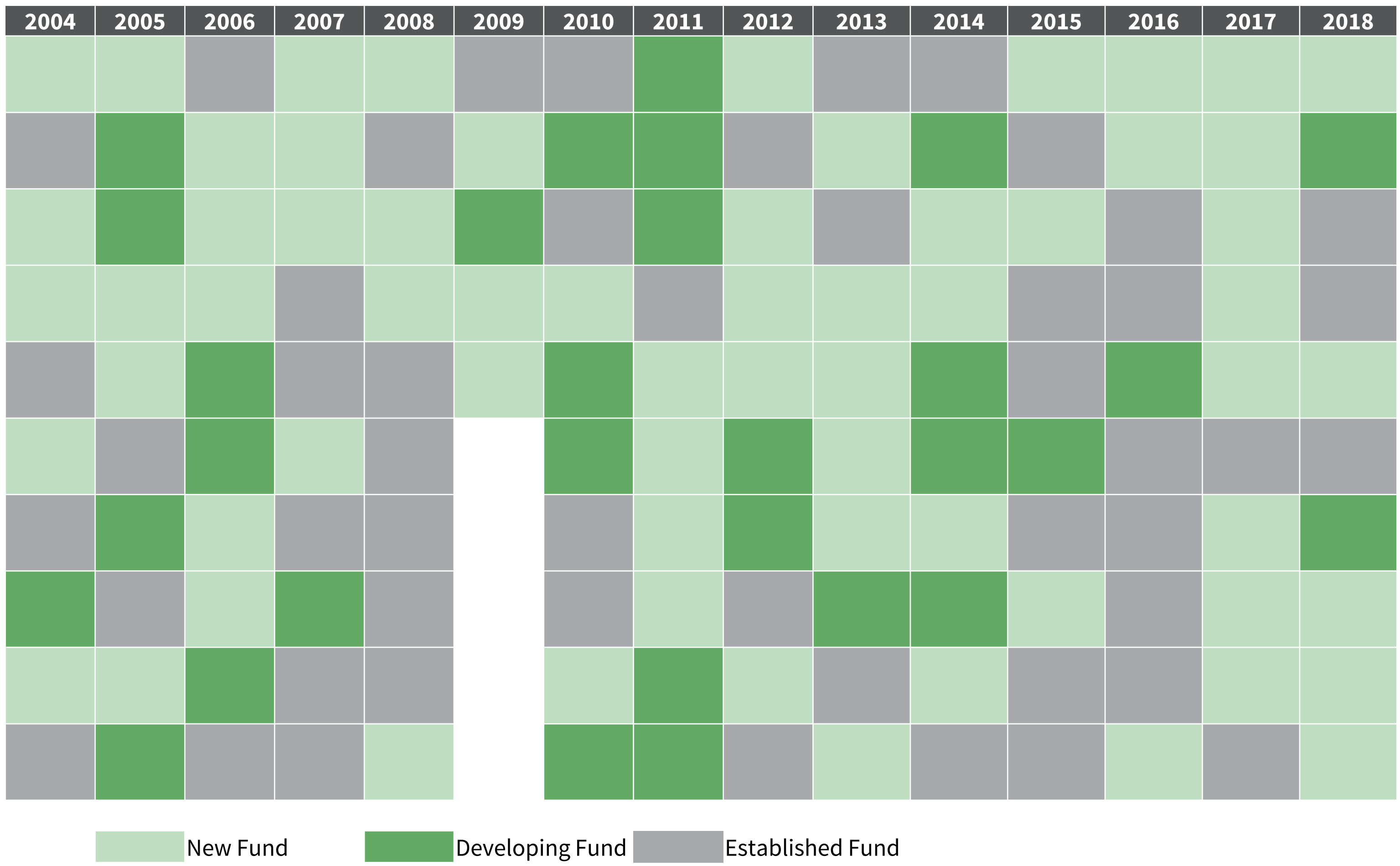
US venture capital: top 10 top quartile funds by vintage year

US VENTURE CAPITAL: TOP 10 TOP QUARTILE FUNDS BY VINTAGE YEAR

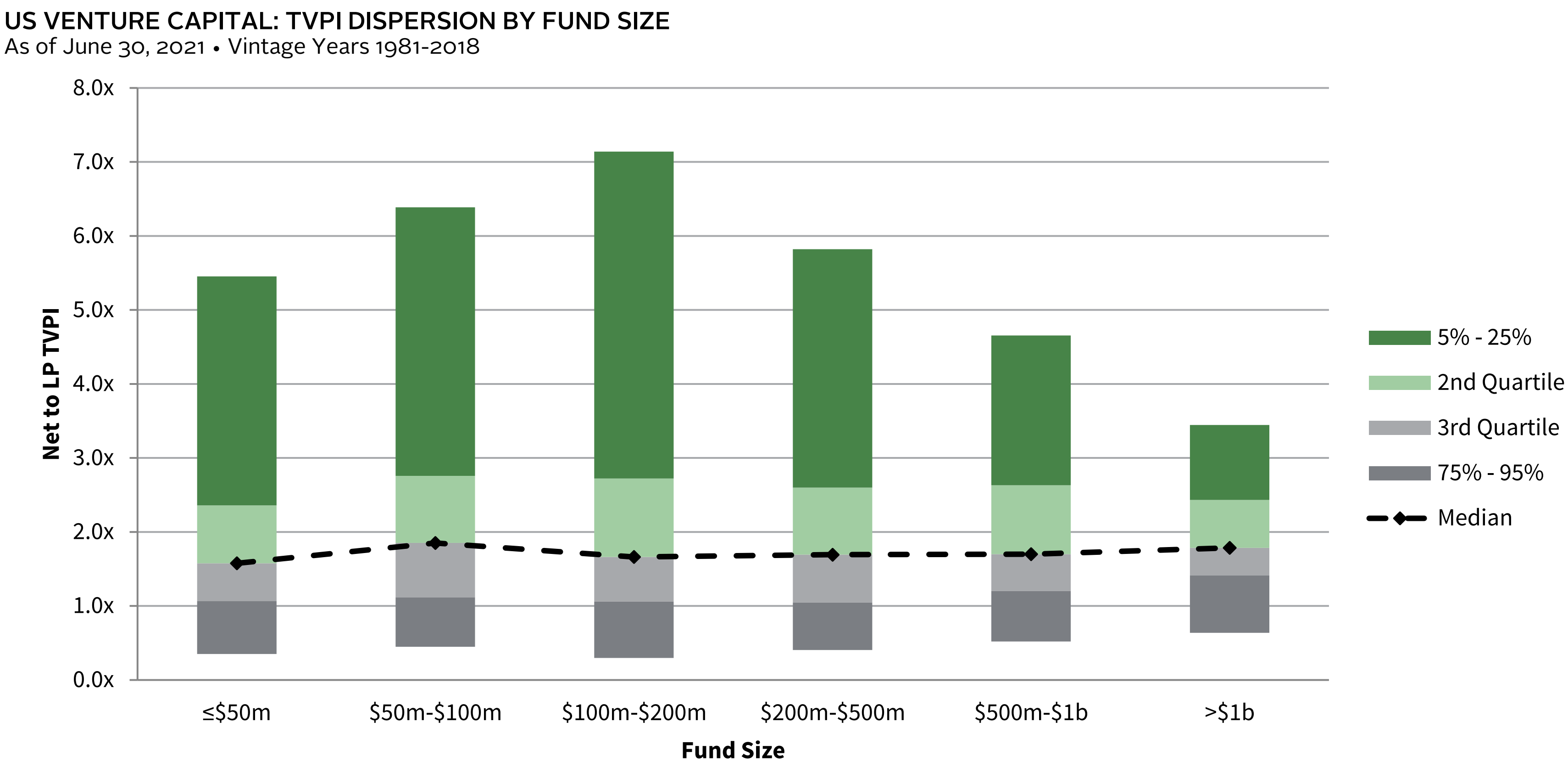
Based on Net TVPI Multiple. As of June 30, 2021.



# of Funds in Vintage Year	64	58	77	67	61	21	47	46	52	64	83	84	80	77	96

Source: Cambridge Associates LLC.
Notes: Total value to paid-in capital multiple is net of fees, expenses and carried interest. Fund order is determined as funds raised under the same strategy and does not include friends and family funds. A new fund is defined as the first or second fund, a developing fund is the third or fourth fund, and an established fund is the fifth fund and beyond. Funds less than three years old are considered too young to have produced meaningful returns; those vintages have been excluded from this analysis. When vintage years have fewer than 40 funds, some portion of the top ten funds fall outside of the top quartile; these funds have been left blank.

US venture capital: TVPI dispersion by fund size



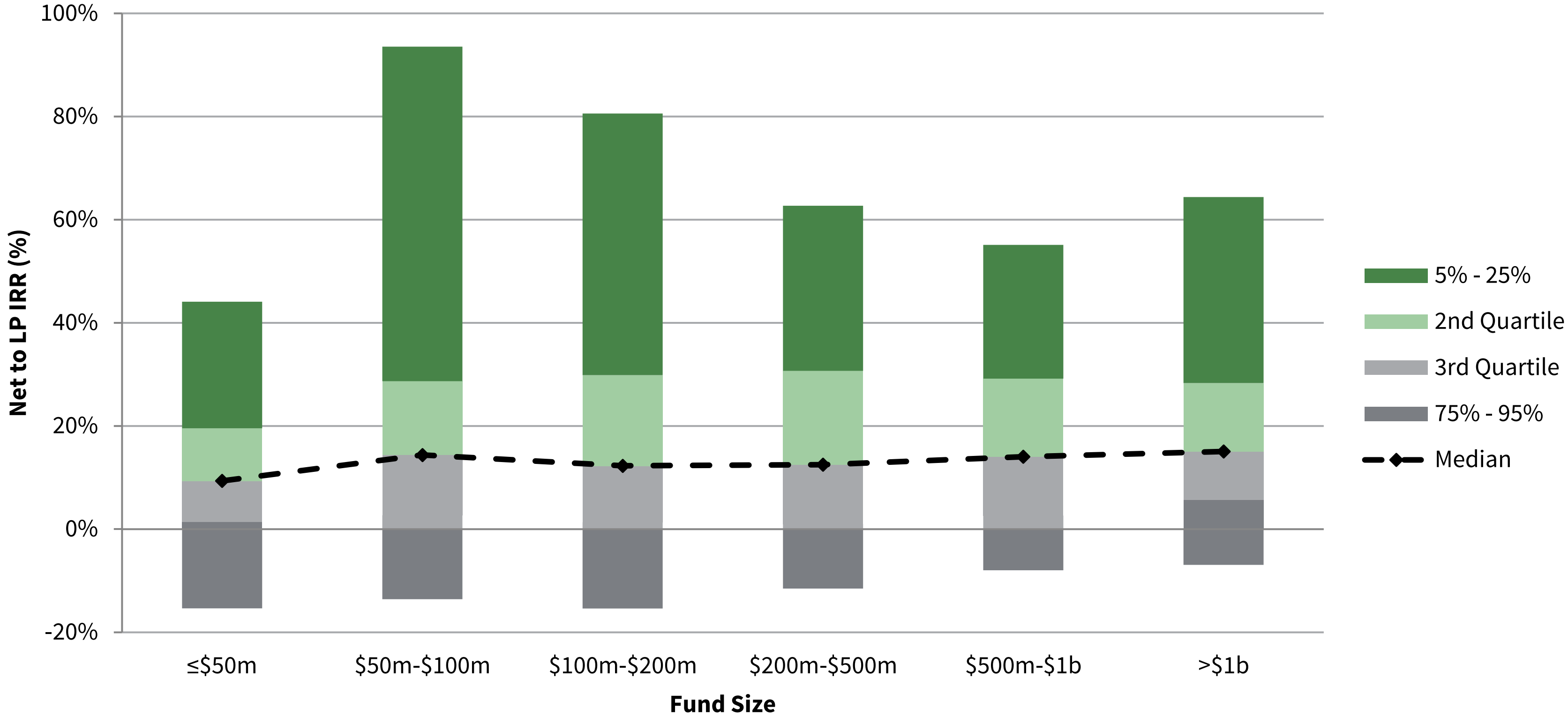
	≤$50m	$50m-$100m	$100m-$200m	$200m-$500m	$500m-$1b	>$1b
N	484	360	404	485	160	33
5%	5.5x	6.4x	7.1x	5.8x	4.7x	3.4x
25%	2.4x	2.8x	2.7x	2.6x	2.6x	2.4x
Median	1.6x	1.9x	1.7x	1.7x	1.7x	1.8x
75%	1.1x	1.1x	1.1x	1x	1.2x	1.4x
95%	0.4x	0.4x	0.3x	0.4x	0.5x	0.6x

Source: Cambridge Associates LLC.
Notes: Pooled returns are net of fees, expenses and carried interest. Funds less than three years old are considered too young to have produced meaningful returns; those vintages have been excluded from this analysis.

US venture capital: IRR dispersion by fund size

US VENTURE CAPITAL: IRR DISPERSION BY FUND SIZE

As of June 30, 2021 • Vintage Years 1981-2018



	≤$50m	$50m-$100m	$100m-$200m	$200m-$500m	$500m-$1b	>$1b
N	484	360	404	485	160	33
5%	44.1%	93.5%	80.6%	62.7%	55.1%	64.4%
25%	19.6%	28.7%	29.8%	30.7%	29.2%	28.3%
Median	9.4%	14.4%	12.3%	12.5%	14.0%	15.1%
75%	1.4%	2.7%	1.3%	1.0%	2.6%	5.6%
95%	-15.4%	-13.6%	-15.4%	-11.5%	-8.0%	-6.9%

Source: Cambridge Associates LLC.
Notes: Pooled returns are net of fees, expenses and carried interest. Funds less than three years old are considered too young to have produced meaningful returns; those vintages have been excluded from this analysis.

CAMBRIDGE ASSOCIATES

Kern County Employees' Retirement Association

Actuarial Valuation and Review

As of June 30, 2021

Segal

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San Francisco, CA 94105-6147
segalco.com
T 415.263.8200

December 2, 2021

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

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2021. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for July 1, 2022 to June 30, 2023.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Retirement Association. The census information and financial information on which our calculations were based was prepared by the staff of the Association. That assistance is gratefully acknowledged.

The actuarial calculations were directed under the supervision of Molly Calcagno, ASA, MAAA and 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 herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Association.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal

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

Molly Calcagno, ASA, MAAA, EA
Actuary

ST/jl

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Segal

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report was prepared by Segal to present a valuation of the Kern County Employees' Retirement Association ("KCERA" or "the Association") as of June 30, 2021. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits. The measurements shown in this actuarial valuation may not be applicable for other purposes. In particular, the measures herein are not necessarily appropriate for assessing the sufficiency of current plan assets to cover the estimated cost of settling the Association's accrued benefit obligations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Association, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2021, provided by KCERA;
- The assets of the Association as of June 30, 2021, provided by KCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2021 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2021 valuation; and
- The funding policy adopted by the Board of Retirement.

One of the general goals of an actuarial valuation is to establish contributions which fully fund the Association's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

Section 1: Actuarial Valuation Summary

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Association's liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the Association's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with prior year's information.

The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both Normal Cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have applied the funding policy last reviewed with the Board of Retirement in 2012. Details of the funding policy are provided in *Section 4, Exhibit 1* on pages 109 and 110.

A schedule of current amortization balances and payments may be found in *Section 3, Exhibit H* starting on page 90. A graphical projection of the Unfunded Actuarial Accrued Liability (UAAL) amortization balances and payments has been included in *Section 3, Exhibit I* starting on page 95.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2022 through June 30, 2023.

Effect of Gain Sharing Provisions

The 7.25% investment return assumption used in this valuation has been developed without taking into consideration any impact of the 50/50 excess earnings allocation between the retirement and Supplemental Retiree Benefits Reserve (SRBR) asset pools. This is based on our understanding that Article 5.5 of the Statute, which authorizes the allocation of 50% allocation 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%.

Actuarial Standard of Practice (ASOP) No. 4 ("Measuring Pension Obligations and Determining Pension Plan Costs or Contributions") states that some plan provisions, including gain sharing provisions, "may create pension obligations that are difficult to appropriately measure using traditional valuation procedures." ASOP No. 4 further states that "for such plan provisions, the actuary should consider using alternative valuation procedures, such as stochastic modeling … to reflect the impact of variations in experience from year to year."

Accordingly, we performed stochastic modeling 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 this valuation) that would average approximately 0.3% of assets over time.

For informational purposes only, when we applied the results of our stochastic model to this valuation we have estimated that such an annual outflow would increase the actuarial accrued liability measured in this valuation using a 7.25% investment return assumption from $7.16 billion to $7.43 billion (for a difference of about $262 million) and would increase the employer's contribution rate by about 4.2% of payroll.

Valuation Highlights

1. On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriffs' Assn. et al. v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members. In response, the Board adopted Resolution 2020-1, which detailed the implementation of the Alameda decision including reclassifying certain pay items for inclusion in compensation earnable and pensionable compensation. The results in this valuation reflect the reclassification of those pay codes as well as the recovery or refunds of benefits and/or member contributions previously paid in conjunction with these pay items, which decreased the UAAL by $28.9 million and decreased the average employer contribution rate by 0.15% of payroll. The decrease in the average employer contribution rate is a result of the amortization of the $28.9 million decrease in UAAL offset somewhat by an increase in the UAAL contribution rate due to a lower total payroll base after the reclassification of pay items.

Pgs. 27-28

2. The Market Value of Assets earned a return of 23.68% for the July 1, 2020 to June 30, 2021 plan year. The Actuarial Value of Assets earned a return of 9.08% for the same period due to the deferral of most of the current year investment gains and the recognition of prior investment gains and losses. While this is greater than the assumed 7.25% assumed in the valuation as of June 30, 2020, the excess return was used to build up the Contingency Reserve from -$16.4 million as of June 30, 2020 to $53.6 million as of June 30, 2021, following the Board's Regular Interest and Excess Interest Crediting Policy. As a result, the Valuation Value of Assets earned a return of 7.93% for the same period, which resulted in an actuarial gain when measured against the assumed rate of return of 7.25% for the 2020-2021 plan year. This actuarial investment gain decreased the average employer contribution rate by 0.38% of payroll.

   As part of the review of the assumed long-term rate of return on investments and other assumptions in the next triennial experience study scheduled before the June 30, 2023 valuation, we will examine the low fixed income interest rate environment and evolving expectations of future investment returns for various asset classes. This will allow us to assist the Board as they continue to monitor anticipated investment returns relative to the assumed long-term rate of return on investments of 7.25%.

Pgs. 55-56

3. The funded ratio (the ratio of the Valuation Value of Assets to Actuarial Accrued Liability) is 67.1%, compared to the prior year funded ratio of 64.4%. This ratio is one measure of funding status, and its history is a measure of funding progress. The funded ratio measured on a market value basis is 73.1%, compared to 61.6% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Association's benefit obligation or the need for or the amount of future contributions.

Pg. 32

4. The Association's UAAL (which is based on the Valuation Value of Assets) has decreased from $2.50 billion to $2.36 billion. The decrease in UAAL is primarily due to lower than expected individual salary increases during 2020-2021, investment return (after "smoothing") greater than the 7.25% return assumption, the implementation of the Alameda Decision and gains from retirement experience, offset by contributions less than expected. A complete reconciliation of the Association's UAAL is provided in *Section 2, Subsection E*.

Pg. 26

5. The net actuarial loss from investment and contribution experience is $3.1 million, or 0.04% of Actuarial Accrued Liability. This loss is primarily due to contributions less than expected, due to the lower than expected increase in the total payroll used to pay the UAAL

contributions for the year and the phase-in of the impact of the new actuarial assumptions on the UAAL contribution rate for the County Safety group. That loss was offset somewhat by the investment return (after "smoothing") greater than the 7.25% return assumption. The net experience gain from sources other than investment and contribution experience was $66.3 million, or 0.93% of the Actuarial Accrued Liability.

Pg. 34

6. The average recommended employer contribution rate calculated in this valuation decreased from 49.16% of payroll to 49.10% of payroll. This decrease is primarily due to lower than expected individual salary increases during 2020-2021, investment return (after "smoothing") greater than the 7.25% return assumption, changes in member demographics amongst the tiers, and gains from retirement experience, offset by amortizing the prior year's UAAL over a smaller than expected total payroll. A complete reconciliation of the Association's average employer rate is provided in *Section 2, Subsection F*.

7. Last year, the Retirement Board elected to phase-in the impact of new actuarial assumptions adopted for the June 30, 2020 valuation on the UAAL contribution rate over a three-year period, beginning with the 2021-2022 fiscal year for the County Safety group. This is the second year of the phase-in. The recommended pre-phase in contribution rates for 2021-2022 and 2022-2023 are shown in this report. The aggregate required contribution rate after reflecting the phase-in is 48.91% of payroll and is shown in a separate letter that follows this report.

Pg. 35

8. The average member rate calculated in this valuation has increased from 6.74% of payroll to 6.82% of payroll. This change is primarily due to changes in member demographics amongst the tiers. A complete reconciliation of the Association's average member rate is provided in *Section 2, Subsection F*.

Pgs. 38-39, 44

9. Consistent with recent years, this valuation reflects that members of the San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) in Tier I and Tier IIA pay 50% of the total Normal Cost rate. There are different District Category III Tier I and Tier IIA employer contribution rates shown in this report for SJVAPCD and also for the Buttonwillow Recreation & Park District. Those employers should not use the combined District Category III employer contribution rate and instead should use their own Tier I and Tier IIA specific employer rates shown in the report along with the Tier IIB employer rate.

Pgs. 45-46

10. Consistent with recent years, this valuation reflects the implementation of the Declining Employer Payroll Policy for Berrenda Mesa Water District and Inyokern Community Services District. Those employers were the only employers in District Category IV. They have been included in a "Declining Employers" category and should contribute based on the dollar contribution amounts (not rates) shown in this report. Unless otherwise noted, all results shown in this report include these declining employers.

Pgs. 23-24

11. The total unrecognized net investment gain as of June 30, 2021 is about $429 million as compared to an unrecognized net investment loss of $196 million in the previous valuation. This deferred investment gain of $429 million will be recognized in the determination of the Actuarial Value of Assets for funding purposes in the next few years as shown in *Section 2, Subsection B.*

    The net deferred gains of $429 million represent about 7.9% of the Market Value of Assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the $429 million market gains is expected to have an impact on the Association's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows (without taking into consideration any possible impact of the 50/50 excess earnings allocation between the retirement and SRBR asset pools):

a. If the net deferred gains in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the funded ratio would increase from 67.1% to 73.1%.

For comparison purposes, if all the net deferred losses in the June 30, 2020 valuation had been recognized immediately in the June 30, 2020 valuation, the funded ratio in last year's valuation would have decreased from 64.4% to 61.6%.

b. If the net deferred gains in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the average employer contribution rate would decrease from 49.10% of payroll to 43.31% of payroll.

For comparison purposes, if all the net deferred losses in the June 30, 2020 valuation had been recognized immediately in the June 30, 2020 valuation, the average employer contribution rate in last year's valuation would have increased from 49.16% of payroll to 51.76% of payroll.

Pg. 88 12. During 2020-2021 there were no "excess earnings" credited to the valuation reserves or the SRBR. Also, at June 30, 2021, the COLA Contribution Reserve was zero and therefore not available to offset the 2% COLA contribution rate. Because the Contingency Reserve is now positive as of June 30, 2021, it is excluded from the Valuation Value of Assets per the Board's Interest Crediting Policy. A complete presentation of the Association's reserves is in *Section 3, Exhibit F*.

Pg. 60 13. The Actuarial Standards Board approved Actuarial Standard of Practice No. 51 (ASOP 51) regarding risk assessment, which was first effective with KCERA's June 30, 2019 actuarial valuation. ASOP 51 requires actuaries to identify and assess risks that "may reasonably be anticipated to significantly affect the plan's future financial condition". Examples of key risks listed that are particularly relevant to KCERA are asset/liability mismatch risk, investment risk, and longevity risk. The standard also requires an actuary to consider if there is any ongoing contribution risk to the plan, however it does not require the actuary to evaluate the particular ability or willingness of contributing entities to make contributions when due, nor does it require the actuary to assess the likelihood or consequences of future changes in applicable law.

The actuary's initial assessment can be strictly a qualitative discussion about potential adverse experience and the possible effect on future results, but it may also include quantitative numerical demonstrations where informative. The actuary is also encouraged to consider a recommendation as to whether a more detailed assessment or risk report would be significantly beneficial for the intended user in order to examine particular financial risks. When making that recommendation, the actuary will take into account such factors as the plan's design, risk profile, maturity, size, funded status, asset allocation, cash flow, possible insolvency and current market conditions.

Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the Association. We were engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Association's future financial condition based on the June 30, 2018 actuarial valuation. That analysis can be found in our separate risk assessment report dated September 4, 2019.

The risk assessment for the June 30, 2021 actuarial valuation, which includes a discussion of key risks that may affect the Association, can be found in *Section 2, Subsection J*.

14. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2021. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. The Association's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2021. While it is impossible to determine how the pandemic will continue to affect market conditions and other demographic experience of the Association in future valuations, Segal is available to prepare projections of potential outcomes upon request.
15. Segal strongly recommends an actuarial funding policy that targets 100% funding of the Actuarial Accrued Liability. Generally, this implies payments that are ultimately at least enough to cover Normal Cost, interest on the UAAL and the principal balance. The funding policy adopted by the Board meets this standard.
16. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution (ADC) under the Association's funding policy and measuring the progress of that funding policy. The Net Pension Liability (NPL) and Pension Expense under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the plan and employer's financial statements as of June 30, 2021, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.

Summary of Key Valuation Results

		June 30, 2021		June 30, 2020	
		Total Rate	**Estimated Annual Dollar Amount[1] ($ in '000s)**	**Total Rate**	**Estimated Annual Dollar Amount[1] ($ in '000s)**
Employer Contribution Rates:[2]	• County General without Courts	40.24%	$167,048	40.38%	$170,942
	• Courts	40.21%	12,672	40.28%	13,201
	• County Safety	77.51%	107,414	78.08%	108,481
	• District Category I	54.13%	3,354	53.16%	3,265
	• District Category II	50.47%	1,233	50.57%	1,295
	• District Category III	47.25%	13,096	46.46%	13,407
	• District Category V	44.92%	570	43.86%	618
	• District Category VI	61.53%	165	60.43%	223
	• Declining Employers[3]	272.41%	474	317.37%	530
	All Categories Combined	**49.10%**	**$306,026**	**49.16%**	**$311,962**

[1] Based on projected annual compensation for each valuation date.
[2] In practice, these blended employer contribution rates for combined Tier I, Tier IIA, Tier IIB and Tier III (as applicable) are used for each category (with the exception of District Category III). See *Section 2, Subsection F* for the employer contribution rates for each tier separately for these categories.
[3] The two employers that were previously in District Category IV are now declining employers. Those employers will contribute based on the dollar contribution amounts shown (not rates).

Summary of Key Valuation Results (continued)

		June 30, 2021		June 30, 2020	
		Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)	Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Average Member Contribution Rates:	• County General Tier I without Courts	5.39%	$7,296	5.33%	$7,878
	• County General Tier IIA without Courts	6.77%	4,439	6.78%	4,673
	• County General Tier IIB without Courts	6.23%	13,345	6.23%	12,873
	• Courts Tier I	8.16%	1,064	8.16%	1,166
	• Courts Tier IIA	6.48%	213	6.50%	237
	• Courts Tier IIB	6.23%	946	6.23%	924
	• County Safety Tier I	6.87%	6,473	6.82%	6,918
	• County Safety Tier IIA	9.32%	709	9.34%	715
	• County Safety Tier IIB	12.93%	4,751	13.07%	3,900
	• District Category I Tier I	3.07%	133	3.16%	139
	• District Category I Tier IIA	6.21%	42	6.22%	41
	• District Category I Tier IIB	6.23%	75	6.23%	68
	• District Category II Tier I	6.17%	87	5.53%	92
	• District Category II Tier IIB	6.23%	64	6.23%	56
	• District Category II Tier III	7.41%	0	7.35%	0
	• District Category III Tier I (Buttonwillow)	8.55%	3	8.67%	3
	• District Category III Tier I (SJVAPCD)	12.18%	2,093	12.27%	2,447
	• District Category III Tier IIA (Buttonwillow)	6.23%	0	6.23%	0
	• District Category III Tier IIA (SJVAPCD)	6.73%	64	6.73%	70
	• District Category III Tier IIB	6.23%	594	6.23%	488
	• District Category V Tier I	0.00%	0	5.63%	8
	• District Category V Tier IIA	6.21%	25	6.08%	24
	• District Category V Tier IIB	6.23%	49	6.23%	54
	• District Category VI Tier I	0.00%	0	0.00%	0
	• District Category VI Tier IIB	6.23%	0	6.23%	0
	• Declining Employers Tier I	5.86%	10	5.50%	9
	• Declining Employers Tier IIB	6.23%	0	6.23%	0
	All Categories Combined	**6.82%**	**$42,475**	**6.74%**	**$42,783**

[1] Based on projected annual compensation for each valuation date.

Summary of Key Valuation Results (continued)

		June 30, 2021 ($ in '000s)	June 30, 2020 ($ in '000s)
Actuarial Accrued Liability as of June 30:[2]	• Retired members and beneficiaries	$4,777,275	$4,591,235
	• Inactive vested members[1]	243,481	231,940
	• Active members	2,143,469	2,182,414
	• Total Actuarial Accrued Liability	$7,164,225	$7,005,589
	• Normal Cost for plan year beginning June 30	124,039	128,583
Assets as of June 30:	• Market Value of Assets (MVA)[3]	$5,235,090	$4,312,314
	• Valuation Value of Assets (VVA)	4,806,026	4,508,548
Funded status as of June 30:	• Unfunded Actuarial Accrued Liability on Market Value of Assets basis	$1,929,135	$2,693,275
	• Funded percentage on MVA basis	73.07%	61.56%
	• Unfunded Actuarial Accrued Liability on Valuation Value of Assets basis	$2,358,199	$2,497,041
	• Funded percentage on VVA basis	67.08%	64.36%
Key assumptions:	• Net investment return	7.25%	7.25%
	• Price inflation	2.75%	2.75%
	• Payroll growth	3.25%	3.25%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes liabilities associated with benefits paid by the Supplemental Retiree Benefits Reserve. These liabilities are included in a separate valuation report.
[3] Excludes non-valuation reserves.

Summary of Key Valuation Results (continued)

		June 30, 2021	June 30, 2020	Change From Prior Year
Demographic data as of June 30:	**Active Members:**			
	• Number of members	9,072	9,326	-2.7%
	• Average age	42.1	41.9	0.2
	• Average service	9.7	9.5	0.2
	• Total projected compensation	$623,294,085	$634,569,637	-1.8%
	• Average projected compensation	$68,705	$68,043	1.0%
	Retired Members and Beneficiaries:			
	• Number of members:			
	– Service retired	6,699	6,559	2.1%
	– Disability retired	874	883	-1.0%
	– Beneficiaries	1,262	1,225	3.0%
	– Total	8,835	8,667	1.9%
	• Average age	69.6	69.4	0.2
	• Average monthly benefit[1]	$3,563	$3,465	2.8%
	Inactive Vested Members:			
	• Number of members[2]	3,517	3,143	11.9%
	• Average age	42.0	42.3	-0.3
	Total Members:	21,424	21,136	1.4%

[1] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.
[2] Includes inactive members due a refund of member contributions.

Important Information about Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by the Association. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	The valuation is based on the Market Value of Assets as of the valuation date, as provided by the Association. The Association uses a "Valuation Value of Assets" that differs from market value to gradually reflect six-month changes in the Market Value of Assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results that does not mean that the previous assumptions were unreasonable.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary

Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The actuarial valuation is prepared at the request of the Association. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan. Future contribution requirements may differ from those determined in the valuation because of: • Differences between actual experience and anticipated experience; • Changes in actuarial assumptions or methods; • Changes in statutory provisions; and • Differences between the contribution rates determined by the valuation and those adopted by the Board of Retirement.[1]
Some actuarial results in this report are not rounded, but that does not imply precision.
If the Association is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Association should look to their other advisors for expertise in these areas.

As Segal has no discretionary authority with respect to the management or assets of the plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the plan.

[1] KCERA has a proven track record of adopting the Actuarial Determined Contributions as determined by the valuation and based on the Board's Actuarial Funding Policy.

Section 2: Actuarial Valuation Results

A. Member Data

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive vested members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in *Section 3, Exhibits A, B,* and *C*.

Member Population: 2012 – 2021

Year Ended June 30	Active Members	Inactive Vested Members[1]	Retired Members and Beneficiaries	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Retired Members and Beneficiaries to Actives
2012	8,253	1,748	6,890	8,638	1.05	0.83
2013	8,485	1,855	7,171	9,026	1.06	0.85
2014	8,512	1,949	7,397	9,346	1.10	0.87
2015	8,481	2,053	7,599	9,652	1.14	0.90
2016	8,627	2,218	7,847	10,065	1.17	0.91
2017	8,728	2,363	8,093	10,456	1.20	0.93
2018	8,867	2,604	8,301	10,905	1.23	0.94
2019	9,197	2,877	8,495	11,372	1.24	0.92
2020	9,326	3,143	8,667	11,810	1.27	0.93
2021	9,072	3,517	8,835	12,352	1.36	0.97

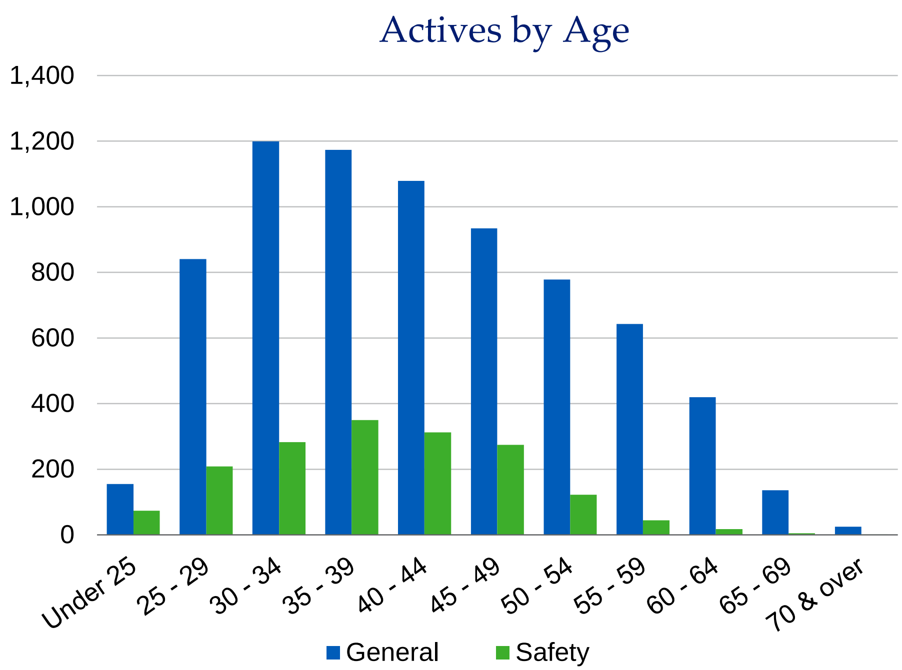
[1] Includes inactive members due a refund of member contributions.

Active Members

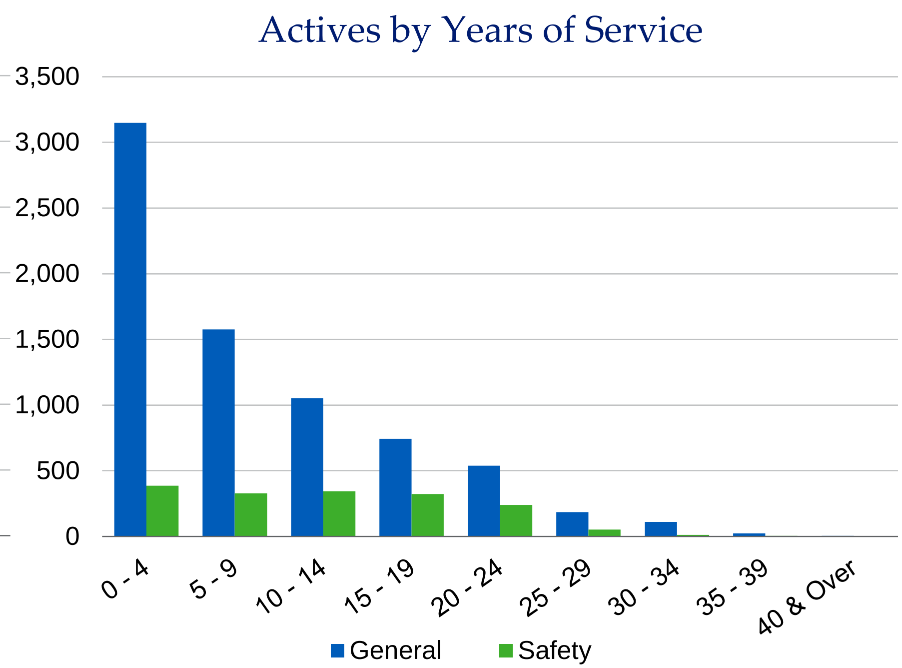
Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 9,072 active members with an average age of 42.1, average years of service of 9.7 years and average compensation of $68,705. The 9,326 active members in the prior valuation had an average age of 41.9, average service of 9.5 years and average compensation of $68,043.

Among the active members, there were none with unknown age information.

Distribution of Active Members as of June 30, 2021



Average age	42.1
Prior year average age	41.9
Difference	0.2



Average years of service	9.7
Prior year average years of service	9.5
Difference	0.2

Inactive Members

In this year's valuation, there were 3,517 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 3,143 in the prior valuation.

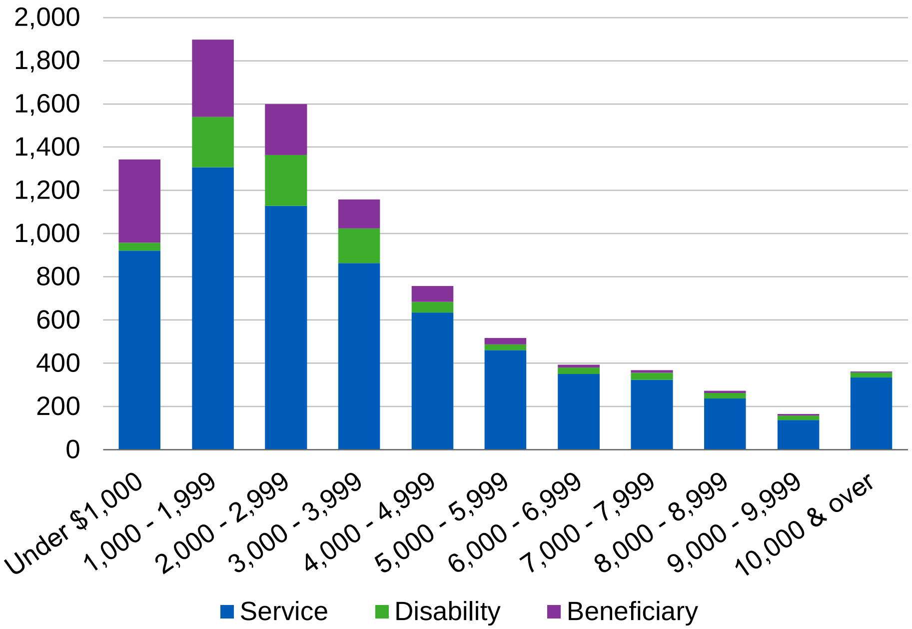
Retired Members and Beneficiaries

As of June 30, 2021, 7,573 retired members and 1,262 beneficiaries were receiving total monthly benefits of $31,476,031. For comparison, in the previous valuation, there were 7,442 retired members and 1,225 beneficiaries receiving monthly benefits of $30,028,202.

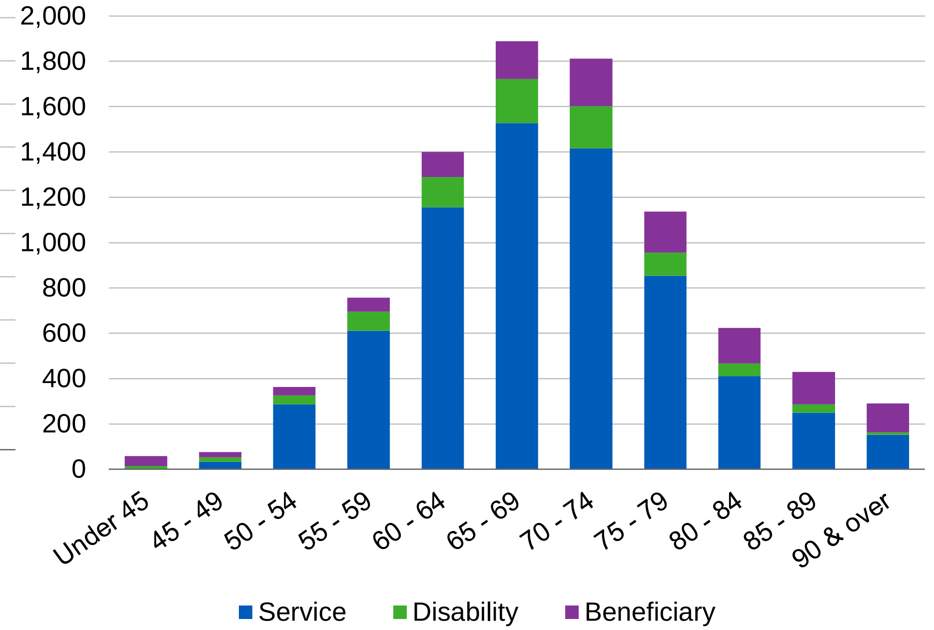
As of June 30, 2021, the average monthly benefit for retired members and beneficiaries is $3,563, compared to $3,465 in the previous valuation. The average age for retired members and beneficiaries is 69.6 in the current valuation, compared with 69.4 in the prior valuation.

Distribution of Retired Members and Beneficiaries as of June 30, 2021

Retired Members and Beneficiaries by Type and Monthly Amount



Retired Members and Beneficiaries by Type and Age



Historical Plan Population

The chart below demonstrates the progression of the active population over the last ten years. The chart also shows the growth among the retired population over the same time period.

Member Data Statistics: 2012 – 2021

	Active Members			Retired Members and Beneficiaries		
Year Ended June 30	Count	Average Age	Average Service	Count	Average Age	Average Monthly Amount
2012	8,253	43.5	10.6	6,890	67.6	$2,721
2013	8,485	42.9	10.2	7,171	67.7	2,827
2014	8,512	42.8	10.3	7,397	68.0	2,914
2015	8,481	42.8	10.4	7,599	68.2	3,000
2016	8,627	42.6	10.2	7,847	68.4	3,065
2017	8,728	42.3	10.0	8,093	68.6	3,157
2018	8,867	42.2	9.9	8,301	68.9	3,246
2019	9,197	41.9	9.5	8,495	69.2	3,363
2020	9,326	41.9	9.5	8,667	69.4	3,465
2021	9,072	42.1	9.7	8,835	69.6	3,563

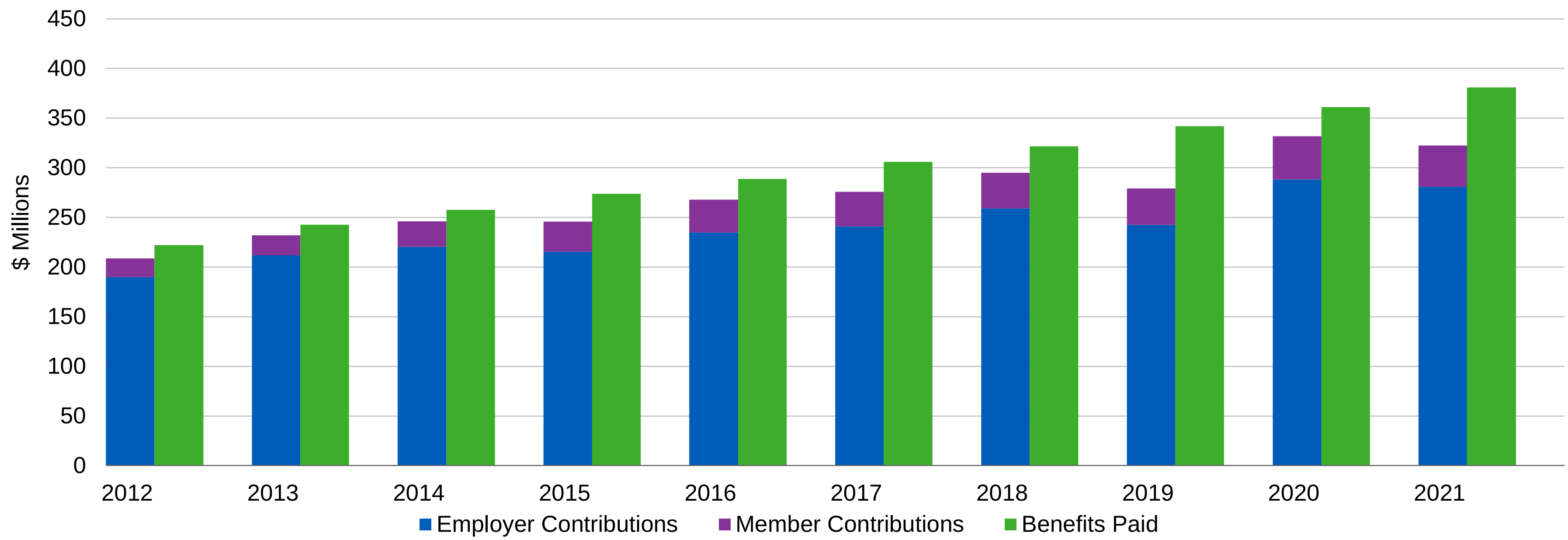
B. Financial Information

Retirement plan funding anticipates that, over the long term, both contributions (less administrative expenses) and investment earnings (less investment fees) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components.

Additional financial information, including a summary of transactions for the valuation year, is presented in *Section 3, Exhibits D, E, F* and *G*.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the valuation asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Comparison of Contributions Made with Benefits for Years Ended June 30, 2012 – 2021



Determination of Actuarial Value of Assets for Year Ended June 30, 2021

		Actual Return	Expected Return	Investment Gain / (Loss)	Percent Deferred	Unrecognized Amount
1	**Market Value of Assets**					**$5,417,513,179**
2	Calculation of unrecognized return					
	a. Six-month period ended 6/30/2016	$102,742,734	$132,508,089	$(29,765,355)	0%	$0
	b. Six-month period ended 12/31/2016	160,552,179	135,836,079	24,716,100	0%	0
	c. Six-month period ended 6/30/2017	266,054,594	141,194,926	124,859,668	10%	12,485,967
	d. Six-month period ended 12/31/2017	253,352,676	148,484,992	104,867,684	20%	20,973,537
	e. Six-month period ended 6/30/2018	14,305,836	152,145,120	(137,839,284)	30%	(41,351,785)
	f. Six-month period ended 12/31/2018	(133,735,888)	151,819,366	(285,555,254)	40%	(114,222,102)
	g. Six-month period ended 6/30/2019	347,954,553	145,751,611	202,202,941	50%	101,101,471
	h. Six-month period ended 12/31/2019	202,028,683	157,497,125	44,531,558	60%	26,718,935
	i. Six-month period ended 6/30/2020	(74,167,569)	164,189,074	(238,356,644)	70%	(166,849,651)
	j. Six-month period ended 12/31/2020	581,412,997	160,447,752	420,965,246	80%	336,772,197
	k. Six-month period ended 6/30/2021	461,947,709	180,352,331	281,595,379	90%	253,435,841
	l. Total unrecognized return[1]					$429,064,409
3	**Preliminary Actuarial Value of Assets: 1 – 2l**					**$4,988,448,771**
4	Corridor around Market Value of Assets					
	a. Minimum – 50% of Market Value					$2,708,756,590
	b. Maximum – 150% of Market Value					8,126,269,769
5	**Final Actuarial Value of Assets**					**$4,988,448,771**
6	Actuarial Value of Assets as a percentage of Market Value of Assets: **5 / 1**					92.1%
7	Non-valuation reserves:					
	a. Supplemental Retiree Benefit Reserve (SRBR) Unallocated to 0.5% COLA benefits					$128,798,257
	b. Contingency Reserve					53,624,406
	c. COLA Contribution Reserve					0
	d. Subtotal					$182,422,663
8	**Valuation Value of Assets: 5 – 7d**					**$4,806,026,107**

Note: Results may not add due to rounding.

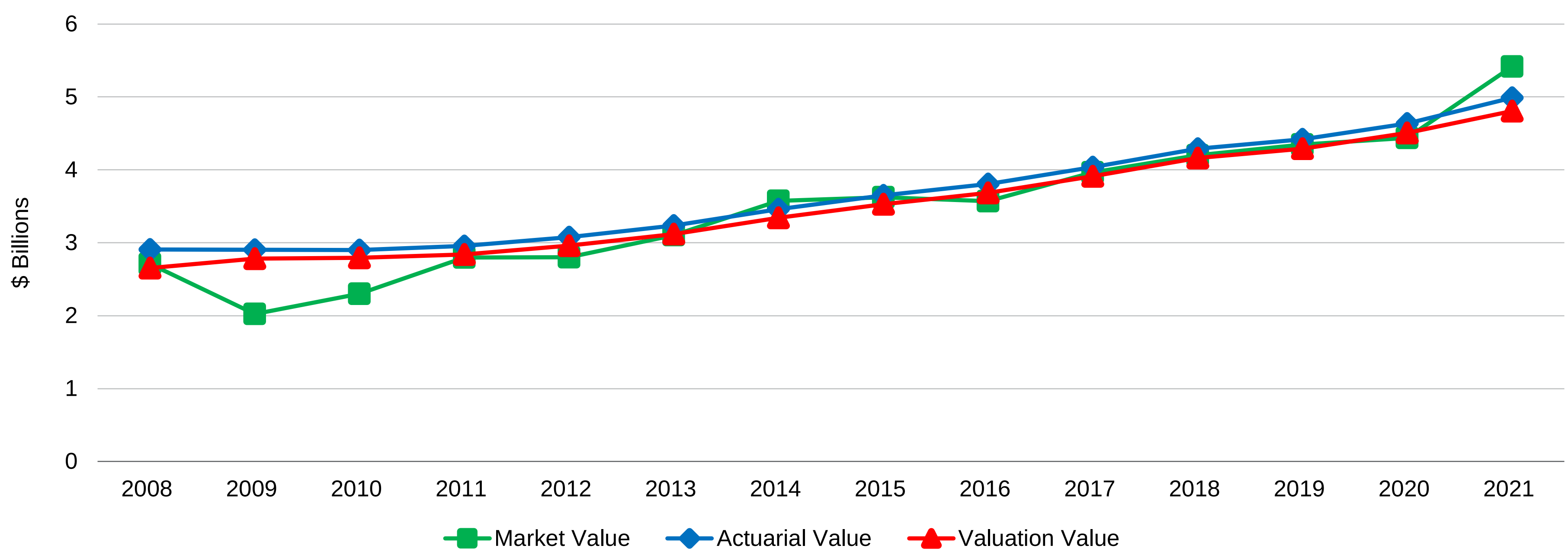
[1] Deferred return as of June 30, 2021 recognized in each of the next five years:

a.	Amount recognized on June 30, 2022	$90,968,292
b.	Amount recognized on June 30, 2023	71,292,717
c.	Amount recognized on June 30, 2024	121,967,402
d.	Amount recognized on June 30, 2025	116,676,461
e.	Amount recognized on June 30, 2026	28,159,537
f.	Subtotal	$429,064,409

Section 2: Actuarial Valuation Results

The Market Value, Actuarial Value and Valuation Value of Assets are representations of the plan's financial status. As investment gains and losses are gradually taken into account, the Actuarial Value of Assets tracks the Market Value of Assets. The Valuation Value of Assets is the Actuarial Value, excluding any non-valuation reserves. The Valuation Value of Assets is significant because the plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the Unfunded Actuarial Accrued Liability is an important element in determining the contribution requirement.

Market Value, Actuarial Value, and Valuation Value of Assets as of June 30, 2008 – 2021



Allocation of Valuation Value of Assets as of June 30, 2021

	County General	District[1]	County Safety	Total
Member Deposit Reserves	$314,166,823	$33,028,625	$158,711,480	$505,906,928
Employer Advance Reserves	534,215,289	54,311,593	581,002,708	1,169,529,590
Cost-of-Living Reserves – 2%	868,328,628	69,633,732	619,640,596	1,557,602,957
Cost-of-Living Reserves – 0.5%[2]	12,852,116	1,030,648	9,171,289	23,054,053
Retired Member Reserves	1,065,163,397	84,924,514	399,844,668	1,549,932,579
Valuation Value of Assets[3]	**$2,794,726,254**	**$242,929,112**	**$1,768,370,742**	**$4,806,026,107**

Note: Results may not add due to rounding.

[1] Includes Valuation Value of Assets allocated to the declining employers as follows:

Berrenda Mesa	$5,577,000
Inyokern	$150,000

[2] Allocated in proportion to the Cost-of-Living Reserve – 2%.

[3] Because the Contingency Reserve is positive, it is excluded from the Valuation Value of Assets per the Board's Interest Crediting Policy.

C. Actuarial Experience

To calculate any actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the actuarially determined contribution will decrease from the previous year. On the other hand, the actuarially determined contribution will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years. There are no changes in actuarial assumptions reflected in this valuation.

The net total gain is $63.2 million, which includes $30.4 million from investment gains, a loss of $33.5 million from contribution experience and $66.3 million in gains from all other sources. The net experience variation from individual sources other than investments and contributions was 0.9% of the Actuarial Accrued Liability. A discussion of the major components of the actuarial experience is on the following pages.

Actuarial Experience for Year Ended June 30, 2021

1	Net gain from investments[1]	$30,447,000
2	Net loss from contribution experience[2]	(33,503,000)
3	Net gain from other experience[3]	66,272,000
4	**Net experience gain: 1 + 2 + 3**	**$63,216,000**

[1] Details on next page.
[2] Due to UAAL contributions paid on lower than expected payroll and the phase-in of the impact of new actuarial assumptions on the UAAL contribution rate for the County Safety group.
[3] See *Section 2, Subsection E* for further details. Does not include the effect of plan or assumption changes, if any.

Investment Experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Association's investment policy. The rate of return on the Market Value of Assets was 23.68% for the year ended June 30, 2021.

For valuation purposes, the assumed rate of return on the Valuation Value of Assets is 7.25%. The actual rate of return on a valuation basis for the 2020-2021 plan year was 7.93%. Because the actual return for the year was greater than the assumed return, the Association experienced an actuarial gain during the year ended June 30, 2021 with regard to its investments.

Investment Experience for Year Ended June 30, 2021

		Market Value	Actuarial Value	Valuation Value
1	Net investment income	$1,043,360,707	$418,061,488	$355,223,792
2	Average value of assets	4,406,473,633	4,602,708,444	4,479,675,293
3	Rate of return: **1 ÷ 2**	23.68%	9.08%	7.93%
4	Assumed rate of return	7.25%	7.25%	7.25%
5	Expected investment income: **2 x 4**	$319,469,338	$333,696,362	$324,776,459
6	**Actuarial gain/(loss): 1 - 5**	**$723,891,369**	**$84,365,126**	**$30,447,333**

Section 2: Actuarial Valuation Results

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial and valuation basis compared to the actual market value investment return for the last ten years, including averages over select time periods.

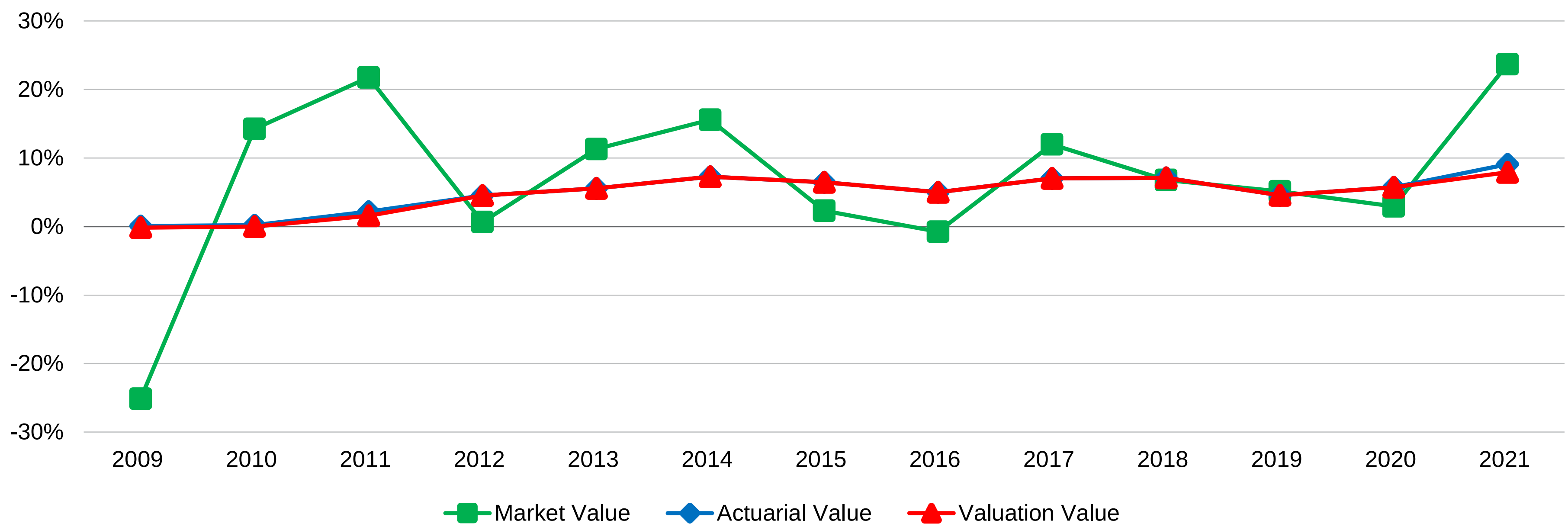
Investment Return – Market Value, Actuarial Value and Valuation Value: 2012 – 2021

Year Ended June 30	Market Value Investment Return		Actuarial Value Investment Return		Valuation Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent
2012	$17,681,865	0.63%	$133,360,035	4.52%	$128,187,974	4.52%
2013	315,415,541	11.29%	171,131,798	5.57%	164,826,838	5.57%
2014	482,632,857	15.57%	235,294,994	7.28%	227,040,629	7.28%
2015	81,931,170	2.30%	222,215,376	6.45%	214,895,554	6.46%
2016	(27,535,157)	(0.76%)	181,835,568	5.00%	176,132,858	5.00%
2017	426,606,857	12.00%	265,683,238	7.01%	257,592,581	7.02%
2018	267,658,596	6.78%	285,584,383	7.10%	277,046,241	7.10%
2019	214,244,104	5.14%	194,249,223	4.56%	188,682,583	4.57%
2020	127,861,225	2.95%	251,758,339	5.72%	245,000,434	5.73%
2021	1,043,360,707	23.68%	418,061,488	9.08%	355,223,792	7.93%
Most recent five-year geometric average return		**9.87%**		**6.68%**		**6.46%**
Most recent ten-year geometric average return		**7.72%**		**6.22%**		**6.11%**

Section 2: Actuarial Valuation Results

Section 2, Subsection B described the actuarial asset valuation method that gradually recognizes fluctuations in the market value rate of return. The goal of this is to stabilize the actuarial rate of return and to produce more level pension plan costs.

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2009 – 2021



Contributions

Contributions for the year ended June 30, 2021 totaled $322.4 million, compared to the projected amount of $354.7 million. This resulted in a loss of $33.5 million from contribution experience for the year, when adjusted for timing.

Non-Investment Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements (more or fewer than projected),
- salary increases (greater or smaller than projected), and
- cost-of-living adjustments (COLAs) higher or lower than anticipated.

The net gain from this other experience for the year ended June 30, 2021 amounted to $66.3 million, which is 0.9% of the Actuarial Accrued Liability. See *Section 2, Subsection E* for a detailed development of the Unfunded Actuarial Accrued Liability.

D. Other Changes in the Actuarial Accrued Liability

The Actuarial Accrued Liability as of June 30, 2021 is $7.2 billion, an increase of $0.2 billion, or 2.3%, from the Actuarial Accrued Liability as of the prior valuation date. The liability is expected to grow each year with Normal Cost and interest, and to decline due to benefit payments made. Additional fluctuations can occur due to actual experience that differs from expected (as discussed in the previous subsection).

Actuarial Assumptions and Methods

There were no changes in plan actuarial assumptions or methods since the prior valuation.

Details on actuarial assumptions and methods are in *Section 4, Exhibit 1*.

Plan Provisions

On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriff's Assn. et al., v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members for that system and other similarly situated 1937 Act county employees retirement systems. See Item (1) on page 8 of this report for a discussion of the action taken by KCERA.

- The change in plan provisions resulted in a decrease of $31.1 million in the Actuarial Accrued Liability (which along with a decrease of $2.2 million in the Valuation Value of Assets resulted in a net decrease of $28.9 million in the UAAL). In addition, there was a decrease of $0.9 million in the Normal Cost as a result of the change in compensation earnable and pensionable compensation for active members.

A summary of plan provisions is in *Section 4, Exhibit 2*.

E. Development of Unfunded Actuarial Accrued Liability

Development for Year Ended June 30, 2021 ($ in '000s)

1	**Unfunded Actuarial Accrued Liability at beginning of year**		**$2,497,041**
2	Total Normal Cost at middle of year[1]		127,191
3	Expected administrative expenses		5,708
4	Expected employer and member contributions[2]		(354,745)
5	Interest		175,142
6	Expected Unfunded Actuarial Accrued Liability at end of year		$2,450,337
7	Changes due to:		
	a. Investment return greater than expected (after "smoothing")	$(30,447)	
	b. Actual contributions less than expected in item 4[3]	33,503	
	c. Individual salary increases lower than expected	(39,749)	
	d. Gains from retirement experience	(22,482)	
	e. COLA increases lower than expected	(5,620)	
	f. Other experience loss	1,579	
	g. Implementation of Alameda decision[4]	(28,922)	
	Total changes		$(92,138)
8	**Unfunded Actuarial Accrued Liability at end of year**		**$2,358,199**

Note: The sum of items 7c through 7f equals the "Net gain from other experience" shown in *Section 2, Subsection C*.

[1] Excludes administrative expense load.
[2] Includes contributions towards administration expenses.
[3] Due to UAAL contributions paid on lower than expected payroll and the phase-in of the impact of new actuarial assumptions on the UAAL contribution rate for the County Safety group.
[4] On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriff's Assn. et al., v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members for that system and other similarly situated 1937 Act county employees retirement systems. See Item (1) on page 8 of this report for a discussion of the action taken by KCERA.

F. Recommended Contribution

The recommended contribution is equal to the employer Normal Cost payment and a payment on the Unfunded Actuarial Accrued Liability. As of June 30, 2021, the average recommended employer contribution is 49.10% of compensation.

The Board sets the funding policy used to calculate the recommended contribution based on layered amortization periods. See *Section 4, Exhibit 1* for further details on the funding policy.

The contribution requirement as of June 30, 2021 is based on the data previously described, the actuarial assumptions and plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions.

Average Recommended Employer Contribution for Year Ended June 30

		2021		2020	
		Amount ($ in '000s)	**% of Projected Compensation[1]**	**Amount ($ in '000s)**	**% of Projected Compensation[1]**
1	Total Normal Cost[2]	$124,039	19.91%	$128,583	20.26%
2	Expected member contributions	42,475	6.82%	42,783	6.74%
3	Employer Normal Cost: **1 – 2**	$81,564	13.09%	$85,800	13.52%
4	Actuarial Accrued Liability	$7,164,225		$7,005,589	
5	Valuation Value of Assets	4,806,026		4,508,548	
6	Unfunded Actuarial Accrued Liability: **4 – 5**	$2,358,199		$2,497,041	
7	Payment on Unfunded Actuarial Accrued Liability	224,462	36.01%	226,162	35.64%
8	Total average recommended employer contribution: **3 + 7**	$306,026	49.10%	$311,962	49.16%
9	Projected compensation	**$623,295**		**$634,570**	

[1] Contributions are assumed to be paid at the middle of the year.
[2] Includes administrative expense load.

Reconciliation of Average Recommended Employer Contribution Rate

The chart below details the changes in the average recommended employer contribution rate from the prior valuation to the current year's valuation.

Reconciliation from June 30, 2020 to June 30, 2021

		Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
1	**Average Recommended Employer Contribution as of June 30, 2020**	**49.16%**	**$311,962**
2	Effect of investment return greater than expected (after "smoothing")	(0.38%)	(2,369)
3	Effect of actual contributions less than expected	0.42%	2,618
4	Effect of individual salary increases lower than expected	(0.49%)	(3,054)
5	Effect of gains on retirement experience	(0.28%)	(1,745)
6	Effect of COLA increases lower than expected	(0.07%)	(436)
7	Effect of amortizing prior year's UAAL over a smaller than expected projected total payroll	1.46%	9,100
8	Effect of changes in demographics of members amongst tiers on Normal Cost	(0.30%)	(1,870)
9	Effect of other net experience gains[2]	(0.27%)	(7,245)
10	Effect of implementation of Alameda decision[3]	(0.15%)	(935)
11	Total change	(0.06%)	$(5,936)
12	**Average Recommended Employer Contribution as of June 30, 2021**	**49.10%**	**$306,026**

1 Based on projected compensation for each valuation date shown.
2 Net of an adjustment to reflect 12-month delay between date of valuation and date of rate implementation for all actuarial experience (-0.19% of payroll). Estimated annual dollar cost also reflects the change in total projected compensation from the prior valuation.
3 On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriff's Assn. et al., v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members for that system and other similarly situated 1937 Act county employees retirement systems. See Item (1) on page 8 of this report for a discussion of the action taken by KCERA.

Reconciliation of Average Recommended Member Contribution Rate

The chart below details the changes in the average recommended member contribution rate from the prior valuation to the current year's valuation.

Reconciliation from June 30, 2020 to June 30, 2021

		Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
1	**Average Recommended Member Contribution as of June 30, 2020**	**6.74%**	**$42,783**
2	Effect of changes in member demographics amongst tiers	0.07%	436
3	Effect of net other changes[2]	0.01%	(744)
4	Effect of implementation of Alameda decision[3]	0.00%	0
5	Total change	0.08%	(308)
6	**Average Recommended Member Contribution as of June 30, 2021**	**6.82%**	**$42,475**

1 Based on projected compensation for each valuation date shown.
2 Other differences in actual versus expected experience. Estimated annual dollar cost also reflects the change in total projected compensation from the prior valuation.
3 On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriff's Assn. et al., v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members for that system and other similarly situated 1937 Act county employees retirement systems. See Item (1) on page 8 of this report for a discussion of the action taken by KCERA.

Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates

County and Courts

Plan (Tier I)	Valuation Report Label	Benefit Formula	Member Contribution Code Section	Member Contribution Provides Average Annuity of:	Adopted 1997 MOU	Soc Sec Integration	Pre-Tax	5-yr Contribution Stop
General – County Tier I	County General Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	Varies[1]
General – County – Court Employees Tier I	Courts Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55 plus supplemental 8.0%[2]	Yes	Yes	Yes	3/12/2011[3]
Safety – County Tier I	County Safety Tier I	31664.1 (3% @ 50)	31639.25	3/200 of FAS1 at age 50[4]	Yes	Yes	Yes	Varies[1]

Plan (Tier IIA)	Valuation Report Label	Benefit Formula	Member Contribution Code Section	Member Contribution Provides Average Annuity of:	Tier Adoption Date	Soc Sec Integration	Pre-Tax
General – County Tier IIA	County General Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	10/27/2007[5]	Yes	Yes
General – County – Court Employees Tier IIA	Courts Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	3/12/2011	Yes	Yes
Safety – County Tier IIA	County Safety Tier IIA	31664 (2% @ 50)	31639.25	1/100 of FAS1 at age 50[4]	3/27/2012	Yes	Yes

Plan (Tier IIB)	Valuation Report Label	Benefit Formula	Member Contribution Code Section	Member Contribution	Tier Adoption Date	Soc Sec Integration	Pre-Tax
General – County Tier IIB	County General Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
General – County – Court Employees Tier IIB	Courts Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
Safety – County Tier IIB	County Safety Tier IIB	31664 (2% @ 50)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes

FAS1 = 1-Year Final Average Salary

1 See next page for member contribution rates by employee association and bargaining unit.
2 Court employees in Tier I pay an additional 8% of the base salary for their entire career.
3 Court employees in Tier I hired prior to this date pay the full member contribution rates for only the first five years of service as a result of the 2010 Memorandum of Understanding (MOU).
4 Safety Tier I and Safety Tier IIA members stop paying contributions upon attaining 30 years of continuous county service.
5 KCPA (Prosecutors) employee association adopted Tier IIA effective July 5, 2008.

Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates (continued)

Summary of KCERA Member Contribution Rates – County Bargaining Units

Plan	Employee Association	Bargaining Unit	5-yr Contribution Stop[1]	1/6th Rate Start[1]	1/3rd Rate Start[1]	"Safety 3" Effective Date
County General	SEIU	1 – Supervisory, 2 – Professional, 3 – Technical Services, 4 – Clerical, 5 – Administrative, 6 – Trade/Crafts/Labor	8/7/2004	5/4/2013	5/3/2014	N/A
County General		D – Mid-management, M – Management, X – Confidential	9/4/2004[2]	7/13/2013	7/12/2014	N/A
County General	KCPA	P – Prosecutors	2/8/2005	8/10/2013	8/9/2014	N/A
County Safety	KCFFU	F – Firefighters, 7 – Supervisors	3/31/2007[3]	5/4/2013	5/3/2014	3/31/2007[4]
County Safety	KLEA	L – Sheriff Law Enforcement, 8 – Supervisors	11/10/2007	5/4/2013	5/3/2014	N/A
County Safety	KCSCA	N – Sheriff Lieutenants, R – Commanders	3/17/2007	5/4/2013	5/3/2014	N/A
County Safety	SEIU-CJU	J – Criminal Justice, S – Supervisors	12/8/2007	5/4/2013	5/3/2014	N/A
County Safety	KCPMA	O – Probation Management	4/7/2004	5/4/2013	5/3/2014	N/A
County Safety	KCPOA	Q – Probation Officers, Y – Supervisors	9/18/2007	8/10/2013	8/9/2014	9/18/2007[4]
County Safety	KCDOA	T – Detention Officers, V – Supervisors	6/23/2007	5/4/2013	5/3/2014	N/A
County Safety	KCSCA II	W – Detention Officers Lieutenants	9/15/2009	5/4/2013	5/3/2014	12/8/2007 to 9/14/2009[5]

1 Tier I members hired prior to this date pay the full member contributions for only the first five years of service. These members will start paying one-sixth of their full member contributions on the "1/6th Rate Start" date, and will start paying one-third of their full member contributions on the "1/3rd Rate Start" date.
2 Elected officials hired prior to this date do not pay member contributions. These members will start paying one-third of their full member contributions on the first day of the first biweekly payroll period in January 2015.
3 Firefighters hired prior to this date pay 1% of their base salary after the first five years of service. These members will start paying one-sixth of their full member contributions (not to exceed 2% of base salary) on the "1/6th Rate Start" date, and will start paying one-third of their full member contributions (not to exceed 4% of base salary) on the "1/3rd Rate Start" date.
4 Members hired after this date pay a uniform "Safety 3" rate for all entry ages. The uniform rate continues to be integrated with Social Security.
5 Effective December 8, 2007 through September 14, 2009, this flat rate applied to KCSCA II employees.

Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates (continued)

Districts

Plan (Tier I)	Valuation Report Label	Benefit Formula	Member Contribution Code Section	Member Contribution Provides Average Annuity of:	Adopted 1997 MOU	Soc Sec Integration	Pre-Tax	5-yr Contribution Stop[1]
District – Berrenda Mesa Water Tier I	Declining Employers Tier I	31676.17 (3% @ 60)[2]	31621.8	1/100 of FAS1 at age 55	Yes	No	Yes	1/1/2004
District – Buttonwillow Recreation & Park Tier I	District Category III Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55 (Member pays 50%)[3]	No	No	No	N/A
District – East Kern Cemetery Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	1/1/2004
District – Inyokern Community Services Tier I	Declining Employers Tier I	31676.17 (3% @ 60)[2]	31621.8	1/100 of FAS1 at age 55	Yes	No	No	1/1/2004
District – Kern County Water Agency Tier I	District Category I Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55 (100% employer pickup if hired prior to 8/22/2004)[4]	Yes	Yes	Yes	N/A
District – Kern Mosquito & Vector Control Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	1/8/2005
District – North of River Sanitation Tier I	District Category V Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	8/7/2004
District – San Joaquin Valley Unified Air Pollution Control Tier I	District Category III Tier I	31676.17 (3% @ 60)	31621.8	Member pays 50% of Normal Cost rate[5]	No	No	Yes	N/A
District – Shafter Recreation & Park Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	Yes	1/1/2004
District – West Side Cemetery Tier I	District Category VI Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	No	N/A[6]
District – West Side Mosquito Abatement Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	No	1/1/2004
District – West Side Recreation & Park Tier I	District Category II Tier I	31676.17 (3% @ 60)	31621.8	1/100 of FAS1 at age 55	Yes	Yes	No	8/7/2004

FAS1 = 1-Year Final Average Salary

1 Tier I Members hired prior to this date pay the full member contribution rates for only the first five years of service as a result of the 1997 Memorandum of Understanding (MOU).
2 District Category IV adopted the 3% @ 60 Formula on a prospective basis only. Member contribution rates are the same as General Tier I.
3 Buttonwillow District Tier I (District Category III) did not adopt the 1997 MOU. Members in those districts pay 50% of the full rates, regardless of hire date.
4 For Kern County Water Agency (District Category I) employees hired prior to August 22, 2004, the employer picks up 100% of all member contributions.
5 Effective July 11, 2015, San Joaquin Valley Unified Air Pollution Control District Tier I members pay 28% of the total Normal Cost rate. That percent increases to 39% effective 2016-2017 and 50% effective 2017-2018.
6 West Side Cemetery (District Category VI) employees pay the full member contribution rates for only the first five years of service, regardless of hire date.

Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates (continued)

Districts (continued)

Plan (Tier IIA)	Valuation Report Label	Benefit Formula	Member Contribution Code Section	Member Contribution Provides Average Annuity of:	Tier Adoption Date	Soc Sec Integration	Pre-Tax
District – Berrenda Mesa Water Tier IIA[1]	Declining Employers Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	1/12/2010	No	Yes
District – Buttonwillow Recreation & Park Tier IIA[1]	District Category III Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	12/17/2012	No	No
District – East Kern Cemetery Tier IIA[1]	District Category II Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	12/17/2012	Yes	Yes
District – Inyokern Community Services Tier IIA[1]	Declining Employers Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	12/13/2012	No	No
District – Kern County Water Agency Tier IIA	District Category I Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	1/1/2010	Yes	Yes
District – Kern Mosquito & Vector Control Tier IIA[1]	District Category II Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	12/12/2012	Yes	Yes
District – North of River Sanitation Tier IIA	District Category V Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	10/29/2007	Yes	Yes
District – San Joaquin Valley Unified Air Pollution Control Tier IIA	District Category III Tier IIA	31676.01 (1.62% @ 65)	31621	Member pays 50% of Normal Cost rate[2]	7/31/2012	No	Yes
District – Shafter Recreation & Park Tier IIA[1]	District Category II Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	12/19/2012	Yes	Yes
District – West Side Cemetery Tier IIA[1]	District Category VI Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	12/18/2012	Yes	No
District – West Side Mosquito Abatement Tier IIA[1]	District Category II Tier IIA	31676.01 (1.62% @ 65)	31621	1/120 of FAS1 at age 60	11/15/2012	Yes	No

FAS1 = 1-Year Final Average Salary

[1] These districts adopted Tier IIA, but had no Tier IIA employees as of the valuation date.
[2] Effective July 8, 2017, San Joaquin Valley Unified Air Pollution Control District Tier IIA members pay 50% of the total Normal Cost rate.

Summary of KCERA Employers, Benefit Formulas and Member Contribution Rates (continued)

Districts (continued)

Plan (Tier IIB and Tier III)	Valuation Report Label	Benefit Formula	Member Contribution Code Section	Member Contribution	Tier Adoption Date	Soc Sec Integration	Pre-Tax
District – Berrenda Mesa Water Tier IIB[1]	Declining Employers Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	Yes
District – Buttonwillow Recreation & Park Tier IIB[1]	District Category III Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	No
District – East Kern Cemetery Tier IIB	District Category II Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – Inyokern Community Services Tier IIB[1]	Declining Employers Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	No
District – Kern County Water Agency Tier IIB	District Category I Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – Kern Mosquito & Vector Control Tier IIB	District Category II Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – North of River Sanitation Tier IIB	District Category V Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – San Joaquin Valley Unified Air Pollution Control Tier IIB	District Category III Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	Yes
District – Shafter Recreation & Park Tier IIB	District Category II Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	Yes
District – West Side Cemetery Tier IIB[1]	District Category VI Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	No
District – West Side Mosquito Abatement Tier IIB	District Category II Tier IIB	31676.01 (1.62% @ 65)	7522.30(a)	50% of Normal Cost rate	1/1/2013	Yes	No
District – West Side Recreation & Park Tier III[1]	District Category II Tier III	7522.20(a) (2.50% @ 67)	7522.30(a)	50% of Normal Cost rate	1/1/2013	No	No

[1] These districts adopted Tier IIB or Tier III, but had no employees in those tiers as of the valuation date.

Recommended Employer Contribution Rates – Current Valuation

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
County General Tier I without Courts								
Normal Cost	13.36%	$18,085	4.26%	$5,767	1.33%	$1,800	18.95%	$25,652
UAAL	21.29%	28,820	2.97%	4,020	5.53%	7,486	29.79%	40,326
Total Contributions	**34.65%**	**$46,905**	**7.23%**	**$9,787**	**6.86%**	**$9,286**	**48.74%**	**$65,978**
County General Tier IIA without Courts								
Normal Cost	3.87%	$2,538	2.15%	$1,410	0.66%	$432	6.68%	$4,380
UAAL	21.29%	13,961	2.97%	1,948	5.53%	3,626	29.79%	19,535
Total Contributions	**25.16%**	**$16,499**	**5.12%**	**$3,358**	**6.19%**	**$4,058**	**36.47%**	**$23,915**
County General Tier IIB without Courts								
Normal Cost	4.88%	$10,453	1.03%	$2,206	0.32%	$686	6.23%	$13,345
UAAL	21.29%	45,603	2.97%	6,362	5.53%	11,845	29.79%	63,810
Total Contributions	**26.17%**	**$56,056**	**4.00%**	**$8,568**	**5.85%**	**$12,531**	**36.02%**	**$77,155**
County General without Courts – Combined								
Normal Cost	7.49%	$31,076	2.26%	$9,383	0.70%	$2,918	10.45%	$43,377
UAAL	21.29%	88,384	2.97%	12,330	5.53%	22,957	29.79%	123,671
Total Contributions	**28.78%**	**$119,460**	**5.23%**	**$21,713**	**6.23%**	**$25,875**	**40.24%**	**$167,048**
Courts Tier I								
Normal Cost	10.59%	$1,381	4.26%	$555	1.33%	$174	16.18%	$2,110
UAAL	21.29%	2,776	2.97%	387	5.53%	721	29.79%	3,884
Total Contributions	**31.88%**	**$4,157**	**7.23%**	**$942**	**6.86%**	**$895**	**45.97%**	**$5,994**
Courts Tier IIA								
Normal Cost	4.16%	$136	2.15%	$71	0.66%	$22	6.97%	$229
UAAL	21.29%	699	2.97%	97	5.53%	181	29.79%	977
Total Contributions	**25.45%**	**$835**	**5.12%**	**$168**	**6.19%**	**$203**	**36.76%**	**$1,206**
Courts Tier IIB								
Normal Cost	4.88%	$741	1.03%	$156	0.32%	$49	6.23%	$946
UAAL	21.29%	3,234	2.97%	451	5.53%	841	29.79%	4,526
Total Contributions	**26.17%**	**$3,975**	**4.00%**	**$607**	**5.85%**	**$890**	**36.02%**	**$5,472**

[1] Based on June 30, 2021 projected compensation as shown on page 47.

Recommended Employer Contribution Rates – Current Valuation (continued)

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
Courts – Combined								
Normal Cost	7.17%	$2,258	2.48%	$782	0.77%	$245	10.42%	$3,285
UAAL	21.29%	6,709	2.97%	935	5.53%	1,743	29.79%	9,387
Total Contributions	**28.46%**	**$8,967**	**5.45%**	**$1,717**	**6.30%**	**$1,988**	**40.21%**	**$12,672**
County Safety Tier I								
Normal Cost	17.47%	$16,460	6.47%	$6,096	2.08%	$1,960	26.02%	$24,516
UAAL	35.52%	33,467	6.91%	6,511	13.01%	12,258	55.44%	52,236
Total Contributions	**52.99%**	**$49,927**	**13.38%**	**$12,607**	**15.09%**	**$14,218**	**81.46%**	**$76,752**
County Safety Tier IIA								
Normal Cost	10.84%	$825	4.97%	$378	1.56%	$119	17.37%	$1,322
UAAL	35.52%	2,702	6.91%	526	13.01%	990	55.44%	4,218
Total Contributions	**46.36%**	**$3,527**	**11.88%**	**$904**	**14.57%**	**$1,109**	**72.81%**	**$5,540**
County Safety Tier IIB								
Normal Cost	9.75%	$3,583	2.41%	$886	0.77%	$282	12.93%	$4,751
UAAL	35.52%	13,051	6.91%	2,539	13.01%	4,781	55.44%	20,371
Total Contributions	**45.27%**	**$16,634**	**9.32%**	**$3,425**	**13.78%**	**$5,063**	**68.37%**	**$25,122**
County Safety – Combined								
Normal Cost	15.06%	$20,868	5.31%	$7,360	1.70%	$2,361	22.07%	$30,589
UAAL	35.52%	49,220	6.91%	9,576	13.01%	18,029	55.44%	76,825
Total Contributions	**50.58%**	**$70,088**	**12.22%**	**$16,936**	**14.71%**	**$20,390**	**77.51%**	**$107,414**
All County with Courts – Combined								
Normal Cost	9.26%	$54,202	2.99%	$17,525	0.95%	$5,524	13.20%	$77,251
UAAL	24.66%	144,313	3.90%	22,841	7.30%	42,729	35.86%	209,883
Total Contributions	**33.92%**	**$198,515**	**6.89%**	**$40,366**	**8.25%**	**$48,253**	**49.06%**	**$287,134**
District Category I Tier I								
Normal Cost	15.68%	$677	4.26%	$184	1.33%	$57	21.27%	$918
UAAL	26.85%	1,159	4.60%	199	5.85%	253	37.30%	1,611
Total Contributions	**42.53%**	**$1,836**	**8.86%**	**$383**	**7.18%**	**$310**	**58.57%**	**$2,529**

[1] Based on June 30, 2021 projected compensation as shown on page 47.

Recommended Employer Contribution Rates – Current Valuation (continued)

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category I Tier IIA								
Normal Cost	4.43%	$30	2.15%	$14	0.66%	$5	7.24%	$49
UAAL	26.85%	180	4.60%	31	5.85%	40	37.30%	251
Total Contributions	**31.28%**	**$210**	**6.75%**	**$45**	**6.51%**	**$45**	**44.54%**	**$300**
District Category I Tier IIB								
Normal Cost	4.88%	$59	1.03%	$12	0.32%	$4	6.23%	$75
UAAL	26.85%	324	4.60%	55	5.85%	71	37.30%	450
Total Contributions	**31.73%**	**$383**	**5.63%**	**$67**	**6.17%**	**$75**	**43.53%**	**$525**
District Category I – Combined								
Normal Cost	12.35%	$766	3.39%	$210	1.09%	$66	16.83%	$1,042
UAAL	26.85%	1,663	4.60%	285	5.85%	364	37.30%	2,312
Total Contributions	**39.20%**	**$2,429**	**7.99%**	**$495**	**6.94%**	**$430**	**54.13%**	**$3,354**
District Category II Tier I								
Normal Cost	12.58%	$178	4.26%	$60	1.33%	$20	18.17%	$258
UAAL	26.85%	381	4.60%	65	5.85%	83	37.30%	529
Total Contributions	**39.43%**	**$559**	**8.86%**	**$125**	**7.18%**	**$103**	**55.47%**	**$787**
District Category II Tier IIB								
Normal Cost	4.88%	$50	1.03%	$11	0.32%	$3	6.23%	$64
UAAL	26.85%	275	4.60%	47	5.85%	60	37.30%	382
Total Contributions	**31.73%**	**$325**	**5.63%**	**$58**	**6.17%**	**$63**	**43.53%**	**$446**
District Category II Tier III								
Normal Cost	5.84%	$0	1.20%	$0	0.37%	$0	7.41%	$0
UAAL	26.85%	0	4.60%	0	5.85%	0	37.30%	0
Total Contributions	**32.69%**	**$0**	**5.80%**	**$0**	**6.22%**	**$0**	**44.71%**	**$0**
District Category II – Combined								
Normal Cost	9.34%	$228	2.89%	$71	0.94%	$23	13.17%	$322
UAAL	26.85%	656	4.60%	112	5.85%	143	37.30%	911
Total Contributions	**36.19%**	**$884**	**7.49%**	**$183**	**6.79%**	**$166**	**50.47%**	**$1,233**

[1] Based on June 30, 2021 projected compensation as shown on page 47.

Recommended Employer Contribution Rates – Current Valuation (continued)

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category III Tier I (Buttonwillow)								
Normal Cost	10.20%	$4	4.26%	$2	1.33%	$0	15.79%	$6
UAAL	26.85%	11	4.60%	2	5.85%	2	37.30%	15
Total Contributions	**37.05%**	**$15**	**8.86%**	**$4**	**7.18%**	**$2**	**53.09%**	**$21**
District Category III Tier I (SJVAPCD)								
Normal Cost	9.38%	$1,612	2.13%	$366	0.67%	$115	12.18%	$2,093
UAAL	26.85%	4,615	4.60%	791	5.85%	1,005	37.30%	6,411
Total Contributions	**36.23%**	**$6,227**	**6.73%**	**$1,157**	**6.52%**	**$1,120**	**49.48%**	**$8,504**
District Category III Tier IIA (Buttonwillow)								
Normal Cost	3.70%	$0	2.15%	$0	0.66%	$0	6.51%	$0
UAAL	26.85%	0	4.60%	0	5.85%	0	37.30%	0
Total Contributions	**30.55%**	**$0**	**6.75%**	**$0**	**6.51%**	**$0**	**43.81%**	**$0**
District Category III Tier IIA (SJVAPCD)								
Normal Cost	5.31%	$50	1.08%	$10	0.34%	$4	6.73%	$64
UAAL	26.85%	255	4.60%	44	5.85%	56	37.30%	355
Total Contributions	**32.16%**	**$305**	**5.68%**	**$54**	**6.19%**	**$60**	**44.03%**	**$419**
District Category III Tier IIB								
Normal Cost	4.88%	$466	1.03%	$98	0.32%	$30	6.23%	$594
UAAL	26.85%	2,561	4.60%	439	5.85%	558	37.30%	3,558
Total Contributions	**31.73%**	**$3,027**	**5.63%**	**$537**	**6.17%**	**$588**	**43.53%**	**$4,152**
District Category III – Combined								
Normal Cost	7.69%	$2,132	1.72%	$476	0.54%	$149	9.95%	$2,757
UAAL	26.85%	7,442	4.60%	1,276	5.85%	1,621	37.30%	10,339
Total Contributions	**34.54%**	**$9,574**	**6.32%**	**$1,752**	**6.39%**	**$1,770**	**47.25%**	**$13,096**
District Category V Tier I								
Normal Cost	18.64%	$14	4.26%	$3	1.33%	$1	24.23%	$18
UAAL	26.85%	20	4.60%	3	5.85%	5	37.30%	28
Total Contributions	**45.49%**	**$34**	**8.86%**	**$6**	**7.18%**	**$6**	**61.53%**	**$46**

[1] Based on June 30, 2021 projected compensation as shown on page 47.

Recommended Employer Contribution Rates – Current Valuation (continued)

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category V Tier IIA								
Normal Cost	4.43%	$18	2.15%	$9	0.66%	$3	7.24%	$30
UAAL	26.85%	110	4.60%	19	5.85%	24	37.30%	153
Total Contributions	**31.28%**	**$128**	**6.75%**	**$28**	**6.51%**	**$27**	**44.54%**	**$183**
District Category V Tier IIB								
Normal Cost	4.88%	$38	1.03%	$8	0.32%	$3	6.23%	$49
UAAL	26.85%	210	4.60%	36	5.85%	46	37.30%	292
Total Contributions	**31.73%**	**$248**	**5.63%**	**$44**	**6.17%**	**$49**	**43.53%**	**$341**
District Category V – Combined								
Normal Cost	5.46%	$70	1.55%	$20	0.61%	$7	7.62%	$97
UAAL	26.85%	340	4.60%	58	5.85%	75	37.30%	473
Total Contributions	**32.31%**	**$410**	**6.15%**	**$78**	**6.46%**	**$82**	**44.92%**	**$570**
District Category VI Tier I								
Normal Cost	18.64%	$50	4.26%	$11	1.33%	$4	24.23%	$65
UAAL	26.85%	72	4.60%	12	5.85%	16	37.30%	100
Total Contributions	**45.49%**	**$122**	**8.86%**	**$23**	**7.18%**	**$20**	**61.53%**	**$165**
District Category VI Tier IIB								
Normal Cost	4.88%	$0	1.03%	$0	0.32%	$0	6.23%	$0
UAAL	26.85%	0	4.60%	0	5.85%	0	37.30%	0
Total Contributions	**31.73%**	**$0**	**5.63%**	**$0**	**6.17%**	**$0**	**43.53%**	**$0**
District Category VI – Combined								
Normal Cost	18.64%	$50	4.26%	$11	1.33%	$4	24.23%	$65
UAAL	26.85%	72	4.60%	12	5.85%	16	37.30%	100
Total Contributions	**45.49%**	**$122**	**8.86%**	**$23**	**7.18%**	**$20**	**61.53%**	**$165**
Declining Employers Tier I (Berrenda)								
Normal Cost	12.18%	$21	4.02%	$7	1.15%	$2	17.35%	$30
UAAL	159.50%	278	48.27%	84	40.12%	69	247.89%	431
Total Contributions[2]	**171.68%**	**$299**	**52.29%**	**$91**	**41.27%**	**$71**	**265.24%**	**$461**

[1] Based on June 30, 2021 projected compensation as shown on page 47.
[2] These Districts are declining employers and they should contribute based on dollar contribution amounts shown (not rates).

Recommended Employer Contribution Rates – Current Valuation (continued)

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
Declining Employers Tier I (Inyokern)								
Normal Cost	N/A	$0	N/A	$0	N/A	$0	N/A	$0
UAAL	N/A	10	N/A	1	N/A	2	N/A	13
Total Contributions[2]	**N/A**	**$10**	**N/A**	**$1**	**N/A**	**$2**	**N/A**	**$13**
Declining Employers – Combined								
Normal Cost	12.07%	$21	4.02%	$7	1.15%	$2	17.24%	$30
UAAL	165.52%	288	48.85%	85	40.80%	71	255.17%	444
Total Contributions	**177.59%**	**$309**	**52.87%**	**$92**	**41.95%**	**$73**	**272.41%**	**$474**
All Districts – Combined								
Normal Cost	8.58%	$3,267	2.09%	$795	0.66%	$251	11.33%	$4,313
UAAL	27.48%	10,461	4.80%	1,828	6.02%	2,290	38.30%	14,579
Total Contributions	**36.06%**	**$13,728**	**6.89%**	**$2,623**	**6.68%**	**$2,541**	**49.63%**	**$18,892**
All Employers – Combined								
Normal Cost	9.22%	$57,469	2.94%	$18,320	0.93%	$5,775	13.09%	$81,564
UAAL	24.83%	154,774	3.96%	24,669	7.22%	45,019	36.01%	224,462
Total Contributions	**34.05%**	**$212,243**	**6.90%**	**$42,989**	**8.15%**	**$50,794**	**49.10%**	**$306,026**

[1] Based on June 30, 2021 projected compensation as shown on page 47.
[2] These Districts are declining employers and they should contribute based on dollar contribution amounts shown (not rates).

Recommended Employer Contribution Rates – Current Valuation (continued)

	June 30, 2021 Projected Compensation ($ in '000s)		June 30, 2021 Projected Compensation ($ in '000s)
County General Tier I without Courts	$135,368	District Category I Tier I	$4,318
County General Tier IIA without Courts	65,575	District Category I Tier IIA	672
County General Tier IIB without Courts	214,201	District Category I Tier IIB	1,206
Courts Tier I	13,038	District Category II Tier I	1,418
Courts Tier IIA	3,281	District Category II Tier IIB	1,025
Courts Tier IIB	15,192	District Category II Tier III	0
County Safety Tier I	94,220	District Category III Tier I (Buttonwillow)	40
County Safety Tier IIA	7,608	District Category III Tier I (SJVAPCD)	17,188
County Safety Tier IIB	36,744	District Category III Tier IIA (Buttonwillow)	0
		District Category III Tier IIA (SJVAPCD)	951
		District Category III Tier IIB	9,540
		District Category V Tier I	76
		District Category V Tier IIA	410
		District Category V Tier IIB	783
		District Category VI Tier I	267
		District Category VI Tier IIB	0
		Declining Employers Tier I (Berrenda)	174
		Declining Employers Tier I (Inyokern)	0
		All Districts	$38,068
All County with Courts	$585,227	Total	$623,295

Note: As of June 30, 2021, the COLA Contribution Reserve was zero and, therefore, not available to offset the 2% COLA contribution rate.

Recommended Employer Contribution Rates – Prior Valuation

	June 30, 2020 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
County General Tier I without Courts								
Normal Cost	13.58%	$20,072	4.28%	$6,326	1.33%	$1,965	19.19%	$28,363
UAAL	21.26%	31,423	3.40%	5,025	4.89%	7,228	29.55%	43,676
Total Contributions	**34.84%**	**$51,495**	**7.68%**	**$11,351**	**6.22%**	**$9,193**	**48.74%**	**$72,039**
County General Tier IIA without Courts								
Normal Cost	3.87%	$2,667	2.15%	$1,482	0.66%	$455	6.68%	$4,604
UAAL	21.26%	14,653	3.40%	2,343	4.89%	3,370	29.55%	20,366
Total Contributions	**25.13%**	**$17,320**	**5.55%**	**$3,825**	**5.55%**	**$3,825**	**36.23%**	**$24,970**
County General Tier IIB without Courts								
Normal Cost	4.87%	$10,063	1.04%	$2,149	0.32%	$661	6.23%	$12,873
UAAL	21.26%	43,930	3.40%	7,026	4.89%	10,104	29.55%	61,060
Total Contributions	**26.13%**	**$53,993**	**4.44%**	**$9,175**	**5.21%**	**$10,765**	**35.78%**	**$73,933**
County General without Courts – Combined								
Normal Cost	7.75%	$32,802	2.35%	$9,957	0.73%	$3,081	10.83%	$45,840
UAAL	21.26%	90,006	3.40%	14,394	4.89%	20,702	29.55%	125,102
Total Contributions	**29.01%**	**$122,808**	**5.75%**	**$24,351**	**5.62%**	**$23,783**	**40.38%**	**$170,942**
Courts Tier I								
Normal Cost	10.75%	$1,536	4.28%	$612	1.33%	$190	16.36%	$2,338
UAAL	21.26%	3,038	3.40%	486	4.89%	699	29.55%	4,223
Total Contributions	**32.01%**	**$4,574**	**7.68%**	**$1,098**	**6.22%**	**$889**	**45.91%**	**$6,561**
Courts Tier IIA								
Normal Cost	4.15%	$151	2.15%	$78	0.66%	$25	6.96%	$254
UAAL	21.26%	775	3.40%	124	4.89%	178	29.55%	1,077
Total Contributions	**25.41%**	**$926**	**5.55%**	**$202**	**5.55%**	**$203**	**36.51%**	**$1,331**
Courts Tier IIB								
Normal Cost	4.87%	$723	1.04%	$154	0.32%	$47	6.23%	$924
UAAL	21.26%	3,155	3.40%	505	4.89%	725	29.55%	4,385
Total Contributions	**26.13%**	**$3,878**	**4.44%**	**$659**	**5.21%**	**$772**	**35.78%**	**$5,309**

[1] Based on June 30, 2020 projected compensation as shown on page 54.

Recommended Employer Contribution Rates – Prior Valuation (continued)

	June 30, 2020 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
Courts – Combined								
Normal Cost	7.35%	$2,410	2.58%	$844	0.80%	$262	10.73%	$3,516
UAAL	21.26%	6,968	3.40%	1,115	4.89%	1,602	29.55%	9,685
Total Contributions	**28.61%**	**$9,378**	**5.98%**	**$1,959**	**5.69%**	**$1,864**	**40.28%**	**$13,201**
County Safety Tier I								
Normal Cost	17.60%	$17,852	6.48%	$6,573	2.08%	$2,110	26.16%	$26,535
UAAL	35.71%	36,222	7.83%	7,942	11.67%	11,838	55.21%	56,002
Total Contributions	**53.31%**	**$54,074**	**14.31%**	**$14,515**	**13.75%**	**$13,948**	**81.37%**	**$82,537**
County Safety Tier IIA								
Normal Cost	10.97%	$840	4.99%	$382	1.58%	$121	17.54%	$1,343
UAAL	35.71%	2,734	7.83%	600	11.67%	893	55.21%	4,227
Total Contributions	**46.68%**	**$3,574**	**12.82%**	**$982**	**13.25%**	**$1,014**	**72.75%**	**$5,570**
County Safety Tier IIB								
Normal Cost	9.88%	$2,948	2.43%	$725	0.76%	$227	13.07%	$3,900
UAAL	35.71%	10,656	7.83%	2,336	11.67%	3,482	55.21%	16,474
Total Contributions	**45.59%**	**$13,604**	**10.26%**	**$3,061**	**12.43%**	**$3,709**	**68.28%**	**$20,374**
County Safety – Combined								
Normal Cost	15.58%	$21,640	5.53%	$7,680	1.76%	$2,458	22.87%	$31,778
UAAL	35.71%	49,612	7.83%	10,878	11.67%	16,213	55.21%	76,703
Total Contributions	**51.29%**	**$71,252**	**13.36%**	**$18,558**	**13.43%**	**$18,671**	**78.08%**	**$108,481**
All County with Courts – Combined								
Normal Cost	9.55%	$56,852	3.11%	$18,481	0.97%	$5,801	13.63%	$81,134
UAAL	24.63%	146,586	4.43%	26,387	6.48%	38,517	35.54%	211,490
Total Contributions	**34.18%**	**$203,438**	**7.54%**	**$44,868**	**7.45%**	**$44,318**	**49.17%**	**$292,624**
District Category I Tier I								
Normal Cost	15.75%	$691	4.28%	$188	1.33%	$59	21.36%	$938
UAAL	26.17%	1,149	4.81%	211	5.04%	221	36.02%	1,581
Total Contributions	**41.92%**	**$1,840**	**9.09%**	**$399**	**6.37%**	**$280**	**57.38%**	**$2,519**

[1] Based on June 30, 2020 projected compensation as shown on page 54.

Recommended Employer Contribution Rates – Prior Valuation (continued)

	June 30, 2020 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category I Tier IIA								
Normal Cost	4.43%	$29	2.15%	$14	0.66%	$4	7.24%	$47
UAAL	26.17%	171	4.81%	32	5.04%	33	36.02%	236
Total Contributions	**30.60%**	**$200**	**6.96%**	**$46**	**5.70%**	**$37**	**43.26%**	**$283**
District Category I Tier IIB								
Normal Cost	4.87%	$53	1.04%	$11	0.32%	$4	6.23%	$68
UAAL	26.17%	287	4.81%	53	5.04%	55	36.02%	395
Total Contributions	**31.04%**	**$340**	**5.85%**	**$64**	**5.36%**	**$59**	**42.25%**	**$463**
District Category I – Combined								
Normal Cost	12.58%	$773	3.48%	$213	1.08%	$67	17.14%	$1,053
UAAL	26.17%	1,607	4.81%	296	5.04%	309	36.02%	2,212
Total Contributions	**38.75%**	**$2,380**	**8.29%**	**$509**	**6.12%**	**$376**	**53.16%**	**$3,265**
District Category II Tier I								
Normal Cost	13.38%	$222	4.28%	$71	1.33%	$23	18.99%	$316
UAAL	26.17%	435	4.81%	80	5.04%	84	36.02%	599
Total Contributions	**39.55%**	**$657**	**9.09%**	**$151**	**6.37%**	**$107**	**55.01%**	**$915**
District Category II Tier IIB								
Normal Cost	4.87%	$44	1.04%	$9	0.32%	$3	6.23%	$56
UAAL	26.17%	235	4.81%	43	5.04%	46	36.02%	324
Total Contributions	**31.04%**	**$279**	**5.85%**	**$52**	**5.36%**	**$49**	**42.25%**	**$380**
District Category II Tier III								
Normal Cost	5.78%	$0	1.20%	$0	0.37%	$0	7.35%	$0
UAAL	26.17%	0	4.81%	0	5.04%	0	36.02%	0
Total Contributions	**31.95%**	**$0**	**6.01%**	**$0**	**5.41%**	**$0**	**43.37%**	**$0**
District Category II – Combined								
Normal Cost	10.38%	$266	3.12%	$80	1.05%	$26	14.55%	$372
UAAL	26.17%	670	4.81%	123	5.04%	130	36.02%	923
Total Contributions	**36.55%**	**$936**	**7.93%**	**$203**	**6.09%**	**$156**	**50.57%**	**$1,295**

[1] Based on June 30, 2020 projected compensation as shown on page 54.

Recommended Employer Contribution Rates – Prior Valuation (continued)

	June 30, 2020 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category III Tier I (Buttonwillow)								
Normal Cost	10.24%	$4	4.28%	$2	1.33%	$0	15.85%	$6
UAAL	26.17%	10	4.81%	2	5.04%	2	36.02%	14
Total Contributions	**36.41%**	**$14**	**9.09%**	**$4**	**6.37%**	**$2**	**51.87%**	**$20**
District Category III Tier I (SJVAPCD)								
Normal Cost	9.46%	$1,886	2.14%	$427	0.67%	$134	12.27%	$2,447
UAAL	26.17%	5,218	4.81%	959	5.04%	1,005	36.02%	7,182
Total Contributions	**35.63%**	**$7,104**	**6.95%**	**$1,386**	**5.71%**	**$1,139**	**48.29%**	**$9,629**
District Category III Tier IIA (Buttonwillow)								
Normal Cost	3.83%	$0	2.15%	$0	0.66%	$0	6.64%	$0
UAAL	26.17%	0	4.81%	0	5.04%	0	36.02%	0
Total Contributions	**30.00%**	**$0**	**6.96%**	**$0**	**5.70%**	**$0**	**42.66%**	**$0**
District Category III Tier IIA (SJVAPCD)								
Normal Cost	5.31%	$55	1.09%	$11	0.33%	$4	6.73%	$70
UAAL	26.17%	273	4.81%	50	5.04%	53	36.02%	376
Total Contributions	**31.48%**	**$328**	**5.90%**	**$61**	**5.37%**	**$57**	**42.75%**	**$446**
District Category III Tier IIB								
Normal Cost	4.87%	$382	1.04%	$82	0.32%	$24	6.23%	$488
UAAL	26.17%	2,051	4.81%	377	5.04%	396	36.02%	2,824
Total Contributions	**31.04%**	**$2,433**	**5.85%**	**$459**	**5.36%**	**$420**	**42.25%**	**$3,312**
District Category III – Combined								
Normal Cost	8.06%	$2,327	1.81%	$522	0.57%	$162	10.44%	$3,011
UAAL	26.17%	7,552	4.81%	1,388	5.04%	1,456	36.02%	10,396
Total Contributions	**34.23%**	**$9,879**	**6.62%**	**$1,910**	**5.61%**	**$1,618**	**46.46%**	**$13,407**
District Category V Tier I								
Normal Cost	13.28%	$19	4.28%	$6	1.33%	$2	18.89%	$27
UAAL	26.17%	38	4.81%	7	5.04%	7	36.02%	52
Total Contributions	**39.45%**	**$57**	**9.09%**	**$13**	**6.37%**	**$9**	**54.91%**	**$79**

[1] Based on June 30, 2020 projected compensation as shown on page 54.

Recommended Employer Contribution Rates – Prior Valuation (continued)

	June 30, 2020 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category V Tier IIA								
Normal Cost	4.57%	$18	2.15%	$9	0.66%	$3	7.38%	$30
UAAL	26.17%	105	4.81%	19	5.04%	21	36.02%	145
Total Contributions	**30.74%**	**$123**	**6.96%**	**$28**	**5.70%**	**$24**	**43.40%**	**$175**
District Category V Tier IIB								
Normal Cost	4.87%	$42	1.04%	$9	0.32%	$3	6.23%	$54
UAAL	26.17%	226	4.81%	41	5.04%	43	36.02%	310
Total Contributions	**31.04%**	**$268**	**5.85%**	**$50**	**5.36%**	**$46**	**42.25%**	**$364**
District Category V – Combined								
Normal Cost	5.63%	$79	1.65%	$24	0.56%	$8	7.84%	$111
UAAL	26.17%	369	4.81%	67	5.04%	71	36.02%	507
Total Contributions	**31.80%**	**$448**	**6.46%**	**$91**	**5.60%**	**$79**	**43.86%**	**$618**
District Category VI Tier I								
Normal Cost	18.80%	$70	4.28%	$16	1.33%	$4	24.41%	$90
UAAL	26.17%	97	4.81%	18	5.04%	18	36.02%	133
Total Contributions	**44.97%**	**$167**	**9.09%**	**$34**	**6.37%**	**$22**	**60.43%**	**$223**
District Category VI Tier IIB								
Normal Cost	4.87%	$0	1.04%	$0	0.32%	$0	6.23%	$0
UAAL	26.17%	0	4.81%	0	5.04%	0	36.02%	0
Total Contributions	**31.04%**	**$0**	**5.85%**	**$0**	**5.36%**	**$0**	**42.25%**	**$0**
District Category VI – Combined								
Normal Cost	18.80%	$70	4.28%	$16	1.33%	$4	24.41%	$90
UAAL	26.17%	97	4.81%	18	5.04%	18	36.02%	133
Total Contributions	**44.97%**	**$167**	**9.09%**	**$34**	**6.37%**	**$22**	**60.43%**	**$223**
Declining Employers Tier I (Berrenda)								
Normal Cost	12.68%	$21	3.60%	$6	1.19%	$2	17.47%	$29
UAAL	189.86%	317	62.12%	104	41.40%	69	293.38%	490
Total Contributions[2]	**202.54%**	**$338**	**65.72%**	**$110**	**42.59%**	**$71**	**310.85%**	**$519**

[1] Based on June 30, 2020 projected compensation as shown on page 54.
[2] These Districts are declining employers and they should contribute based on dollar contribution amounts shown (not rates).

Recommended Employer Contribution Rates – Prior Valuation (continued)

	June 30, 2020 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
Declining Employers Tier I (Inyokern)								
Normal Cost	N/A	$0	N/A	$0	N/A	$0	N/A	$0
UAAL	N/A	9	N/A	1	N/A	1	N/A	11
Total Contributions[2]	**N/A**	**$9**	**N/A**	**$1**	**N/A**	**$1**	**N/A**	**$11**
Declining Employers – Combined								
Normal Cost	12.57%	$21	3.60%	$6	1.20%	$2	17.37%	$29
UAAL	195.21%	326	62.87%	105	41.92%	70	300.00%	501
Total Contributions	**207.78%**	**$347**	**66.47%**	**$111**	**43.12%**	**$72**	**317.37%**	**$530**
All Districts – Combined								
Normal Cost	8.95%	$3,536	2.18%	$861	0.68%	$269	11.81%	$4,666
UAAL	26.88%	10,621	5.05%	1,997	5.21%	2,054	37.14%	14,672
Total Contributions	**35.83%**	**$14,157**	**7.23%**	**$2,858**	**5.89%**	**$2,323**	**48.95%**	**$19,338**
All Employers – Combined								
Normal Cost	9.52%	$60,388	3.05%	$19,342	0.95%	$6,070	13.52%	$85,800
UAAL	24.77%	157,207	4.47%	28,384	6.40%	40,571	35.64%	226,162
Total Contributions	**34.29%**	**$217,595**	**7.52%**	**$47,726**	**7.35%**	**$46,641**	**49.16%**	**$311,962**

[1] Based on June 30, 2020 projected compensation as shown on page 54.
[2] These Districts are declining employers and they should contribute based on dollar contribution amounts shown (not rates).

Recommended Employer Contribution Rates – Prior Valuation (continued)

	June 30, 2020 Projected Compensation ($ in '000s)		June 30, 2020 Projected Compensation ($ in '000s)
County General Tier I without Courts	$147,803	District Category I Tier I	$4,390
County General Tier IIA without Courts	68,921	District Category I Tier IIA	655
County General Tier IIB without Courts	206,633	District Category I Tier IIB	1,097
Courts Tier I	14,291	District Category II Tier I	1,662
Courts Tier IIA	3,644	District Category II Tier IIB	899
Courts Tier IIB	14,839	District Category II Tier III	0
County Safety Tier I	101,434	District Category III Tier I (Buttonwillow)	39
County Safety Tier IIA	7,657	District Category III Tier I (SJVAPCD)	19,939
County Safety Tier IIB	29,839	District Category III Tier IIA (Buttonwillow)	0
		District Category III Tier IIA (SJVAPCD)	1,043
		District Category III Tier IIB	7,839
		District Category V Tier I	145
		District Category V Tier IIA	402
		District Category V Tier IIB	862
		District Category VI Tier I	370
		District Category VI Tier IIB	0
		Declining Employers Tier I (Berrenda)	167
		Declining Employers Tier I (Inyokern)	0
		All Districts	$39,509
All County with Courts	$595,061	Total	$634,570

Note: As of June 30, 2020, the COLA Contribution Reserve was zero and, therefore, not available to offset the 2% COLA contribution rate.

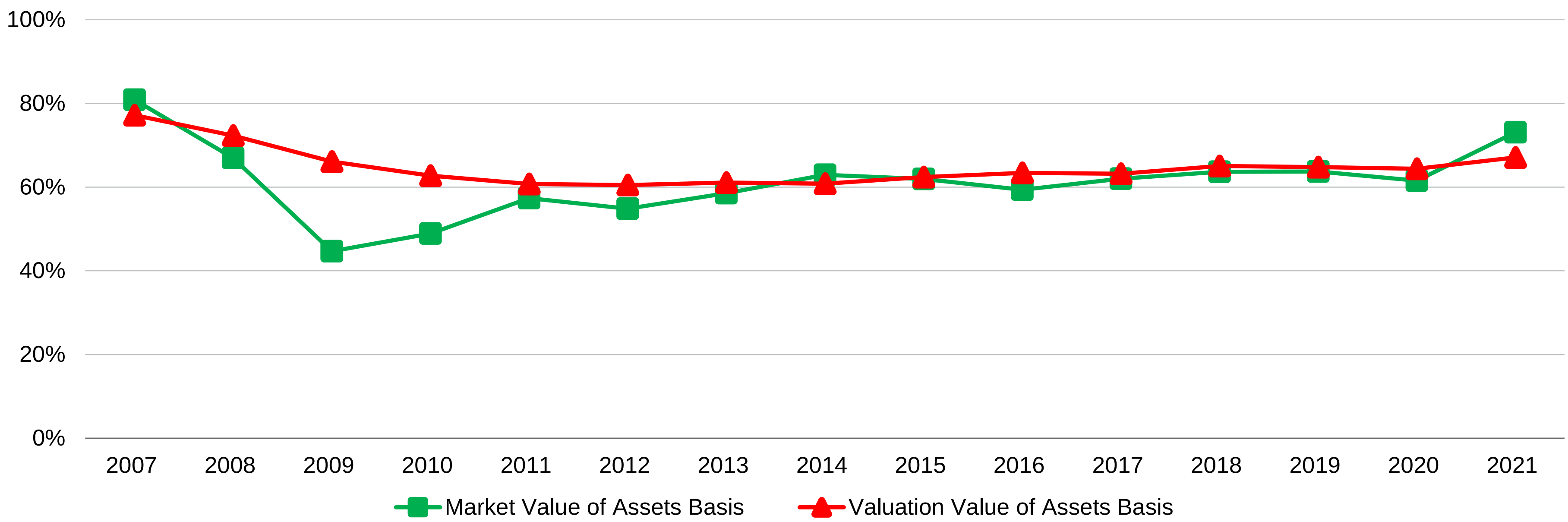
G. Funded Status

A commonly reported piece of information regarding the Association's financial status is the funded ratio. These ratios compare the Market and Valuation Value of Assets to the Actuarial Accrued Liability of the Association. High ratios indicate a well-funded plan while lower ratios may indicate recent changes to actuarial assumptions, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

The chart below depicts a history of the funded ratio for the Association. The chart on the next page shows the Association's schedule of funding progress for the last ten years.

The funded status measures shown in this valuation are appropriate for assessing the need for or amount of future contributions. However, they are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Association's benefit obligations. As the chart below shows, the measures are different depending on whether the Valuation or Market Value of Assets is used.

Funded Ratio for Years Ended June 30, 2007 – 2021



Schedule of Funding Progress for Years Ended June 30, 2012 – 2021

Actuarial Valuation Date as of June 30	Valuation Value of Assets[1] (a)	Actuarial Accrued Liability (AAL)[2] (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (%) (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (%) [(b) - (a)] / (c)
2012	$2,960,507,000	$4,894,990,000	$1,934,483,000	60.5%	$543,558,000	355.9%
2013	3,120,632,000	5,108,619,000	1,987,987,000	61.1%	555,752,000	357.7%
2014	3,342,122,000	5,492,440,000	2,150,318,000	60.8%	555,634,000	387.0%
2015	3,529,786,000	5,657,173,000	2,127,387,000	62.4%	556,824,000	382.1%
2016	3,685,447,000	5,813,092,000	2,127,645,000	63.4%	567,261,000	375.1%
2017	3,913,073,000	6,191,433,000	2,278,360,000	63.2%	572,081,000	398.3%
2018	4,163,476,000	6,398,814,000	2,235,338,000	65.1%	584,180,000	382.6%
2019	4,291,573,000	6,622,495,000	2,330,922,000	64.8%	612,277,000	380.7%
2020	4,508,548,000	7,005,589,000	2,497,041,000	64.4%	634,570,000	393.5%
2021	4,806,026,000	7,164,225,000	2,358,199,000	67.1%	623,295,000	378.3%

[1] Excludes assets for SRBR Reserves Unallocated to 0.5% COLA benefits and COLA Contribution Reserve. Excludes assets for Contingency Reserve (unless the Contingency Reserve is negative).
[2] Excludes liabilities held for SRBR Reserves Unallocated to 0.5% COLA benefits.

H. Actuarial Balance Sheet

An overview of the Association's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the Association for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the Actuarial Present Value of Future Benefits of the Association.

Second, this Actuarial Present Value of Future Benefits is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Association, the present value of future member contributions, the present value of future employer Normal Cost contributions, and the present value of future employer amortization payments for the Unfunded Actuarial Accrued Liability.

Actuarial Balance Sheet for Year Ended

	June 30, 2021 ($ in '000s)	June 30, 2020 ($ in '000s)
Actuarial Present Value of Future Benefits		
• Present value of benefits for retired members and beneficiaries	$4,777,275	$4,591,235
• Present value of benefits for inactive vested members[1]	243,481	231,940
• Present value of benefits for active members	3,097,679	3,164,715
Total Actuarial Present Value of Future Benefits	**$8,118,435**	**$7,987,890**
Current and future assets		
• Total Valuation Value of Assets	$4,806,026	$4,508,548
• Present value of future contributions by members	373,180	374,416
• Present value of future employer contributions for:		
– Entry age Normal Cost	581,030	607,885
– Unfunded Actuarial Accrued Liability	2,358,199	2,497,041
Total of current and future assets	**$8,118,435**	**$7,987,890**

[1] Includes inactive members due a refund of member contributions.

I. Volatility Ratios

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the Market Value of Assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measurement because it is based on the current level of assets.

The current AVR is about 8.7. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.7% of one year's payroll. Because actuarial gains and losses are amortized over 18 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions. The current total plan LVR is about 11.5, but is 9.5 for General compared to 18.5 for Safety. This means, for example, that assumption changes will have a greater impact on employer contribution rates for Safety than for General.

The chart on the next page shows how the asset and liability volatility ratios have varied over time.

Volatility Ratios for Years Ended 2012 – 2021

Year Ended June 30	Asset Volatility Ratio			Liability Volatility Ratio		
	General	Safety	Total	General	Safety	Total
2012	4.3	7.7	5.2	7.7	12.8	9.0
2013	4.7	8.0	5.6	8.0	12.7	9.2
2014	5.5	9.1	6.4	8.5	13.7	9.9
2015	5.6	9.2	6.5	8.8	14.1	10.2
2016	5.4	9.0	6.3	8.8	14.4	10.3
2017	5.8	10.4	6.9	9.2	16.0	10.8
2018	6.0	11.0	7.2	9.2	16.4	11.0
2019	5.8	11.4	7.1	9.0	16.9	10.8
2020	5.7	11.8	7.0	9.1	18.0	11.0
2021	7.1	14.4	8.7	9.5	18.5	11.5

J. Risk Assessment

Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the plan.

Our separate risk assessment report dated September 4, 2019 based on the June 30, 2018 actuarial valuation contained a detailed analysis of the potential range of future measurements. This section provides descriptions and basic assessments of the primary risks that are likely to have an ongoing influence on the Association's financial condition, as well as a discussion of historical trends and maturity measures.

Risk Assessments

- Asset/Liability Mismatch Risk (the potential that future plan experience does not affect asset and liability values in the same way, causing them to diverge)

  The most significant asset/liability mismatch risk to the Association is investment risk, as discussed below. In fact, investment risk has the potential to impact asset/liability mismatch in two ways. The first mismatch is evident in annual valuations: when asset values deviate from assumptions, they are typically independent from liability changes. The second mismatch can be caused when systemic asset deviations from assumptions may signal the need for an assumption change, which causes liability values and contribution rates to move in the opposite direction from any changes in the expected experience of asset growth rates.

  Asset/liability mismatch can also be caused by demographic assumption risk such as longevity, which affects liabilities but have no impact on asset levels. This risk is also discussed below.

- Investment Risk (the risk that investment returns will be different than expected)

  The investment return assumption is a long-term, static assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. That volatility can cause significant changes in the financial condition of the Association, affecting both funded status and contribution rates. The inherent year-to-year volatility is reduced by smoothing through the Actuarial Value of Assets, however investment experience can still have a sizable impact. As discussed in *Section 2, Subsection I, Volatility Ratios*, on page 58, a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.7% of one-year's payroll. Because actuarial gains and losses are amortized over 18 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain or loss.

  The single year market value rate of return over the last 10 years has ranged from a low of -0.76% to a high of 23.68%.

- Longevity Risk (the risk that mortality experience will be different than expected)

  The actuarial valuation includes current life expectancy assumptions and an expectation of future improvement in life expectancy, which are significant assumptions given the relatively long duration of liabilities for pension plans. Emerging plan experience that does not match these expectations will result in increases or decreases in the actuarially determined contribution over time. This risk can be reduced by using tables appropriate for the Association (public experience tables) that are weighted by benefit levels, and by using generational mortality projections. Effective with the June 30, 2020 valuation, the Board has adopted a benefit-weighted mortality table with the generational projection approach.

- Other Risks

  In addition to longevity, the valuation includes a variety of other assumptions that are unlikely to match future experience exactly. One example is projected salary scales over time. As salary is central to the determination of benefits paid in retirement, deviations from the projected salary scales could have a material impact on the benefits anticipated for each member. Examples of demographic assumptions include retirement, termination and disability assumptions, and will likely vary in significance for different groups (for example, disability assumptions are typically more significant for safety groups).

Some plans also carry significant contribution risk, defined as the potential for actual future contributions deviating from expected future contributions. However, the employers have a proven track-record of making the Actuarially Determined Contributions based on the Board's Actuarial Funding Policy, so contribution risk is minimal.

Evaluation of Historical Trends

Past experience can help demonstrate the sensitivity of key results to the plan's actual experience. Over the past ten years:

- The funded percentage on the Valuation Value of Assets has increased from 60.5% to 67.1%. For a more detailed history see *Section 2, Subsection G, Funded Status* starting on page 55.
- The geometric average investment return on the Actuarial Value of Assets over the last 10 years was 6.22%. This includes a high of a 9.08% return and a low of 4.52%. The average over the last 5 years 6.68%. For more details see the Investment Return table in *Section 2, Subsection C* on page 28.
- One of the primary sources of new UAAL was the strengthening of assumptions through multiple assumption changes. For example, the assumption changes in 2014 changed the discount rate from 7.75% to 7.50% and updated mortality tables adding $204 million in unfunded liability. The assumption changes in 2017 changed the discount rate from 7.50% to 7.25% and updated mortality tables adding $213 million in unfunded liability. The assumption changes in 2020 again updated mortality tables adding $147 million in unfunded liability. For more details on the unfunded liability changes see *Section 3, Exhibit H, Table of Amortization Bases* starting on page 90.

- The plan's funding policy effectively deals with these unfunded liabilities over time. This can be seen most clearly in the *Section 3, Exhibit I, Projection of UAAL Balances and Payments* on pages 95 and 96.

Maturity Measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.83 to 0.97. An increased ratio indicates that the plan has grown in maturity over time. This is to be expected, but is also informative to understanding plan sensitivity to particular risks. For more details see *Section 2, Subsection A, Member Data* on page 18.

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the plan's asset allocation is aligned to meet emerging pension liabilities. Over the past year, benefits paid were $65 million more than contributions received (net of administrative expenses). Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return. For more details on historical cash flows see the Comparison of Contributions with Benefits in *Section 2, Subsection B, Financial Information* on page 22.

A further discussion of plan maturity measures and how they relate to changes in assets and liabilities is included in *Section 2, Subsection I, Volatility Ratios* on page 58.

Section 3: Supplemental Information

Exhibit A: Table of Plan Coverage

Total Plan

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	9,072	9,326	-2.7%
• Average age	42.1	41.9	0.2
• Average years of service	9.7	9.5	0.2
• Total projected compensation	$623,294,085	$634,569,637	-1.8%
• Average projected compensation	$68,705	$68,043	1.0%
• Account balances	$409,562,974	$384,784,461	6.4%
• Total active vested members	5,574	5,568	0.1%
Inactive vested members:[1]			
• Number	3,517	3,143	11.9%
• Average age	42.0	42.3	-0.3
Retired members:			
• Number in pay status	6,699	6,559	2.1%
• Average age	69.1	68.9	0.2
• Average monthly benefit[2]	$3,849	$3,754	2.5%
Disabled members:			
• Number in pay status	874	883	-1.0%
• Average age	68.1	67.7	0.4
• Average monthly benefit[2]	$3,442	$3,333	3.3%
Beneficiaries:			
• Number in pay status	1,262	1,225	3.0%
• Average age	73.1	73.6	-0.5
• Average monthly benefit[2]	$2,128	$2,012	5.8%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

General Tier I County with Courts

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	1,994	2,191	-9.0%
• Average age	51.4	51.0	0.4
• Average years of service	19.5	18.8	0.7
• Total projected compensation	$148,405,938	$162,093,865	-8.4%
• Average projected compensation	$74,426	$73,982	0.6%
• Account balances	$148,182,279	$146,508,105	1.1%
• Total active vested members	1,991	2,188	-9.0%
Inactive vested members:[1]			
• Number	930	948	-1.9%
• Average age	49.2	48.9	0.3
Retired members:			
• Number in pay status	5,044	4,987	1.1%
• Average age	69.9	69.7	0.2
• Average monthly benefit[2]	$3,295	$3,194	3.2%
Disabled members:			
• Number in pay status	438	451	-2.9%
• Average age	69.3	68.7	0.6
• Average monthly benefit[2]	$2,082	$2,015	3.3%
Beneficiaries:			
• Number in pay status	806	786	2.5%
• Average age	74.1	74.6	-0.5
• Average monthly benefit[2]	$1,771	$1,687	5.0%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

General Tier IIA County with Courts

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	952	1,026	-7.2%
• Average age	46.3	45.3	1.0
• Average years of service	10.4	9.4	1.0
• Total projected compensation	$68,855,902	$72,564,278	-5.1%
• Average projected compensation	$72,328	$70,725	2.3%
• Account balances	$46,799,595	$43,508,370	7.6%
• Total active vested members	888	939	-5.4%
Inactive vested members:[1]			
• Number	539	488	10.5%
• Average age	44.0	43.7	0.3
Retired members:			
• Number in pay status	79	57	38.6%
• Average age	65.7	66.0	-0.3
• Average monthly benefit[2]	$802	$731	9.7%
Disabled members:			
• Number in pay status	2	1	100.0%
• Average age	57.6	58.9	-1.3
• Average monthly benefit[2]	$1,820	$2,544	-28.5%
Beneficiaries:			
• Number in pay status	6	5	20.0%
• Average age	63.5	61.8	1.7
• Average monthly benefit[2]	$732	$648	13.0%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

General Tier IIB County with Courts

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	4,027	3,999	0.7%
• Average age	37.6	36.9	0.7
• Average years of service	3.5	3.0	0.5
• Total projected compensation	$229,392,208	$221,472,104	3.6%
• Average projected compensation	$56,964	$55,382	2.9%
• Account balances	$50,815,026	$40,189,986	26.4%
• Total active vested members	1,114	786	41.7%
Inactive vested members:[1]			
• Number	1,451	1,171	23.9%
• Average age	36.9	36.8	0.1
Retired members:			
• Number in pay status	6	3	100.0%
• Average age	65.4	67.6	-2.2
• Average monthly benefit[2]	$926	$710	30.4%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	1	0	N/A
• Average age	41.5	N/A	N/A
• Average monthly benefit[2]	$463	N/A	N/A

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

Districts Tier I

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	212	242	-12.4%
• Average age	47.7	47.8	-0.1
• Average years of service	17.0	16.4	0.6
• Total projected compensation	$23,481,338	$26,711,469	-12.1%
• Average projected compensation	$110,761	$110,378	0.3%
• Account balances	$22,637,401	$23,753,321	-4.7%
• Total active vested members	212	242	-12.4%
Inactive vested members:[1]			
• Number	142	144	-1.4%
• Average age	50.4	49.9	0.5
Retired members:			
• Number in pay status	308	288	6.9%
• Average age	68.0	67.6	0.4
• Average monthly benefit[2]	$4,135	$3,994	3.5%
Disabled members:			
• Number in pay status	13	11	18.2%
• Average age	65.6	65.8	-0.2
• Average monthly benefit[2]	$2,478	$2,419	2.4%
Beneficiaries:			
• Number in pay status	43	38	13.2%
• Average age	73.3	73.5	-0.2
• Average monthly benefit[2]	$2,614	$2,443	7.0%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

Districts Tier IIA

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	20	21	-4.8%
• Average age	42.8	41.6	1.2
• Average years of service	10.5	9.5	1.0
• Total projected compensation	$2,032,991	$2,100,012	-3.2%
• Average projected compensation	$101,650	$100,001	1.6%
• Account balances	$1,127,572	$1,008,569	11.8%
• Total active vested members	20	21	-4.8%
Inactive vested members:[1]			
• Number	10	9	11.1%
• Average age	38.5	37.6	0.9
Retired members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

Districts Tier IIB

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	177	162	9.3%
• Average age	35.1	35.2	-0.1
• Average years of service	3.1	2.8	0.3
• Total projected compensation	$12,554,054	$10,697,620	17.4%
• Average projected compensation	$70,927	$66,035	7.4%
• Account balances	$2,401,676	$1,795,128	33.8%
• Total active vested members	45	32	40.6%
Inactive vested members:[1]			
• Number	31	23	34.8%
• Average age	34.7	32.9	1.8
Retired members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

Districts Tier III

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average years of service	N/A	N/A	N/A
• Total projected compensation	N/A	N/A	N/A
• Average projected compensation	N/A	N/A	N/A
• Account balances	N/A	N/A	N/A
• Total active vested members	N/A	N/A	N/A
Inactive vested members:[1]			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
Retired members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier I

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	1,015	1,107	-8.3%
• Average age	43.9	43.4	0.5
• Average years of service	17.5	16.7	0.8
• Total projected compensation	$94,219,971	$101,434,245	-7.1%
• Average projected compensation	$92,828	$91,630	1.3%
• Account balances	$111,215,144	$106,853,187	4.1%
• Total active vested members	1,013	1,106	-8.4%
Inactive vested members:[1]			
• Number	248	237	4.6%
• Average age	42.3	42.0	0.3
Retired members:			
• Number in pay status	1,261	1,223	3.1%
• Average age	66.2	66.0	0.2
• Average monthly benefit[2]	$6,199	$6,130	1.1%
Disabled members:			
• Number in pay status	421	420	0.2%
• Average age	67.1	66.7	0.4
• Average monthly benefit[2]	$4,895	$4,774	2.5%
Beneficiaries:			
• Number in pay status	406	396	2.5%
• Average age	71.5	71.6	-0.1
• Average monthly benefit[2]	$2,809	$2,632	6.7%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier IIA

Category	Year Ended June 30		Change From Prior Year
	2021	2020	
Active members in valuation:			
• Number	94	98	-4.1%
• Average age	37.3	36.5	0.8
• Average years of service	9.5	8.4	1.1
• Total projected compensation	$7,607,736	$7,656,577	-0.6%
• Average projected compensation	$80,933	$78,128	3.6%
• Account balances	$6,039,571	$5,272,647	14.5%
• Total active vested members	93	97	-4.1%
Inactive vested members:[1]			
• Number	26	21	23.8%
• Average age	37.2	35.2	2.0
Retired members:			
• Number in pay status	1	1	0.0%
• Average age	66.9	65.9	1.0
• Average monthly benefit[2]	$1,009	$984	2.5%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier IIB

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	581	480	21.0%
• Average age	31.6	31.6	0.0
• Average years of service	3.9	3.9	0.0
• Total projected compensation	$36,743,947	$29,839,467	23.1%
• Average projected compensation	$63,243	$62,166	1.7%
• Account balances	$20,344,711	$15,895,148	28.0%
• Total active vested members	198	157	26.1%
Inactive vested members:[1]			
• Number	140	102	37.3%
• Average age	32.8	32.5	0.3
Retired members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

[1] Includes inactive members due a refund of member contributions.
[2] Excludes monthly benefits paid from the Supplemental Retiree Benefit Reserve.

Exhibit B: Members in Active Service as of June 30, 2021 by Age, Years of Service, and Average Projected Compensation

Total Plan

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	229	229	—	—	—	—	—	—	—	—
	$48,311	$48,311	—	—	—	—	—	—	—	—
25 – 29	1,048	937	111	—	—	—	—	—	—	—
	$54,576	$53,450	$64,083	—	—	—	—	—	—	—
30 – 34	1,482	848	554	80	—	—	—	—	—	—
	$61,186	$55,248	$67,630	$79,507	—	—	—	—	—	—
35 – 39	1,524	582	432	388	121	1	—	—	—	—
	$69,209	$58,542	$66,106	$82,768	$87,831	$104,492	—	—	—	—
40 – 44	1,391	329	290	320	341	109	2	—	—	—
	$73,724	$58,436	$65,253	$79,532	$84,060	$93,353	$55,712	—	—	—
45 – 49	1,208	254	175	235	249	254	40	1	—	—
	$77,945	$64,395	$65,750	$81,018	$83,126	$90,385	$87,728	$90,438	—	—
50 – 54	900	144	141	156	157	194	81	26	1	—
	$77,409	$62,671	$62,856	$76,011	$81,281	$89,418	$89,963	$92,658	$119,305	—
55 – 59	687	109	89	118	103	134	68	54	12	—
	$71,006	$57,377	$70,216	$68,796	$71,903	$75,896	$76,756	$81,665	$79,535	—
60 – 64	436	72	79	72	68	63	32	33	12	5
	$72,813	$66,710	$63,867	$73,592	$72,651	$75,090	$77,384	$86,037	$96,273	$91,514
65 – 69	141	29	25	26	23	17	12	6	3	—
	$70,774	$63,751	$56,616	$78,220	$72,539	$67,732	$86,168	$98,437	$78,927	—
70 & over	26	2	7	2	3	6	3	2	—	1
	$76,866	$43,353	$89,920	$43,536	$89,155	$79,538	$79,274	$44,082	—	$124,620
Total	**9,072**	**3,535**	**1,903**	**1,397**	**1,065**	**778**	**238**	**122**	**28**	**6**
	$68,705	**$56,483**	**$66,090**	**$78,997**	**$81,722**	**$86,265**	**$83,509**	**$85,471**	**$88,064**	**$97,032**

Exhibit B: Members in Active Service as of June 30, 2021 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier I County with Courts

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	7	—	1	6	—	—	—	—	—	—
	$61,116	—	$55,724	$62,015	—	—	—	—	—	—
35 – 39	134	—	1	95	38	—	—	—	—	—
	$72,350	—	$95,763	$71,634	$73,526	—	—	—	—	—
40 – 44	361	2	3	132	176	46	2	—	—	—
	$71,896	$147,628	$83,037	$68,627	$73,607	$71,414	$55,712	—	—	—
45 – 49	404	—	3	94	159	129	18	1	—	—
	$76,725	—	$82,335	$74,696	$76,566	$78,852	$71,775	$90,438	—	—
50 – 54	407	—	3	68	119	140	57	19	1	—
	$79,109	—	$87,261	$69,739	$75,693	$85,097	$82,040	$77,709	$119,305	—
55 – 59	377	1	—	62	86	114	57	48	9	—
	$69,974	$62,466	—	$63,532	$66,862	$72,620	$71,387	$76,918	$65,435	—
60 – 64	220	1	—	32	60	58	23	31	11	4
	$74,337	$101,780	—	$65,617	$70,412	$73,418	$69,779	$85,218	$97,515	$87,580
65 – 69	70	—	—	15	22	14	11	6	2	—
	$76,323	—	—	$73,486	$73,563	$65,839	$86,259	$98,437	$80,372	—
70 & over	14	—	—	1	3	6	1	2	—	1
	$75,540	—	—	$38,412	$89,155	$79,538	$61,671	$44,082	—	$124,620
Total	**1,994**	**4**	**11**	**505**	**663**	**507**	**169**	**107**	**23**	**5**
	$74,426	**$114,876**	**$82,671**	**$69,662**	**$73,591**	**$77,528**	**$75,528**	**$80,183**	**$84,419**	**$94,988**

Exhibit B: Members in Active Service as of June 30, 2021 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier IIA County with Courts

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	5	2	3	—	—	—	—	—	—	—
	$43,500	$39,808	$45,962	—	—	—	—	—	—	—
30 – 34	91	—	72	19	—	—	—	—	—	—
	$61,747	—	$61,864	$61,304	—	—	—	—	—	—
35 – 39	204	23	73	106	2	—	—	—	—	—
	$73,176	$62,707	$68,015	$79,073	$69,371	—	—	—	—	—
40 – 44	189	19	79	89	1	1	—	—	—	—
	$73,905	$57,452	$63,793	$86,722	$53,941	$64,704	—	—	—	—
45 – 49	150	14	55	80	1	—	—	—	—	—
	$77,792	$89,389	$69,671	$81,000	$105,443	—	—	—	—	—
50 – 54	122	5	55	62	—	—	—	—	—	—
	$72,246	$92,952	$59,660	$81,741	—	—	—	—	—	—
55 – 59	85	6	33	42	2	2	—	—	—	—
	$70,256	$43,166	$70,921	$75,018	$64,266	$46,543	—	—	—	—
60 – 64	73	7	29	35	1	1	—	—	—	—
	$73,689	$81,500	$66,098	$79,172	$42,215	$78,731	—	—	—	—
65 – 69	27	6	10	10	1	—	—	—	—	—
	$69,860	$81,571	$47,483	$87,196	$50,013	—	—	—	—	—
70 & over	6	2	3	1	—	—	—	—	—	—
	$67,232	$43,353	$89,342	$48,660	—	—	—	—	—	—
Total	**952**	**84**	**412**	**444**	**8**	**4**	**—**	**—**	**—**	**—**
	$72,328	**$68,277**	**$64,830**	**$80,304**	**$64,860**	**$59,130**	**—**	**—**	**—**	**—**

Exhibit B: Members in Active Service as of June 30, 2021
by Age, Years of Service, and Average Projected Compensation (continued)

General Tier IIB County with Courts

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	145	145	—	—	—	—	—	—	—	—
	$43,820	$43,820	—	—	—	—	—	—	—	—
25 – 29	781	720	61	—	—	—	—	—	—	—
	$51,798	$51,479	$55,559	—	—	—	—	—	—	—
30 – 34	1,052	731	320	1	—	—	—	—	—	—
	$56,801	$54,105	$63,001	$43,769	—	—	—	—	—	—
35 – 39	763	504	256	2	1	—	—	—	—	—
	$59,111	$57,908	$61,468	$68,371	$43,551	—	—	—	—	—
40 – 44	459	288	170	1	—	—	—	—	—	—
	$59,252	$57,581	$62,210	$37,671	—	—	—	—	—	—
45 – 49	325	224	97	3	1	—	—	—	—	—
	$61,361	$62,081	$59,780	$65,840	$39,892	—	—	—	—	—
50 – 54	206	132	72	2	—	—	—	—	—	—
	$60,875	$62,210	$58,548	$56,579	—	—	—	—	—	—
55 – 59	149	98	48	2	1	—	—	—	—	—
	$59,430	$57,552	$63,738	$48,020	$59,523	—	—	—	—	—
60 – 64	108	61	46	1	—	—	—	—	—	—
	$62,825	$65,413	$59,779	$45,099	—	—	—	—	—	—
65 – 69	36	22	14	—	—	—	—	—	—	—
	$59,248	$59,346	$59,096	—	—	—	—	—	—	—
70 & over	3	—	3	—	—	—	—	—	—	—
	$91,656	—	$91,656	—	—	—	—	—	—	—
Total	**4,027**	**2,925**	**1,087**	**12**	**3**	**—**	**—**	**—**	**—**	**—**
	$56,964	**$55,314**	**$61,441**	**$55,833**	**$47,655**	**—**	**—**	**—**	**—**	**—**

Exhibit B: Members in Active Service as of June 30, 2021 by Age, Years of Service, and Average Projected Compensation (continued)

Districts Tier I

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	5	—	3	2	—	—	—	—	—	—
	$76,062	—	$87,345	$59,138	—	—	—	—	—	—
35 – 39	37	—	1	33	3	—	—	—	—	—
	$102,943	—	$103,449	$104,317	$87,657	—	—	—	—	—
40 – 44	48	—	2	15	25	6	—	—	—	—
	$116,971	—	$132,497	$91,583	$115,335	$182,087	—	—	—	—
45 – 49	44	—	1	17	15	10	1	—	—	—
	$112,545	—	$99,220	$106,388	$117,868	$119,254	$83,591	—	—	—
50 – 54	34	—	1	8	15	3	6	1	—	—
	$115,530	—	$231,506	$80,589	$107,875	$152,104	$117,670	$271,353	—	—
55 – 59	27	—	—	6	6	6	6	3	—	—
	$114,118	—	—	$81,473	$123,191	$116,379	$118,181	$148,613	—	—
60 – 64	14	—	—	4	5	2	3	—	—	—
	$102,571	—	—	$95,694	$103,341	$84,799	$122,304	—	—	—
65 – 69	2	—	—	1	—	1	—	—	—	—
	$80,430	—	—	$59,468	—	$101,391	—	—	—	—
70 & over	1	—	—	—	—	—	1	—	—	—
	$119,496	—	—	—	—	—	$119,496	—	—	—
Total	**212**	**—**	**8**	**86**	**69**	**28**	**17**	**4**	**—**	**—**
	$110,761	**—**	**$120,150**	**$96,731**	**$112,874**	**$132,523**	**$116,771**	**$179,298**	**—**	**—**

Exhibit B: Members in Active Service as of June 30, 2021
by Age, Years of Service, and Average Projected Compensation (continued)

Districts Tier IIA

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	3	—	2	1	—	—	—	—	—	—
	$102,213	—	$96,111	$114,419	—	—	—	—	—	—
35 – 39	6	—	4	2	—	—	—	—	—	—
	$91,575	—	$93,277	$88,171	—	—	—	—	—	—
40 – 44	5	1	4	—	—	—	—	—	—	—
	$102,394	$76,791	$108,794	—	—	—	—	—	—	—
45 – 49	2	—	1	1	—	—	—	—	—	—
	$94,399	—	$59,153	$129,644	—	—	—	—	—	—
50 – 54	2	—	1	1	—	—	—	—	—	—
	$83,192	—	$94,655	$71,728	—	—	—	—	—	—
55 – 59	2	—	2	—	—	—	—	—	—	—
	$154,878	—	$154,878	—	—	—	—	—	—	—
60 – 64	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
65 – 69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 & over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**20**	**1**	**14**	**5**	**—**	**—**	**—**	**—**	**—**	**—**
	$101,650	**$76,791**	**$104,576**	**$98,426**	**—**	**—**	**—**	**—**	**—**	**—**

Exhibit B: Members in Active Service as of June 30, 2021
by Age, Years of Service, and Average Projected Compensation (continued)

Districts Tier IIB

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	10	10	—	—	—	—	—	—	—	—
	$62,663	$62,663	—	—	—	—	—	—	—	—
25 – 29	54	51	3	—	—	—	—	—	—	—
	$66,968	$66,301	$78,292	—	—	—	—	—	—	—
30 – 34	41	25	16	—	—	—	—	—	—	—
	$76,753	$67,247	$91,608	—	—	—	—	—	—	—
35 – 39	30	21	9	—	—	—	—	—	—	—
	$70,385	$64,959	$83,046	—	—	—	—	—	—	—
40 – 44	17	10	7	—	—	—	—	—	—	—
	$64,527	$58,929	$72,524	—	—	—	—	—	—	—
45 – 49	9	7	2	—	—	—	—	—	—	—
	$88,408	$89,085	$86,038	—	—	—	—	—	—	—
50 – 54	7	4	3	—	—	—	—	—	—	—
	$81,723	$48,581	$125,914	—	—	—	—	—	—	—
55 – 59	3	1	2	—	—	—	—	—	—	—
	$77,083	$52,072	$89,588	—	—	—	—	—	—	—
60 – 64	4	3	1	—	—	—	—	—	—	—
	$54,147	$46,882	$75,944	—	—	—	—	—	—	—
65 – 69	1	1	—	—	—	—	—	—	—	—
	$53,764	$53,764	—	—	—	—	—	—	—	—
70 & over	1	—	1	—	—	—	—	—	—	—
	$86,449	—	$86,449	—	—	—	—	—	—	—
Total	**177**	**133**	**44**	—	**—**	**—**	**—**	**—**	**—**	**—**
	$70,927	**$65,466**	**$87,433**	—	**—**	**—**	**—**	**—**	**—**	**—**

Exhibit B: Members in Active Service as of June 30, 2021
by Age, Years of Service, and Average Projected Compensation (continued)

Districts Tier III

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
35 – 39	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
40 – 44	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
45 – 49	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
50 – 54	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
55 – 59	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
60 – 64	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
65 – 69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 & over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
	—	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**

Exhibit B: Members in Active Service as of June 30, 2021
by Age, Years of Service, and Average Projected Compensation (continued)

Safety Tier I

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	4	—	4	—	—	—	—	—	—	—
	$94,461	—	$94,461	—	—	—	—	—	—	—
30 – 34	78	—	30	48	—	—	—	—	—	—
	$89,309	—	$89,526	$89,173	—	—	—	—	—	—
35 – 39	224	—	10	136	77	1	—	—	—	—
	$91,486	—	$81,398	$89,603	$95,952	$104,492	—	—	—	—
40 – 44	283	1	5	82	139	56	—	—	—	—
	$92,456	$76,206	$77,952	$87,727	$91,887	$102,378	—	—	—	—
45 – 49	253	1	5	38	73	115	21	—	—	—
	$95,193	$55,354	$88,259	$85,506	$90,563	$100,812	$101,598	—	—	—
50 – 54	116	—	3	15	23	51	18	6	—	—
	$95,640	—	$65,948	$81,189	$92,849	$97,590	$105,815	$110,215	—	—
55 – 59	37	—	—	6	8	12	5	3	3	—
	$90,559	—	—	$73,873	$91,085	$91,664	$88,251	$90,674	$121,834	—
60 – 64	15	—	1	—	2	2	6	2	1	1
	$89,540	—	$70,589	—	$78,327	$112,058	$84,073	$98,724	$82,609	$107,252
65 – 69	4	—	—	—	—	2	1	—	1	—
	$72,381	—	—	—	—	$64,156	$85,176	—	$76,038	—
70 & over	1	—	—	—	—	—	1	—	—	—
	$56,655	—	—	—	—	—	$56,655	—	—	—
Total	**1,015**	**2**	**58**	**325**	**322**	**239**	**52**	**11**	**5**	**1**
	$92,828	**$65,780**	**$85,812**	**$87,908**	**$92,524**	**$99,835**	**$98,572**	**$102,796**	**$104,830**	**$107,252**

Exhibit B: Members in Active Service as of June 30, 2021
by Age, Years of Service, and Average Projected Compensation (continued)

Safety Tier IIA

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	6	1	5	—	—	—	—	—	—	—
	$82,880	$76,798	$84,096	—	—	—	—	—	—	—
30 – 34	30	—	29	1	—	—	—	—	—	—
	$82,668	—	$81,992	$102,275	—	—	—	—	—	—
35 – 39	40	—	33	7	—	—	—	—	—	—
	$79,028	—	$80,275	$73,150	—	—	—	—	—	—
40 – 44	8	1	7	—	—	—	—	—	—	—
	$80,576	$89,901	$79,244	—	—	—	—	—	—	—
45 – 49	6	—	6	—	—	—	—	—	—	—
	$84,845	—	$84,845	—	—	—	—	—	—	—
50 – 54	3	—	3	—	—	—	—	—	—	—
	$67,459	—	$67,459	—	—	—	—	—	—	—
55 – 59	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
60 – 64	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
65 – 69	1	—	1	—	—	—	—	—	—	—
	$113,239	—	$113,239	—	—	—	—	—	—	—
70 & over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**94**	**2**	**84**	**8**	**—**	**—**	**—**	**—**	**—**	**—**
	$80,933	**$83,350**	**$81,270**	**$76,791**	**—**	**—**	**—**	**—**	**—**	**—**

Exhibit B: Members in Active Service as of June 30, 2021 by Age, Years of Service, and Average Projected Compensation (continued)

Safety Tier IIB

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	74	74	—	—	—	—	—	—	—	—
	$55,172	$55,172	—	—	—	—	—	—	—	—
25 – 29	198	163	35	—	—	—	—	—	—	—
	$60,771	$58,157	$72,942	—	—	—	—	—	—	—
30 – 34	175	92	81	2	—	—	—	—	—	—
	$66,265	$61,075	$71,764	$82,300	—	—	—	—	—	—
35 – 39	86	34	45	7	—	—	—	—	—	—
	$65,429	$61,162	$68,309	$67,636	—	—	—	—	—	—
40 – 44	21	7	13	1	—	—	—	—	—	—
	$66,565	$60,416	$69,740	$68,333	—	—	—	—	—	—
45 – 49	15	8	5	2	—	—	—	—	—	—
	$68,026	$64,961	$69,575	$76,418	—	—	—	—	—	—
50 – 54	3	3	—	—	—	—	—	—	—	—
	$51,267	$51,267	—	—	—	—	—	—	—	—
55 – 59	7	3	4	—	—	—	—	—	—	—
	$85,853	$80,161	$90,123	—	—	—	—	—	—	—
60 – 64	2	—	2	—	—	—	—	—	—	—
	$116,162	—	$116,162	—	—	—	—	—	—	—
65 – 69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 & over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**581**	**384**	**185**	**12**	**—**	**—**	**—**	**—**	**—**	**—**
	$63,243	**$58,848**	**$71,822**	**$71,602**	**—**	**—**	**—**	**—**	**—**	**—**

Exhibit C: Reconciliation of Member Data

	Active Members	Inactive Vested Members[1]	Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2020	**9,326**	**3,143**	**6,559**	**883**	**1,225**	**21,136**
• New members	729	99	N/A	N/A	126	954
• Terminations	(565)	565	N/A	N/A	N/A	0
• Contribution refunds	(191)	(152)	N/A	N/A	N/A	(343)
• Retirements	(238)	(92)	330	N/A	N/A	0
• New disabilities	(10)	(1)	(10)	21	N/A	0
• Return to work	37	(37)	0	0	N/A	0
• Died with or without beneficiary	(16)	(8)	(181)	(30)	(81)	(316)
• Data adjustments	0	0	1	0	(8)	(7)
Number as of June 30, 2021	**9,072**	**3,517**	**6,699**	**874**	**1,262**	**21,424**

[1] Includes inactive members due a refund of member contributions.

Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended June 30, 2021		Year Ended June 30, 2020	
Net assets at market value at the beginning of the year		**$4,438,794,794**		**$4,345,780,060**
Contribution income:				
• Employer contributions	$280,812,319		$288,293,446	
• Employee contributions	41,602,345		43,477,770	
• Less administrative expenses	(6,060,675)		(5,523,229)	
Net contribution income		$316,353,989		$326,247,987
Investment income:				
• Interest, dividends, and other income	$66,296,030		$63,730,264	
• Asset appreciation	1,038,614,396		98,537,566	
• Less investment expenses	(61,549,719)		(34,406,606)	
Net investment income		$1,043,360,707		$127,861,224
Total income available for benefits		**$1,359,714,696**		**$454,109,211**
Less benefit payments:				
• Retirement and survivor benefits	$(355,196,758)		$(338,894,982)	
• Supplemental retirement benefits	(19,286,001)		(17,747,422)	
• Refunds of member contributions	(6,513,551)		(4,451,963)	
• Miscellaneous expenses	0		(111)	
Net benefit payments		**$(380,996,310)**		**$(361,094,478)**
Change in net assets at market value		**$978,718,386**		**$93,014,733**
Net assets at market value at the end of the year		**$5,417,513,179**		**$4,438,794,794**

Note: Results may not add due to rounding.

Exhibit E: Summary Statement of Plan Assets

	June 30, 2021		June 30, 2020	
Cash equivalents		$436,432,952		$163,250,243
Capital assets		$1,857,301		$2,382,951
Accounts receivable:				
• Investments sold	$33,460,069		$137,112,878	
• Interest and dividends	7,955,743		8,644,475	
• Contributions and other receivables	15,095,666		13,912,846	
Total accounts receivable		$56,511,478		$159,670,199
Investments:				
• Debt securities and bonds	$1,199,785,267		$1,403,561,154	
• Equities	1,891,166,027		1,698,285,809	
• Real estate investments	390,498,784		278,658,132	
• Alternative investments	1,173,685,052		792,527,403	
• Commodities	345,848,156		220,589,899	
• Collateral held for securities lending	181,519,384		184,159,900	
Total investments at market value		$5,182,502,670		$4,577,782,296
Total assets		$5,677,304,401		$4,903,085,689
Accounts payable:				
• Securities purchased	$(77,247,942)		$(275,979,493)	
• Collateral held for securities lent	(181,519,384)		(184,159,900)	
• Contributions and other liabilities	(1,023,895)		(4,151,503)	
Total accounts payable		$(259,791,221)		$(464,290,896)
Net assets at market value		**$5,417,513,179**		**$4,438,794,794**
Net assets at actuarial value		**$4,988,448,771**		**$4,635,029,604**
Net assets at valuation value		**$4,806,026,107**		**$4,508,548,272**

Note: Results may not add due to rounding.

Exhibit F: Summary of Reported Reserve Information

	June 30, 2021	June 30, 2020
Member Deposit Reserve – General & Courts	$314,166,823	$287,434,022
Member Deposit Reserve – Safety	158,711,480	143,396,605
Member Deposit Reserve – Special Districts	33,028,625	31,090,256
Employers Advance Reserve – General & Courts	534,215,289	475,973,601
Employers Advance Reserve – Safety	581,002,708	527,844,083
Employers Advance Reserve – Special Districts	54,311,593	48,621,285
Cost-of-Living Reserve – General & Courts	868,328,628	802,938,574
Cost-of-Living Reserve – Safety	619,640,596	571,879,238
Cost-of-Living Reserve – Special Districts	69,633,732	62,866,270
Retired Members – General, Courts & Special Districts	1,150,087,912	1,131,012,963
Retired Members – Safety	399,844,668	408,636,469
Supplemental Retiree Benefit Reserve (SRBR) – 0.5% COLA	23,054,053	33,209,640
Contingency Reserve[1]	0	(16,354,734)
Valuation Reserves (Valuation Value of Assets)	$4,806,026,107	$4,508,548,272
Supplemental Retiree Benefit Reserve (SRBR)	$128,798,257	$126,481,333
Contingency Reserve[2]	53,624,406	0
COLA Contribution Reserve	0	0
Total Reserves (Actuarial Value of Assets)	$4,988,448,771	$4,635,029,604
Market Stabilization Reserve	$429,064,409	$(196,234,810)
Net Market Value of Assets	**$5,417,513,179**	**$4,438,794,794**

Note: Results may not add due to rounding.

[1] Because the Contingency Reserve is negative as of June 30, 2020, it is included as part of (i.e., as an offset to) the June 30, 2020 Valuation Value of Assets.
[2] Because the Contingency Reserve is positive as of June 30, 2021, it is excluded from the June 30, 2021 Valuation Value of Assets.

Exhibit G: Development of the Fund through June 30, 2021

Year Ended June 30	Employer Contributions	Member Contributions	Administrative and Other Expenses	Net Investment Return[1]	Benefit Payments	Market Value of Assets at Year-End	Valuation Value of Assets at Year-End	Valuation Value as a Percent of Market Value
2012	$189,837,352	$18,719,762	$0	$17,681,865	$222,140,484	$2,800,024,038	$2,960,506,633	105.7%
2013	211,677,478	20,282,751	0	315,415,541	242,629,555	3,104,770,253	3,120,631,727	100.5%
2014	220,393,167	25,810,310	0	482,632,857	257,495,061	3,576,111,526	3,342,121,678	93.5%
2015	215,476,956	30,324,848	4,886,637	81,931,170	273,864,680	3,625,093,183	3,529,785,691	97.4%
2016	234,713,690	33,278,504	5,224,452	(27,535,157)	288,738,174	3,571,587,594	3,685,447,112	103.2%
2017	241,112,434	34,649,054	5,243,309	426,606,857	305,817,454	3,962,895,176	3,913,072,636	98.7%
2018	258,894,487	36,143,110	5,116,557	267,658,596	321,612,528	4,198,862,285	4,163,475,848	99.2%
2019	242,424,569	36,827,443	4,766,651	214,244,104	341,811,689	4,345,780,060	4,291,572,784	98.8%
2020	288,293,446	43,477,770	5,523,340	127,861,224	361,094,367	4,438,794,794	4,508,548,272	101.6%
2021	280,812,319	41,602,345	6,060,675	1,043,360,707	380,996,310	5,417,513,179	4,806,026,107	88.7%

Note: Results may not add due to rounding.

[1] On a market basis, net of investment fees and administrative expenses prior to 2015. Starting in 2015, administrative expenses are included in the previous column.

Exhibit H: Table of Amortization Bases

General County with Courts

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Restart Amortization	December 31, 2005	$1,137,894[2]	30	$1,134,543	14.5	$103,719
Actuarial Loss	June 30, 2012	36,175	18	29,021	9	3,880
Actuarial Loss	June 30, 2013	13,512	18	11,387	10	1,395
Actuarial Gain	June 30, 2014	(37,659)	18	(32,999)	11	(3,741)
Assumption Change	June 30, 2014	103,045	18	90,309	11	10,237
Actuarial Gain	June 30, 2015	(21,641)	18	(19,604)	12	(2,073)
Actuarial Gain	June 30, 2016	(2,590)	18	(2,401)	13	(239)
Actuarial Gain	June 30, 2017	(40,492)	18	(38,498)	14	(3,614)
Assumption Change	June 30, 2017	120,406	18	114,448	14	10,743
Actuarial Gain	June 30, 2018	(19,589)	18	(18,973)	15	(1,691)
Actuarial Loss	June 30, 2019	70,119	18	68,841	16	5,852
Actuarial Loss	June 30, 2020	24,813	18	24,612	17	2,003
Assumption Change	June 30, 2020	108,013	18	107,126	17	8,718
Actuarial Gain	June 30, 2021	(47,168)	18	(47,168)	18	(3,687)
Implementation of Alameda Decision	June 30, 2021	(17,062)	15	(17,062)	15	(1,521)
Subtotal				**$1,403,582**		**$129,981**

[1] As of middle of year.
[2] As of June 30, 2011.

Exhibit H: Table of Amortization Bases (continued)

Districts

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Restart Amortization	December 31, 2005	$86,149[2]	30	$85,892	14.5	$7,852
Actuarial Loss	June 30, 2012	4,431	18	3,552	9	475
Actuarial Loss	June 30, 2013	1,620	18	1,357	10	166
Actuarial Loss	June 30, 2014	2,584	18	2,259	11	256
Assumption Change	June 30, 2014	7,390	18	6,476	11	734
Actuarial Gain	June 30, 2015	(31)	18	(20)	12	(2)
Actuarial Loss	June 30, 2016	5,060	18	4,708	13	468
Actuarial Loss	June 30, 2017	5,822	18	5,533	14	519
Assumption Change	June 30, 2017	11,343	18	10,768	14	1,011
Actuarial Loss	June 30, 2018	5,634	18	5,444	15	485
Actuarial Loss	June 30, 2019	14,365	18	14,101	16	1,199
Actuarial Loss	June 30, 2020	3,557	18	3,527	17	287
Assumption Change	June 30, 2020	10,306	18	10,225	17	832
Actuarial Loss	June 30, 2021	3,337	18	3,337	18	261
Implementation of Alameda Decision	June 30, 2021	(7,865)	15	(7,865)	15	(701)
Districts Subtotal (Not Including Declining Employers)				**$149,294**		**$13,842**

1 As of middle of year.
2 As of June 30, 2011.

Exhibit H: Table of Amortization Bases (continued)

Districts (continued)

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Declining Employer Restart Amortization (Berrenda Mesa)	June 30, 2019	$4,147	18	$3,896	16	$406
Actuarial Loss (Berrenda Mesa)	June 30, 2020	556	18	535	17	54
Assumption Change (Berrenda Mesa)	June 30, 2020	267	18	258	17	26
Actuarial Gain (Berrenda Mesa)	June 30, 2021	(495)	18	(495)	18	(49)
Implementation of Alameda Decision (Berrenda Mesa)	June 30, 2021	1	15	1	15	0
Declining Employer Restart Amortization (Inyokern)	June 30, 2019	102	18	96	16	10
Actuarial Loss (Inyokern)	June 30, 2020	13	18	10	17	1
Assumption Change (Inyokern)	June 30, 2020	5	18	0	17	0
Actuarial Loss (Inyokern)	June 30, 2021	18	18	18	18	2
Implementation of Alameda Decision (Inyokern)	June 30, 2021	0	15	0	15	0
Declining Employer Subtotal				**$4,319**		**$450**
Subtotal				**$153,613**		**$14,292**

[1] As of middle of year.

Exhibit H: Table of Amortization Bases (continued)

Safety County

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Restart Amortization	December 31, 2005	$606,032[2]	30	$604,248	14.5	$55,240
Actuarial Loss	June 30, 2012	37,591	18	30,141	9	4,030
Actuarial Loss	June 30, 2013	17,808	18	15,003	10	1,838
Actuarial Gain	June 30, 2014	(23,991)	18	(21,031)	11	(2,384)
Assumption Change	June 30, 2014	93,817	18	82,212	11	9,319
Actuarial Gain	June 30, 2015	(8,513)	18	(7,713)	12	(816)
Actuarial Gain	June 30, 2016	(4,514)	18	(4,209)	13	(418)
Actuarial Gain	June 30, 2017	(24,660)	18	(23,440)	14	(2,200)
Assumption Change	June 30, 2017	81,394	18	77,370	14	7,263
Actuarial Gain	June 30, 2018	(13,175)	18	(12,742)	15	(1,136)
Actuarial Loss	June 30, 2019	34,070	18	33,437	16	2,843
Actuarial Loss	June 30, 2020	23,024	18	22,836	17	1,859
Assumption Change	June 30, 2020	28,027	18	27,796	17	2,262
Actuarial Gain	June 30, 2021	(18,908)	18	(18,908)	18	(1,478)
Implementation of Alameda Decision	June 30, 2021	(3,996)	15	(3,996)	15	(356)
Subtotal				**$801,004**		**$75,866**

1 As of middle of year.
2 As of June 30, 2011.

Exhibit H: Table of Amortization Bases (continued)

Total KCERA

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Restart Amortization	December 31, 2005	$1,830,075[2]	30	$1,824,683	14.5	$166,811
Actuarial Loss	June 30, 2012	78,197	18	62,714	9	8,385
Actuarial Loss	June 30, 2013	32,940	18	27,747	10	3,399
Actuarial Gain	June 30, 2014	(59,066)	18	(51,771)	11	(5,869)
Assumption Change	June 30, 2014	204,252	18	178,997	11	20,290
Actuarial Gain	June 30, 2015	(30,185)	18	(27,337)	12	(2,891)
Actuarial Gain	June 30, 2016	(2,044)	18	(1,902)	13	(189)
Actuarial Gain	June 30, 2017	(59,330)	18	(56,405)	14	(5,295)
Assumption Change	June 30, 2017	213,143	18	202,586	14	19,017
Actuarial Gain	June 30, 2018	(27,130)	18	(26,271)	15	(2,342)
Actuarial Loss	June 30, 2019	118,554	18	116,379	16	9,894
Declining Employer Restart (Berrenda)	June 30, 2019	4,147	18	3,896	16	406
Declining Employer Restart (Inyokern)	June 30, 2019	102	18	96	16	10
Actuarial Loss	June 30, 2020	51,394	18	50,975	17	4,149
Actuarial Loss (Berrenda)	June 30, 2020	556	18	535	17	54
Actuarial Loss (Inyokern)	June 30, 2020	13	18	10	17	1
Assumption Change	June 30, 2020	146,346	18	145,147	17	11,812
Assumption Change (Berrenda)	June 30, 2020	267	18	258	17	26
Assumption Change (Inyokern)	June 30, 2020	5	18	0	17	0
Actuarial Gain	June 30, 2021	(62,739)	18	(62,739)	18	(4,904)
Actuarial Gain (Berrenda)	June 30, 2021	(495)	18	(495)	18	(49)
Actuarial Loss (Inyokern)	June 30, 2021	18	18	18	18	2
Implementation of Alameda Decision	June 30, 2021	(28,923)	15	(28,923)	15	(2,578)
Implementation of Alameda Decision (Berrenda)	June 30, 2021	1	15	1	15	0
Implementation of Alameda Decision (Inyokern)	June 30, 2021	0	15	0	15	0
KCERA Total				**$2,358,199**		**$220,139**

1 As of middle of year.
2 As of June 30, 2011.

Exhibit I: Projection of UAAL Balances and Payments

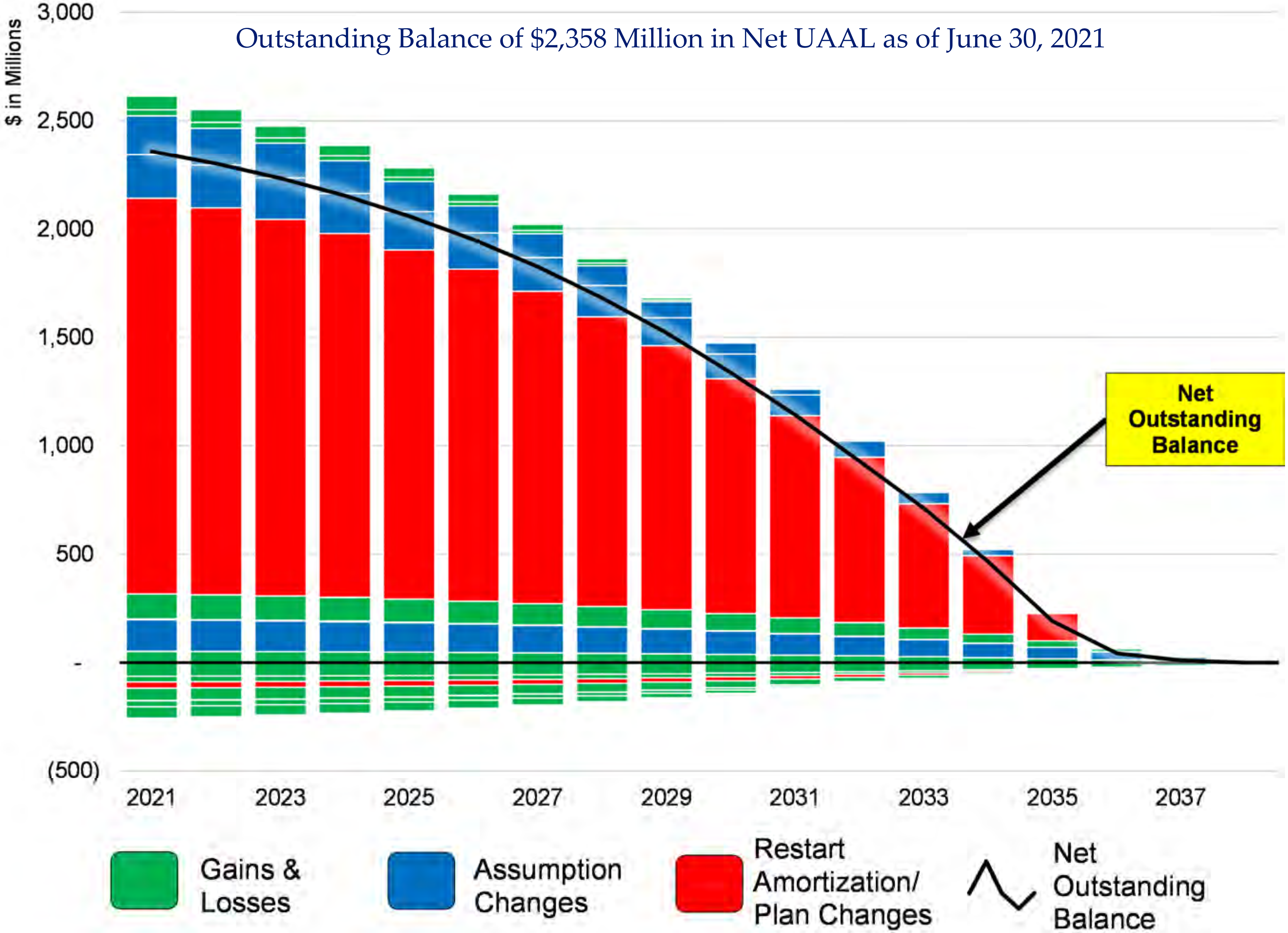


Exhibit I: Projection of UAAL Balances and Payments (continued)

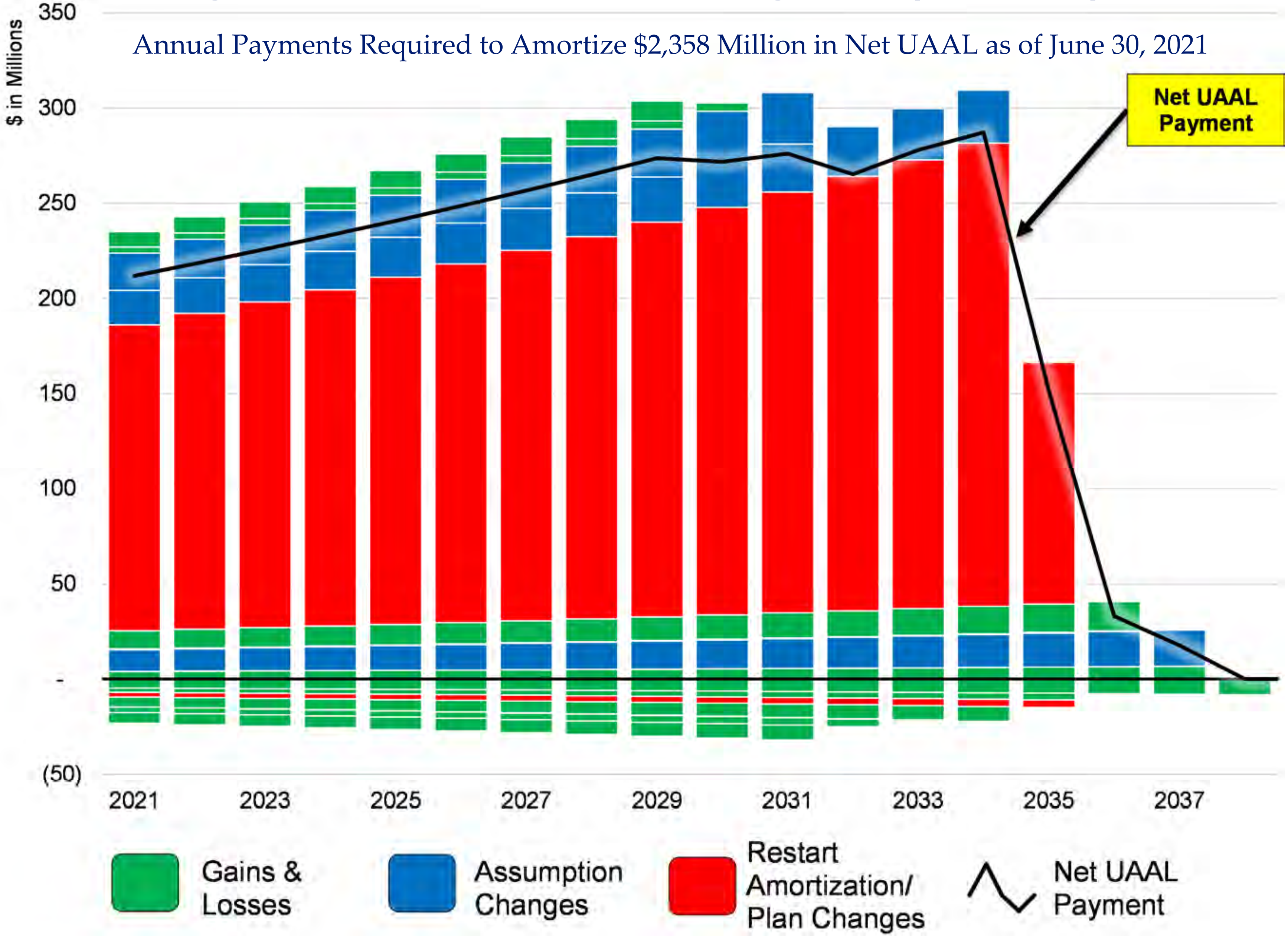


Exhibit J: Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Actuarial Accrued Liability for Actives:	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial Accrued Liability for Pensioners and Beneficiaries:	The single-sum value of lifetime benefits to existing pensioners and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial Cost Method:	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial Gain or Loss:	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield in actuarial liabilities that are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.
Actuarially Equivalent:	Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV):	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Section 3: Supplemental Information

Actuarial Present Value of Future Plan Benefits:	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits when due.
Actuarial Valuation:	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Actuarially Determined Contribution (ADC) and the Net Pension Liability (NPL).
Actuarial Value of Assets (AVA):	The value of the Association's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.
Actuarially Determined:	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the plan.
Actuarially Determined Contribution (ADC):	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Association's funding policy. The ADC consists of the employer Normal Cost and the Amortization Payment.
Amortization Method:	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization Payment:	The portion of the pension plan contribution, or ADC, that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Assumptions or Actuarial Assumptions:	The estimates upon which the cost of the Association is calculated, including: Investment return - the rate of investment yield that the Association will earn over the long-term future; Mortality rates - the death rates of employees and pensioners; life expectancy is based on these rates; Retirement rates - the rate or probability of retirement at a given age or service; Disability rates - the probability of disability retirement at a given age; Withdrawal rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates - the rates of salary increase due to inflation and productivity growth.
Closed Amortization Period:	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Open Amortization Period.
Decrements:	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined Benefit Plan:	A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.
Defined Contribution Plan:	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer Normal Cost:	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience Study:	A periodic review and analysis of the actual experience of the Association that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.
Funded Ratio:	The ratio of the Valuation Value of Assets (VVA) to the Actuarial Accrued Liability (AAL). Plans sometimes calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the VVA.
Investment Return:	The rate of earnings of the plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

Normal Cost:	That portion of the Actuarial Present Value of pension plan benefits allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.
Open Amortization Period:	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period with level percentage of payroll is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never decrease, but will become smaller each year, in relation to covered payroll, if the actuarial assumptions are realized.
Payroll or Compensation:	Compensation Earnable and Pensionable Compensation expected to be paid to active members during the twelve months following the valuation date. Only Compensation Earnable and Pensionable Compensation that would possibly go into the determination of retirement benefits are included.
Unfunded Actuarial Accrued Liability:	The excess of the Actuarial Accrued Liability over the Valuation Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability.
Valuation Date or Actuarial Valuation Date:	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.
Valuation Value of Assets:	The Actuarial Value of Assets reduced by the value of non-valuation reserves.

Section 4: Actuarial Valuation Basis

Exhibit 1: Actuarial Assumptions and Methods

Rationale for Assumptions: The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2016 through June 30, 2019 Actuarial Experience Study dated August 3, 2020. Unless otherwise noted, all actuarial assumptions and methods shown below apply to members for all tiers. These assumptions were adopted by the Board.

Economic Assumptions

Net Investment Return: 7.25%; net of investment expenses.

Based on the Actuarial Experience Study reference above, expected investment expenses represent about 0.40% of the Market Value of Assets.

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. This results in an administrative expense load as shown below:

	Average Contribution Rate Before Administrative Expense	Weighting	Total Loading
Employer	48.31%	87.81%	0.79%
Member	6.71%	12.19%	0.11%
Total		100.00%	0.90%

Under this approach, the employer Normal Cost rate is then increased by the same percent of payroll as the member rate with the remaining employer loading allocated to the employer UAAL rate. This is done to maintain a 50/50 sharing of Normal Cost for those in PEPRA Tiers. The table below shows this allocation.

Allocation of Administrative Expense Load as a % of Payroll	
Addition to Employer Basic Normal Cost Rate	0.11%
Addition to Employer Basic UAAL Rate	0.68%
Addition to Member Basic Rate	0.11%
Total Addition to Contribution Rates	0.90%

The administrative expense load is added to the Basic rates for employers and members.

Member Contribution Crediting Rate: 7.25%, compounded semi-annually.

Consumer Price Index (CPI) and Cost of Living Adjustments (COLA):	CPI Increase of 2.75% per year. Retiree COLA increases due to CPI are assumed to be 2.50% per year.
Payroll Growth:	Inflation of 2.75% per year plus "across the board" real salary increases of 0.50% per year.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.75% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 2.75% per year from the valuation date.
Salary Increases:	The annual rate of compensation increase includes: inflation at 2.75%, plus "across the board" salary increases of 0.50% per year, plus the following merit and promotion increases:

Merit and Promotion Increases

Years of Service	Rate (%) General	Rate (%) Safety
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

Demographic Assumptions:	
Post-Retirement Mortality Rates:	*Healthy* • **General Members:** Pub-2010 General Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 15% for females, projected generationally with the two-dimensional mortality improvement scale MP-2019. • **Safety Members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2019. *Disabled* • **General Members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates decreased by 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2019. • **Safety Members:** Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2019. *Beneficiaries* • **General and Safety Members:** Pub-2010 General Contingent Survivor Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 10% for males and females, projected generationally with the two-dimensional mortality improvement scale MP-2019. The Pub-2010 mortality tables and adjustments as shown above with generational projection to the ages of participants as of the measurement date reasonably reflect the mortality experience as of the measurement date. The generational projection is a provision for future mortality improvement.

Pre-Retirement Mortality Rates:

- **General Members:** Pub-2010 General Employee Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2019.
- **Safety Members:** Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2019.

	Rate (%)			
	General		Safety	
Age	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

All pre-retirement deaths are assumed to be non-service connected. Note that generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Mortality Rates for Member Contributions:

- **General Members:** Pub-2010 General Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 15% for females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 30% male and 70% female.
- **Safety Members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 80% male and 20% female.

Disability Incidence:

	Rate (%)	
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

50% of General disabilities are assumed to be service connected (duty) disabilities and the other 50% are assumed to be non-service connected (ordinary) disabilities.

90% of Safety disabilities are assumed to be service connected (duty) disabilities and the other 10% are assumed to be non-service connected (ordinary) disabilities.

Termination:

Years of Service	Rate (%) General	Rate (%) Safety
Less than 1	17.00	9.00
1 – 2	13.00	8.00
2 – 3	10.00	7.00
3 – 4	9.00	6.00
4 – 5	8.50	5.00
5 – 6	8.00	4.00
6 – 7	7.00	3.50
7 – 8	6.00	3.25
8 – 9	5.00	3.00
9 – 10	4.00	2.60
10 – 11	3.75	2.20
11 – 12	3.50	1.80
12 – 13	3.25	1.60
13 – 14	3.00	1.40
14 – 15	2.75	1.20
15 – 16	2.50	1.00
16 – 17	2.30	0.90
17 – 18	2.10	0.75
18 – 19	1.90	0.75
19 – 20	1.70	0.75
20 – 21	1.50	0.00
21 – 22	1.30	0.00
22 – 23	1.10	0.00
23 – 24	1.00	0.00
24 – 25	1.00	0.00
25 – 26	1.00	0.00
26 – 27	1.00	0.00
27 – 28	1.00	0.00
28 – 29	1.00	0.00
29 – 30	1.00	0.00
30 & Over	0.00	0.00

Refer to the next table that contains rates for electing a refund of contributions upon termination. No termination is assumed after a member is first assumed to retire.

Electing a Refund of Contributions upon Termination:

Years of Service	Rate (%) General	Rate (%) Safety
Less than 5	100.00	100.00
5 – 6	36.00	44.00
6 – 7	34.00	40.00
7 – 8	32.00	38.00
8 – 9	30.00	32.00
9 – 10	28.00	30.00
10 – 11	26.00	26.00
11 – 12	25.00	25.00
12 – 13	24.00	21.00
13 – 14	23.00	18.00
14 – 15	22.00	15.00
15 – 16	21.00	12.00
16 – 17	18.00	10.00
17 – 18	16.00	8.00
18 – 19	14.00	6.00
19 – 20	13.00	4.00
20 – 21	12.00	0.00
21 – 22	11.00	0.00
22 – 23	10.00	0.00
23 – 24	8.00	0.00
24 – 25	6.00	0.00
25 – 26	4.00	0.00
26 – 27	2.00	0.00
27 & Over	0.00	0.00

Retirement Rates:

Age	General Tier I <25 Years of Service	General Tier I >25 Years of Service	General Tiers IIA and IIB	General Tier III	Safety Tier I <25 Years of Service	Safety Tier I >25 Years of Service	Safety Tiers IIA and IIB
	Rate (%)						
45	0.00	0.00	0.00	0.00	5.00	5.00	0.00
46	0.00	0.00	0.00	0.00	5.00	5.00	0.00
47	0.00	0.00	0.00	0.00	5.00	5.00	0.00
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	20.00	30.00	20.00	20.00	25.00	50.00	25.00
64	20.00	30.00	20.00	20.00	25.00	50.00	25.00
65	35.00	35.00	35.00	35.00	100.00	100.00	100.00
66	35.00	35.00	35.00	35.00	100.00	100.00	100.00
67	35.00	35.00	35.00	35.00	100.00	100.00	100.00
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

Retirement Age and Benefit for Deferred Vested Members:

For current and future deferred vested members, retirement age assumptions are as follows:

General Retirement Age: 57

Safety Retirement Age: 53

We assume that 45% of future General and 60% of future Safety deferred vested members will continue to work for a reciprocal employer. For reciprocal members, we assume 4.00% and 3.75% compensation increases per annum for General and Safety members, respectively.

Section 4: Actuarial Valuation Basis

Future Benefit Accruals:	1.0 year of service per year of employment.
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Definition of Active Members:	All active members of KCERA as of the valuation date.
Form of Payment:	All active and inactive members are assumed to elect the unmodified option at retirement.
Percent Married:	For all active and inactive members, 70% of male members and 60% of female members are assumed to be married at pre-retirement death or retirement. There is no explicit assumption for children's benefits.
Age and Gender of Spouse:	For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.
Actuarial Funding Policy	
Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus the lesser of years of employment or years of benefit service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formula for each individual has always been in effect (i.e., "replacement life within a tier").
Actuarial Value of Assets:	Market Value of Assets (MVA) less unrecognized returns in each of the last nine semi-annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on the market value, and are recognized semi-annually over a five-year period. The Actuarial Value of Assets (AVA) is limited by a 50% corridor; the AVA cannot be less than 50% of MVA, nor greater than 150% of MVA.
Valuation Value of Assets:	The Actuarial Value of Assets reduced by the value of the non-valuation reserves (excluding the Contingency Reserve if it is negative).

Amortization Policy:	The UAAL, (i.e., the difference between the Actuarial Accrued Liability and the Valuation Value of Assets), as of June 30, 2011 shall be amortized separately from any future changes in UAAL over a period of 24.5 years from June 30, 2011. Any new UAAL as a result of actuarial gains or losses identified in the annual valuation as of June 30 will be amortized over a period of 18 years. Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period of 18 years. Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis: a. With the exception noted in b., below, the change in UAAL as a result of any plan amendments will be amortized over a period of 15 years or less; b. the increase in UAAL resulting from a temporary retirement incentive, including the impact of benefits resulting from additional service permitted in Section 31641.04 of the 1937 CERL (Golden Handshake), will be funded over a period of up to 5 years. For Golden Handshakes, the employer has the choice of two methods: i. Payment in full for the UAAL attributable to the Golden Handshake in the first month of the fiscal year following the fiscal year in which the Golden Handshake was granted. ii. Payment according to a five-year amortization period which will be invoiced (payable in 30 days) to the employer in the first month of the fiscal year following the fiscal year in which the Golden Handshake 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 at any time during the five-year amortization period. If the amortization method is used, then the outstanding balance will generally be recorded as a receivable asset to be included with the Actuarial Value of Assets. All Golden Handshakes provided by an employer during any fiscal year will be bundled together and will be invoiced in one transaction in the first month following the fiscal year in which the Golden Handshakes were granted. UAAL shall be amortized over “closed” amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation. UAAL shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase (i.e., wage inflation). If an overfunding or “surplus” exists (i.e., the Valuation Value of Assets exceeds the Actuarial Accrued Liability, so that the total of all UAAL amortization layers becomes negative), such surplus and any subsequent surpluses will be amortized over an “open” amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL will be amortized over 18 years as the first of a new series of amortization layers. These amortization policy components will apply separately to each of KCERA’s UAAL cost sharing groups.

Other Actuarial Methods	
Employer Contributions:	Employer contributions consist of two components: *Normal Cost* The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is determined as a level percentage of the member's compensation. *Contribution to the Unfunded Actuarial Accrued Liability (UAAL)* The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL) is calculated to remain level as a percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase along with expected payroll at the combined annual inflation and "across the board" salary increase rate of 3.25%. Effective with the June 30, 2012 valuation, the June 30, 2011 UAAL is being amortized over a 24.5-year declining period (14.5 years as of June 30, 2021). The change in UAAL that arises due to actuarial gains or losses or due to changes in actuarial assumptions or methods at each valuation is amortized over its own declining 18-year period. Any change in UAAL that arises due to plan amendments is amortized over its own declining 15-year period (with the exception of retirement incentives which are amortized over its own declining period of up to 5 years). The amortization policy is described on the previous page. The UAAL contribution rates have been adjusted to account for the one-year delay between the valuation date and the date that the contribution rates become effective. The recommended employer contributions are provided in *Section 2, Subsection F*. The rates are shown for each tier/cost group and are separated into Normal Cost and UAAL components into each of these three benefit categories: • The Basic benefits are the retirement benefits excluding all COLAs. • The COLA benefits adopted prior to Ventura Settlement are referred to as the "2.0% COLA benefits". • The COLA benefits provided under the Ventura settlement are referred to as the "0.5% COLA benefits".

Section 4: Actuarial Valuation Basis

Member Contributions:	The member contribution rates for all members are provided in *Section 4, Exhibit 3*. *General Tiers I and IIA and Safety Tiers I and IIA* Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General and Safety members, respectively. The basic contribution rate is determined as that percentage of compensation which if paid annually from a member's first year of membership through the prescribed retirement age would accumulate to the amount necessary to fund a prescribed annuity. The prescribed annuity is equal to: • 1/100 of Final Average Salary per year of service at age 55 for General Tier I members • 1/120 of Final Average Salary per year of service at age 60 for General Tier IIA members • 1/100 of Final Average Salary per year of service at age 50 for Safety Tier I and Safety Tier IIA members Safety Tier I members also pay a supplemental contribution rate such that the aggregate amount of the supplemental and basic contribution rates will provide an annuity equal to 3/200 of one year Final Average Salary per year of service at age 50. Members in these non-CalPEPRA tiers do not contribute towards the cost-of-living benefits. Effective July 11, 2015, San Joaquin Valley Unified Air Pollution Control District Tier I members pay 28% of the total Normal Cost rate. That percent increased to 39% effective 2016-2017 and 50% effective 2017-2018. Effective July 8, 2017, San Joaquin Valley Unified Air Pollution Control District Tier IIA members pay 50% of the total Normal Cost rate. *General Tiers IIB and III and Safety Tier IIB* Pursuant to Section 7522.30(a) of the Government Code, General Tier IIB, General Tier III and Safety Tier IIB members are required to contribute at least 50% of the Normal Cost rate. In addition, there are certain additional requirements that would have to be met such as requiring the new employees to pay the contribution rate of “similarly situated employees”, if it is greater. (reference: Section 7522.30(c)). We further understand that different rules may have to be applied for collectively bargained employees, non-represented, managerial or other supervisory employees. (reference: Section 7522.30(e)). In preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the new members and we have taken into account in this valuation only the requirements of Section 7522.30(c), but not requirements of Section 7522.30(e). Also of note is that based on our discussions with KCERA, we have used the discretion made available by Section 31620.5(a) of AB 1380 to no longer round the member contribution rates to the nearest quarter of one percent as previously required by CalPEPRA. This is consistent with established practice for the non-CalPEPRA tiers and should allow for exactly one-half of the Normal Cost for the CalPEPRA tiers to be paid by the employees and one-half by the employers. In addition, Section 31620.5(b) of AB 1380 also provides that the “one percent” rule under Section 7022.30(d) does not apply. This section formerly limited the circumstances under which the member rate would change. Member contributions are accumulated at an annual interest rate adopted annually by the Board.

	For some employers, benefits are integrated with Social Security. In those cases, non-General Tier III members pay two-thirds of the full rate on the first $350 of pay each month. (The General Tier III formula, as valued, is not integrated with Social Security.) The tables on pages 36 through 40 summarize the specific member contribution rate arrangements for each employer as they have been reflected in this valuation. For valuation purposes, the member contribution levels that are assumed to be in place are those for the fiscal year that begins one year after the valuation date. Any future changes in member contribution rates after that would be reflected in future valuations in determining the allocation of the total costs payable between the employers and the members.
Transfers:	When employees transfer from one participating employer to another KCERA participating employer, recognition needs to be made of the employee's prior service within KCERA on an equitable basis. For each employee that transfers within KCERA the funding for the employee's benefits will be determined as follows: The employee will be reported and funded as a vested terminated employee for the former participating employer with reciprocal benefits the same as any other vested terminated employee who moves to a reciprocal retirement system other than KCERA. • The employee will be reported and funded as an active employee for the new participating employer but with reciprocal service credits for the prior service in KCERA for purposes of benefit eligibility and entry age. Benefit amounts will be funded only for the service provided to the new participating employer. • Upon retirement from KCERA, the employee's total retirement benefit will be determined based on service with each KCERA participating employer and the employee's Final Average Salary. • The entire liability for the retired employee's KCERA benefit payments will be allocated to the latest participating employer's cost group. The employee will be reported as a retired employee for the latest participating employer with the full KCERA retirement benefit amount.

Section 4: Actuarial Valuation Basis

Cost Sharing Adjustments:	KCERA’s Normal Cost is determined separately for each group of members that have the same benefit formula (on a prospective basis). The seven Normal Cost cost sharing groups are as follows: • General Tier I • General Tier IIA • General Tier IIB • General Tier III • Safety Tier I • Safety Tier IIA • Safety Tier IIB KCERA’s UAAL is determined separately for each cost sharing group depending on the assets for that cost group. The three UAAL cost sharing groups are as follows: • General County and Courts • General Districts • Safety
Internal Revenue Code Section 415:	Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual’s account in a defined contribution plan. A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan’s assets. In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of $160,000 indexed for inflation. That limit is $230,000 for 2021. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant’s circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions. Benefits for members in the legacy tiers in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m). Legal Counsel’s review and interpretation of the law and regulations should be sought on any questions in this regard. Contribution rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.
Changed Actuarial Assumptions and Methods:	There have been no changes in actuarial assumptions or methods since the last valuation.

Exhibit 2: Summary of Plan Provisions

This exhibit summarizes the major provisions of the Association included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Membership Eligibility:	All permanent employees of Kern County or participating Special Districts scheduled to work 50% or more of the required regular standard hours are eligible to become a member of the Retirement Association subject to classification below:
General Tier I	All General members hired by the County prior to October 27, 2007 (prior to July 5, 2008 for Prosecutors), hired by North of the River Sanitation District prior to October 29, 2007, hired by the Kern County Water Agency prior to January 1, 2010, hired by Berrenda Mesa Water District prior to January 12, 2010, hired by San Joaquin Valley Unified Air Pollution Control District prior to July 31, 2012, hired by West Side Mosquito Abatement District prior to November 15, 2012, hired by Kern Mosquito & Vector Control District prior to December 12, 2012, hired by Inyokern Community Services District prior to December 13, 2012, hired by Buttonwillow Recreation & Park District or East Kern Cemetery District prior to December 17, 2012, hired by West Side Cemetery District prior to December 18, 2012, hired by Shafter Recreation & Park District prior to December 19, 2012, or hired by the Courts prior to March 12, 2011.
General Tier IIA	All General members hired by the County on or after October 27, 2007, hired by North of the River Sanitation District on or after October 29, 2007, hired by the Kern County Water Agency on or after January 1, 2010, hired by Berrenda Mesa Water District on or after January 12, 2010, hired by San Joaquin Valley Unified Air Pollution Control District on or after July 31, 2012, hired by West Side Mosquito Abatement District on or after November 15, 2012, hired by Kern Mosquito & Vector Control District on or after December 12, 2012, hired by Inyokern Community Services District on or after December 13, 2012, hired by Buttonwillow Recreation & Park District or East Kern Cemetery District on or after December 17, 2012, hired by West Side Cemetery District on or after December 18, 2012, hired by Shafter Recreation & Park District on or after December 19, 2012, or hired by the Courts on or after March 12, 2011; and hired prior to January 1, 2013.
General Tier IIB	All General members hired by the County or districts (other than West Side Recreation & Park) on or after January 1, 2013.
General Tier III	All General members hired by West Side Recreation & Park on or after January 1, 2013.
Safety Tier I	All members employed in active law enforcement, active fire suppression, probation, detention or criminal investigation hired prior to March 27, 2012.
Safety Tier IIA	All members employed in active law enforcement, active fire suppression, probation, detention or criminal investigation hired on or after March 27, 2012 and prior to January 1, 2013.
Safety Tier IIB	All member employee in active law enforcement, active fire suppression, probation, detention or criminal investigation hired on or after January 1, 2013.

Final Compensation for Benefit Determination:	
General Tiers I and IIA, Safety Tiers I and IIA	Highest consecutive twelve months of compensation earnable (§31462.1) (FAS1).
General Tier IIB, General Tier III and Safety Tier IIB	Highest consecutive thirty-six months of pensionable compensation (§7522.32 and §7522.34) (FAS3).
Compensation Limit:	
Non-General Tier III	For members with membership dates on or after July 1, 1996, Compensation Earnable is limited to Internal Revenue Code Section 401(a)(17). The limit for the plan year beginning July 1, 2021 is $290,000. The limit is indexed for inflation on an annual basis.
General Tier III	Pensionable Compensation is limited to $128,059 for 2021 ($153,671, if not enrolled in Social Security). The limit is indexed for inflation on an annual basis.
Service:	Years of service (Yrs).
Service Retirement Eligibility:	
General Tiers I, IIA and IIB	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 30 years of service credit, regardless of age (§31672).
General Tier III	Age 52 with 5 years of service (§7522.20(a)), or age 70 regardless of service credit.
Safety Tiers I, IIA and IIB	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 20 years of service credit, regardless of age (§31663.25).
Benefit Formula:	

General Tier I (§31676.17)

Retirement Age	Benefit Formula[1]
50	(2.00%xFAS1 – 1/3x2.00%x$350 x 12) x Yrs
55	(2.50%xFAS1 – 1/3x2.50%x$350 x 12) x Yrs
60	(3.00%xFAS1 – 1/3x3.00%x$350 x 12) x Yrs
62 and over	(3.00%xFAS1 – 1/3x3.00%x$350 x 12) x Yrs

General Tier I[2] (§31676.14)

Retirement Age	Benefit Formula
50	1.48% x FAS1 x Yrs
55	1.95% x FAS1 x Yrs
60	2.44% x FAS1 x Yrs
62 and over	2.61% x FAS1 x Yrs

	Retirement Age	Benefit Formula[1]
General Tier IIA (§31676.01)		
	50	(0.79%xFAS1 – 1/3x0.79%x$350 x 12) x Yrs
	55	(0.99%xFAS1 – 1/3x1.00%x$350 x 12) x Yrs
	60	(1.28%xFAS1 – 1/3x1.28%x$350 x 12) x Yrs
	62	(1.39%xFAS1 – 1/3x1.39%x$350 x 12) x Yrs
	65 and over	(1.62%xFAS1 – 1/3x1.62%x$350 x 12) x Yrs

General Tier IIB (§31676.01)	**Retirement Age**	**Benefit Formula[1]**
	50	(0.79%xFAS3 – 1/3x0.79%x$350 x 12) x Yrs
	55	(0.99%xFAS3 – 1/3x1.00%x$350 x 12) x Yrs
	60	(1.28%xFAS3 – 1/3x1.28%x$350 x 12) x Yrs
	62	(1.39%xFAS3 – 1/3x1.39%x$350 x 12) x Yrs
	65 and over	(1.62%xFAS3 – 1/3x1.62%x$350 x 12) x Yrs

(1) Benefits for some District Members are not integrated with Social Security.

(2) Two General Districts, Berrenda Mesa and Inyokern, have adopted Section 31676.17 on a prospective basis only as of January 1, 2005, but have Section 31676.14 for service prior to January 1, 2005.

General Tier III (§7522.20(a))	**Retirement Age**	**Benefit Formula**
	52	1.00% x FAS3 x Yrs
	55	1.30% x FAS3 x Yrs
	60	1.80% x FAS3 x Yrs
	62	2.00% x FAS3 x Yrs
	65	2.30% x FAS3 x Yrs
	67 and over	2.50% x FAS3 x Yrs

Safety Tier I (§31664.1)	**Retirement Age**	**Benefit Formula**
	50	(3.00% x FAS1 - 1/3 x 3.00% x $350 x 12) x Yrs
	55	(3.00% x FAS1 - 1/3 x 3.00% x $350 x 12) x Yrs
	60 and over	(3.00% x FAS1 - 1/3 x 3.00% x $350 x 12) x Yrs

Safety Tier IIA (§31664)	**Retirement Age**	**Benefit Formula**
	50	(2.00% x FAS1 - 1/3 x 2.00% x $350 x 12) x Yrs
	55	(2.62% x FAS1 - 1/3 x 2.62% x $350 x 12) x Yrs
	60 and over	(2.62% x FAS1 - 1/3 x 2.62% x $350 x 12) x Yrs
Safety Tier IIB (§31664)	**Retirement Age**	**Benefit Formula**
	50	(2.00% x FAS3 - 1/3 x 2.00% x $350 x 12) x Yrs
	55	(2.62% x FAS3 - 1/3 x 2.62% x $350 x 12) x Yrs
	57 and over	(2.62% x FAS3 - 1/3 x 2.62% x $350 x 12) x Yrs

Maximum Benefit:	
Non-General Tier III	100% of final compensation (§31676.14, §31676.17, §31676.01, §31664.1, §31664).
General Tier III	There is no final compensation limit on the maximum retirement benefit.
Non-Service Connected Disability:	
Eligibility	Five years of service (§31720).
Benefit	20% of Final Compensation plus 2% of Final Compensation for each full year of service in excess of five years, not to exceed 40% of Final Compensation (§31727.7). For all members, 100% of the Service Retirement benefit, if greater.
Service Connected Disability:	
Eligibility	No age or service requirements (§31720).
Benefit	50% of the Final Compensation or 100% of Service Retirement benefit, if greater (§31727.4).

Pre-Retirement Death:	
All Members	
Eligibility	None.
Basic lump sum benefit	Refund of employee contributions with interest plus one month's eligible compensation for each year of service to a maximum of six months' compensation (§31781).
Service Connected Death	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787). In addition, Safety members are entitled to benefits under Sections 31787.5 and 31787.6.
Vested Members	
Eligibility	Five years of service.
Basic benefit	60% of the greater of Service Retirement or Non-Service Connected Disability Retirement benefit payable to surviving eligible spouse or eligible children (§31765.1, §31781.1), in lieu of above. Additionally, the spouse may choose a combined benefit of: • A lump sum payment of up to six months' compensation (see above), and • A monthly (60%) benefit reduced by actuarial equivalent of the lump sum payment (§31781.3).
Death After Retirement:	
All Members	
Service Retirement or Non-Service Connected Disability Retirement	Unless another option was selected at retirement, 60% of member's unmodified allowance continued to eligible spouse (§31760.1). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the day of retirement (§31760.1), or, at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31760.2).
Service Connected Disability	Unless another option was selected at retirement, 100% of member's unmodified allowance continued to eligible spouse (§31786).
Withdrawal Benefits:	
Less than Five Years of Service	Refund of accumulated employee contributions with interest (§31628) or entitled to earned benefits commencing any time after eligible to retire (§31629.5) if eligible for benefits at a reciprocal system.
Five or More Years of Service	If contributions left on deposit, a member is entitled to earned benefits commencing at any time after eligible to retire (§31700). Service for eligibility includes service credited as an employee of a reciprocal system.
Post-retirement Cost-of-Living Benefits:	Future changes based on changes to the Consumer Price Index to a maximum of 2.50% per year. (§31870.4)
Supplemental Retiree Benefit Reserve:	The Association provides Supplemental Retiree Benefit Reserve benefits for eligible retirees. These benefits have been excluded from this valuation.

Section 4: Actuarial Valuation Basis

Member Contributions:	Please refer to *Section 4, Exhibit 3* for the specific rates. Members in General Tiers I and IIA (excluding San Joaquin Valley Unified Air Pollution Control District) and Safety Tiers I and IIA do not contribute towards the cost-of-living benefits.
General Tier I (non-SJVAPCD)	
Basic	Entry age based rates that provide for an average annuity at age 55 equal to 1/100 of FAS (§31621.8).
General Tier I (SJVAPCD)	
Basic	Entry age based rates that provide for 50% of total Normal Cost Rate.
General Tier IIA (non-SJVAPCD)	
Basic	Entry age based rates that provide for an average annuity at age 60 equal to 1/120 of FAS (§31621).
General Tier IIA (SJVAPCD)	
Basic	Entry age based rates that provide for 50% of total Normal Cost Rate.
General Tiers IIB and III	Non-entry age based rates that provide for 50% of total Normal Cost Rate.
Safety Tier I	
Basic	Entry age based rates that provide for an average annuity at age 50 equal to 1/100 of FAS (§31639.25).
Supplemental	Entry age based rates that provide for an average annuity at age 50 equal to 1/200 of FAS (Resolution #2004-144).
Safety "3" Tier I	
Basic and Supplemental	At all entry ages, the member contribution rate for the above Safety Tier I members who enter the plan at age 27.
Safety Tier IIA	
Basic	Entry age based rates that provide for an average annuity at age 50 equal to 1/100 of FAS (§31639.25).
Safety "3" Tier IIA	
Basic	At all entry ages, the member contribution rate for the above Safety Tier IIA members who enter the plan at age 27.
Safety Tier IIB	Non-entry age based rates that provide for 50% of total Normal Cost Rate.
Other Information:	Safety Tier I and Tier IIA members with 30 or more years of service are exempt from paying member contributions. Various other exemptions for member contributions are outlined on pages 36 through 40.

Changed Plan Provisions:	On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriff's Assn. et al., v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members for that system and other similarly situated 1937 Act county employees retirement systems. See Item (1) on page 8 of this report for a discussion of the action taken by KCERA.

Note: The summary of major plan provisions is designed to outline principal plan benefits as interpreted for purposes of the actuarial valuation. If the Association should find the plan summary not in accordance with the actual provisions, the Association should alert the actuary so they can both be sure the proper provisions are valued.

Exhibit 3: Member Contribution Rates

General Tier I Members' (non-SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

	Integrated		Non-Integrated
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation	All Compensation
16	4.35%	6.52%	6.52%
17	4.43%	6.65%	6.65%
18	4.51%	6.77%	6.77%
19	4.60%	6.90%	6.90%
20	4.68%	7.02%	7.02%
21	4.77%	7.15%	7.15%
22	4.86%	7.29%	7.29%
23	4.95%	7.42%	7.42%
24	5.04%	7.56%	7.56%
25	5.13%	7.70%	7.70%
26	5.23%	7.84%	7.84%
27	5.33%	7.99%	7.99%
28	5.42%	8.13%	8.13%
29	5.52%	8.28%	8.28%
30	5.63%	8.44%	8.44%
31	5.73%	8.59%	8.59%
32	5.83%	8.75%	8.75%
33	5.95%	8.92%	8.92%
34	6.05%	9.08%	9.08%
35	6.17%	9.25%	9.25%
36	6.29%	9.43%	9.43%
37	6.41%	9.61%	9.61%
38	6.53%	9.80%	9.80%
39	6.66%	9.99%	9.99%

Exhibit 3: Member Contribution Rates (continued)

General Tier I Members' (non-SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integrated		Non-Integrated
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation	All Compensation
40	6.79%	10.19%	10.19%
41	6.93%	10.39%	10.39%
42	7.06%	10.59%	10.59%
43	7.19%	10.78%	10.78%
44	7.32%	10.98%	10.98%
45	7.45%	11.18%	11.18%
46	7.58%	11.37%	11.37%
47	7.70%	11.55%	11.55%
48	7.79%	11.69%	11.69%
49	7.88%	11.82%	11.82%
50	7.94%	11.91%	11.91%
51	7.98%	11.97%	11.97%
52	7.99%	11.99%	11.99%
53	7.99%	11.98%	11.98%
54 & Over	7.93%	11.90%	11.90%

Interest: 7.25% per annum
COLA: None
Administrative Expenses: 0.11% of payroll added to Basic rates
Mortality: See *Section 4, Exhibit 1*
Salary Increase: Inflation (2.75%) + Across-the-Board Increase (0.50%) + Merit and Promotion (See *Section 4, Exhibit 1*)
Note: These rates are determined before any pickups by the employer, if any.

Exhibit 3: Member Contribution Rates (continued)

General Tier I Members' (SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

Entry Age	All Compensation
16	9.28%
17	9.46%
18	9.63%
19	9.82%
20	9.99%
21	10.18%
22	10.38%
23	10.56%
24	10.76%
25	10.96%
26	11.16%
27	11.38%
28	11.58%
29	11.79%
30	12.02%
31	12.24%
32	12.47%
33	12.71%
34	12.94%
35	13.18%
36	13.44%
37	13.70%
38	13.97%
39	14.24%

Exhibit 3: Member Contribution Rates (continued)

General Tier I Members' (SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

Entry Age	All Compensation
40	14.53%
41	14.81%
42	15.10%
43	15.37%
44	15.66%
45	15.94%
46	16.21%
47	16.47%
48	16.67%
49	16.86%
50	16.99%
51	17.07%
52	17.10%
53	17.09%
54 & Over	16.97%

The General Tier I (SJVAPCD) member contribution rate is 50% of the total Normal Cost rate. The rates shown above also include an administrative expense load of 0.11% of payroll.

Exhibit 3: Member Contribution Rates (continued)

General Tier IIA Members' (non-SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

	Integrated		Non-Integrated
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation	All Compensation
16	3.15%	4.72%	4.72%
17	3.21%	4.81%	4.81%
18	3.27%	4.90%	4.90%
19	3.33%	4.99%	4.99%
20	3.39%	5.08%	5.08%
21	3.45%	5.18%	5.18%
22	3.51%	5.27%	5.27%
23	3.58%	5.37%	5.37%
24	3.65%	5.47%	5.47%
25	3.71%	5.57%	5.57%
26	3.78%	5.67%	5.67%
27	3.85%	5.78%	5.78%
28	3.93%	5.89%	5.89%
29	3.99%	5.99%	5.99%
30	4.07%	6.10%	6.10%
31	4.15%	6.22%	6.22%
32	4.22%	6.33%	6.33%
33	4.30%	6.45%	6.45%
34	4.38%	6.57%	6.57%
35	4.46%	6.69%	6.69%
36	4.54%	6.81%	6.81%
37	4.63%	6.94%	6.94%
38	4.71%	7.07%	7.07%
39	4.80%	7.20%	7.20%

Exhibit 3: Member Contribution Rates (continued)

General Tier IIA Members' (non-SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

	Integrated		Non-Integrated
Entry Age	**First $350 of Monthly Compensation**	**Over $350 of Monthly Compensation**	**All Compensation**
40	4.89%	7.33%	7.33%
41	4.98%	7.47%	7.47%
42	5.07%	7.61%	7.61%
43	5.17%	7.76%	7.76%
44	5.27%	7.91%	7.91%
45	5.38%	8.07%	8.07%
46	5.49%	8.23%	8.23%
47	5.59%	8.39%	8.39%
48	5.69%	8.54%	8.54%
49	5.80%	8.70%	8.70%
50	5.91%	8.86%	8.86%
51	6.00%	9.00%	9.00%
52	6.09%	9.14%	9.14%
53	6.17%	9.25%	9.25%
54	6.24%	9.36%	9.36%
55	6.29%	9.43%	9.43%
56	6.32%	9.48%	9.48%
57	6.33%	9.49%	9.49%
58	6.33%	9.49%	9.49%
59 & Over	6.28%	9.42%	9.42%

Interest: 7.25% per annum
COLA: None
Administrative Expenses: 0.11% of payroll added to Basic rates
Mortality: See *Section 4, Exhibit 1*
Salary Increase: Inflation (2.75%) + Across-the-Board Increase (0.50%) + Merit and Promotion (See *Section 4, Exhibit 1*)
Note: These rates are determined before any pickups by the employer, if any.

Exhibit 3: Member Contribution Rates (continued)

General Tier IIA Members' (SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

Entry Age	All Compensation
16	4.58%
17	4.67%
18	4.75%
19	4.84%
20	4.93%
21	5.02%
22	5.11%
23	5.21%
24	5.31%
25	5.40%
26	5.50%
27	5.61%
28	5.71%
29	5.81%
30	5.92%
31	6.03%
32	6.14%
33	6.26%
34	6.37%
35	6.49%
36	6.60%
37	6.73%
38	6.86%
39	6.98%

Exhibit 3: Member Contribution Rates (continued)

General Tier IIA Members' (SJVAPCD) Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

Entry Age	All Compensation
40	7.11%
41	7.24%
42	7.38%
43	7.52%
44	7.67%
45	7.83%
46	7.98%
47	8.14%
48	8.28%
49	8.44%
50	8.59%
51	8.73%
52	8.86%
53	8.97%
54	9.08%
55	9.14%
56	9.19%
57	9.20%
58	9.20%
59 & Over	9.13%

The General Tier IIA (SJVAPCD) member contribution rate is 50% of the total Normal Cost rate. The rates shown above also include an administrative expense load of 0.11% of payroll.

Exhibit 3: Member Contribution Rates (continued)

General Tier IIB Members' Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

	Integrated		Non-Integrated
All Members	First $350 of Monthly Compensation	Over $350 of Monthly Compensation	All Compensation
Basic	3.33%	5.00%	5.00%
2% COLA	0.70%	1.05%	1.05%
0.5% COLA	0.22%	0.33%	0.33%
Total	4.25%	6.38%	6.38%

The General Tier IIB member contribution rate is 50% of the total Normal Cost rate. The rates shown above also include an administrative expense load of 0.11% of payroll.

General Tier III Members' Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

All Members	All Compensation[1]
Basic	5.84%
2% COLA	1.20%
0.5% COLA	0.37%
Total	7.41%

The General Tier III member contribution rate is 50% of the total Normal Cost rate. The rates shown above also include an administrative expense load of 0.11% of payroll.

[1] It is our understanding that in the determination of pension benefits under the General Tier III formula, the compensation that can be taken into account for 2021 is $128,059 (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2021 (reference: Section 7522.10(d)).

Exhibit 3: Member Contribution Rates (continued)

Safety Tier I Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integrated	
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation
16	7.31%	10.96%
17	7.46%	11.19%
18	7.61%	11.42%
19	7.77%	11.66%
20	7.93%	11.90%
21	8.10%	12.15%
22	8.27%	12.40%
23	8.44%	12.66%
24	8.61%	12.92%
25	8.79%	13.19%
26	8.98%	13.47%
27	9.17%	13.75%
28	9.37%	14.05%
29	9.57%	14.35%
30	9.77%	14.66%
31	9.99%	14.98%
32	10.21%	15.32%
33	10.44%	15.66%
34	10.67%	16.01%
35	10.91%	16.37%
36	11.16%	16.74%
37	11.42%	17.13%
38	11.69%	17.53%
39	11.96%	17.94%

Exhibit 3: Member Contribution Rates (continued)

Safety Tier I Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integrated	
Entry Age	**First $350 of Monthly Compensation**	**Over $350 of Monthly Compensation**
40	12.23%	18.34%
41	12.49%	18.74%
42	12.68%	19.02%
43	12.77%	19.16%
44	12.83%	19.25%
45	12.86%	19.29%
46	12.86%	19.29%
47	12.83%	19.25%
48	12.69%	19.04%
49 & Over	12.42%	18.63%

Interest: 7.25% per annum
COLA: None
Administrative Expenses: 0.11% of payroll added to Basic rates
Mortality: See *Section 4, Exhibit 1*
Salary Increase: Inflation (2.75%) + Across-the-Board Increase (0.50%) + Merit and Promotion (See *Section 4, Exhibit 1*)
Note: These rates are determined before any pickups by the employer, if any.

Exhibit 3: Member Contribution Rates (continued)

Safety 3" Safety Tier I Members' Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

	Integrated	
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation
Every	9.17%	13.75%

Interest: 7.25% per annum
COLA: None
Administrative Expense: 0.11% of payroll added to Basic rates
Mortality: See *Section 4, Exhibit 1*
Salary Increase: Inflation (2.75%) + Across-the-Board Increase (0.50%) + Merit and Promotion (See *Section 4, Exhibit 1*)

Note: Beginning at various dates throughout 2007, certain Safety bargaining units converted to a new schedule of contribution rates, referred to as "Safety 3" contribution rates. For employees falling under this category and hired after the appropriate date (which varies by bargaining unit), the contribution rate will be a flat percentage of pay regardless of entry age. Based on the most recent Actuarial Experience Study, the contribution rates shown above are based on an entry age of 27. This is expected to provide for the same value of contributions that would be made based on the specific entry age based rates shown on the previous two pages. These rates are determined before any pickups by the employer.

Exhibit 3: Member Contribution Rates (continued)

Safety Tier IIA Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integrated	
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation
16	4.89%	7.34%
17	5.00%	7.50%
18	5.10%	7.65%
19	5.21%	7.81%
20	5.31%	7.97%
21	5.42%	8.13%
22	5.53%	8.30%
23	5.65%	8.47%
24	5.77%	8.65%
25	5.89%	8.83%
26	6.01%	9.02%
27	6.14%	9.21%
28	6.27%	9.40%
29	6.40%	9.60%
30	6.54%	9.81%
31	6.69%	10.03%
32	6.83%	10.25%
33	6.99%	10.48%
34	7.14%	10.71%
35	7.30%	10.95%
36	7.47%	11.20%
37	7.63%	11.45%
38	7.82%	11.73%
39	8.00%	12.00%

Exhibit 3: Member Contribution Rates (continued)

Safety Tier IIA Members' (Excluding "Safety 3" Members) Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integrated	
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation
40	8.17%	12.26%
41	8.35%	12.53%
42	8.48%	12.72%
43	8.54%	12.81%
44	8.58%	12.87%
45	8.60%	12.90%
46	8.59%	12.89%
47	8.58%	12.87%
48	8.49%	12.73%
49 & Over	8.31%	12.46%

Interest:	7.25% per annum
COLA:	None
Administrative Expenses:	0.11% of payroll added to Basic rates
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.75%) + Across-the-Board Increase (0.50%) + Merit and Promotion (See *Section 4, Exhibit 1*)

Note: These rates are determined before any pickups by the employer, if any.

Exhibit 3: Member Contribution Rates (continued)

"Safety 3" Safety Tier IIA Members' Contribution Rates from the June 30, 2021 Actuarial Valuation
(Expressed as a Percentage of Monthly Compensation)

	Integrated	
Entry Age	First $350 of Monthly Compensation	Over $350 of Monthly Compensation
Every	6.14%	9.21%

Interest:	7.25% per annum
COLA:	None
Administrative Expense:	0.11% of payroll added to Basic rates
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.75%) + Across-the-Board Increase (0.50%) + Merit and Promotion (See *Section 4, Exhibit 1*)

Note: Beginning at various dates throughout 2007, certain Safety bargaining units converted to a new schedule of contribution rates, referred to as "Safety 3" contribution rates. For employees falling under this category and hired after the appropriate date (which varies by bargaining unit), the contribution rate will be a flat percentage of pay regardless of entry age. Based on the most recent Actuarial Experience Study, the contribution rates shown above are based on an entry age of 27. This is expected to provide for the same value of contributions that would be made based on the specific entry age based rates shown on the previous two pages. These rates are determined before any pickups by the employer.

Exhibit 3: Member Contribution Rates (continued)

Safety Tier IIB Members' Contribution Rates from the June 30, 2021 Actuarial Valuation (Expressed as a Percentage of Monthly Compensation)

	Integrated	
All Members	First $350 of Monthly Compensation	Over $350 of Monthly Compensation
Basic	6.65%	9.97%
2% COLA	1.64%	2.46%
0.5% COLA	0.53%	0.79%
Total	8.82%	13.22%

The Safety Tier IIB member contribution rate is 50% of the total Normal Cost rate. The rates shown above also include an administrative expense load of 0.11% of payroll.

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December 2, 2021

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

Re: Kern County Employees' Retirement Association (KCERA)
Inyokern Community Services District – Impact of Declining Employer Payroll Policy based on June 30, 2021 Actuarial Valuation

Dear Dominic:

As requested, we have prepared information regarding the impact of the Declining Employer Payroll Policy (Policy) on the Inyokern Community Services District (Inyokern). In August 2019, the Retirement Board determined that a triggering event occurred during the 2019-20 fiscal year, resulting from this employer ceasing to enroll new hires and/or a material and expected long-lasting reduction in KCERA covered payroll.

We have determined the Valuation Value of Assets (VVA), Actuarial Accrued Liability (AAL) and resulting Unfunded Actuarial Accrued Liability (UAAL) that have been allocated to Inyokern as of June 30, 2021 based on the Policy. We have also included the employer contribution amounts for Inyokern that result from application of the Policy. These contribution amounts are also shown in the Actuarial Valuation and Review as of June 30, 2021.

Summary of Results

After applying the Policy, we have determined Inyokern's UAAL to be as follows as of June 30, 2021:

	Inyokern
Unfunded Actuarial Accrued Liability as of June 30, 2021	$124,000

The Policy requires that the employer contribution to pay off the initial UAAL be made in level dollar amounts over a period not to exceed eighteen years. Section 6 F of the Policy further states:

> Annually, after the determination of the covered employer's initial funding obligation, as part of the regular annual actuarial valuation of the plan, KCERA's actuary will measure any change in the UAAL of the participating employer due to actuarial experience or changes in actuarial assumptions. In addition to the amortized payments for the covered employer's initial UAAL funding obligation determined as of the initial valuation, the employer will be liable for, and must contribute to KCERA, any such new UAAL determined as of subsequent valuations, based upon an amortization schedule recommended by the actuary and adopted by the Board of Retirement.

As shown in Exhibit C, this valuation reflects changes in UAAL due to both actuarial experience and changes in plan provisions. On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriff's Assn. et al., v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members for that system and other similarly situated 1937 Act county employees retirement systems. See Item (1) on page 8 of the Actuarial Valuation and Review as of June 30, 2021 for a discussion of the action taken by KCERA. We have amortized the changes in Inyokern's UAAL due to actuarial experience as a separate 18-year level dollar amortization layer and the changes in Inyokern's UAAL due to changes in plan provisions as a separate 15-year level dollar amortization layer, both using the current 7.25% discount rate. The use of 18 years and 15 years as the amortization periods for these changes in UAAL is consistent with both the Declining Employer Payroll Policy and KCERA's regular Actuarial Funding Policy, and is recommended by Segal.

A comparison of the demographics of Inyokern as of June 30, 2021 and June 30, 2020 is provided in Exhibit A.

The following table is a summary comparison of the average contribution rates for both employers and members before and after application of the Policy.

Inyokern[1]

	June 30, 2021		June 30, 2020	
	Rate	Estimated Annual Amount[2] ($ in '000s)	Rate	Estimated Annual Amount[3] ($ in '000s)
Average Employer Rate				
Normal Cost	N/A	$0	N/A	$0
UAAL	N/A	13[4]	N/A	11[5]
Total Contributions	N/A	$13[6]	N/A	$11[7]
Average Member Rate	N/A	$0	N/A	$0

1 There are no active members at Inyokern. Therefore, there is no Normal Cost rate and no average member rate after application of the Policy.

2 Based on June 30, 2021 projected compensation of $0.

3 Based on June 30, 2020 projected compensation of $0.

4 This annual UAAL contribution in dollars of $13,000 for Inyokern is equal to the level dollar layered amortization of the $124,000 in UAAL of $13,000 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, 2022.

5 This annual UAAL contribution in dollars of $11,000 for Inyokern is equal to the level dollar layered 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.

6 Inyokern should contribute based on the dollar amounts shown. These contribution amounts assume payment throughout the 2022-23 plan year

7 Inyokern should contribute based on the dollar amounts shown. These contribution amounts assume payment throughout the 2021-22 plan year

The UAAL and employer contribution amounts for this employer are higher than that shown in our previous letter dated November 30, 2020 that included the impact of the Policy based on the previous actuarial valuation. This increase is due to actuarial experience (primarily contributions less than expected in 2020-2021).

Declining Payroll Methodology

Based on the methodology described in the Policy, a participating employer that has a triggering event, such as ceasing to enroll new hires or a material and expected long-lasting reduction in KCERA covered payroll, would be allocated a pro-rata share of the total UAAL for their cost group. That pro-rata share would be allocated based on the employer's AAL including inactive and deferred members as compared to the AAL for all the employers within the same cost group. Note that this means that the initial UAAL payments for the employer would no longer be allocated in proportion to its covered payroll (which is expected to decline), but rather in proportion to its AAL.

The initial VVA is determined by a pro-rata allocation based on the employer's initial AAL to the AAL for all the employers within that cost group. The initial UAAL is the initial AAL minus the initial VVA. This amount is rolled forward each year using the actual contributions and benefit payments for Inyokern, and the actual (smoothed) return for all KCERA assets. The detailed calculations of the UAAL for Inyokern based on applying the Policy are shown in Exhibit B.

Assumptions used in Calculations

Unless otherwise noted, all of the above calculations are based on the June 30, 2021 actuarial valuation results including the participant data and actuarial assumptions on which that valuation was based. That valuation and these calculations were completed under the supervision of Molly Calcagno, ASA, MAAA, Enrolled Actuary.

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

Please let us know if you have any questions.

Sincerely,

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

Molly Calcagno, ASA, MAAA, EA
Actuary

Table of Plan Coverage for Inyokern Community Services District

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average years of service	N/A	N/A	N/A
• Total projected compensation	N/A	N/A	N/A
• Average projected compensation	N/A	N/A	N/A
• Account balances	N/A	N/A	N/A
• Total active vested members	N/A	N/A	N/A
Inactive vested members:[1]			
• Number	1	1	0.0%
• Average age	47.8	46.8	1.0
Retired members:			
• Number in pay status	1	1	0.0%
• Average age	53.4	52.4	1.0
• Average monthly benefit[2]	$345	$336	2.7%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

[1] Includes inactive members due a refund of contributions.
[2] Excludes monthly benefit paid from the Supplemental Retiree Benefit Reserve.

Allocated UAAL for Inyokern Community Services District

Here are the specific steps involved in the determination of the UAAL for Inyokern as of June 30, 2021:

Step 1: Determine the AAL for Inyokern as of June 30, 2021

The June 30, 2021 AAL of Inyokern was calculated using the membership data for Inyokern as of the same date. Inyokern's AAL as of June 30, 2021 was $274,000.[1]

Step 2: Determine the VVA for Inyokern as of June 30, 2021

In our previous letter dated November 30, 2020, Inyokern's portion of the VVA as of June 30, 2020 was $143,000.

To determine the VVA for Inyokern as of June 30, 2021, the June 30, 2020 amount is rolled forward using the actual contributions and benefit payments for Inyokern, and the actual (smoothed) return for all KCERA assets. The VVA as of June 30, 2021 is calculated in the following table:

		Year Ended June 30, 2021
1	Rate of Return[2]	7.93%
2	VVA as of June 30, 2020	$143,000
3	Employer Contributions	0
4	Member Contributions	0
5	Benefit Payments	4,059
6	Interest Crediting[3]	11,179
7	VVA as of June 30, 2021	$150,000[4,5]

The VVA for Inyokern as of June 30, 2021 is $150,000.[4]

1 Assumes none of the transfer liability from the County will be allocated to Inyokern.
2 Based on VVA rate of return for all KCERA assets.
3 Equals [(2) x (1)] plus [(3) + (4) – (5)] x [(1) / 2].
4 This has been rounded to the nearest $1,000.
5 The gain from investments is $1,000.

Step 3: Determine the UAAL for Inyokern as of June 30, 2021

Inyokern's UAAL as of June 30, 2021 is equal to:

- The AAL for Inyokern's actives, deferred vested, retirees and beneficiaries as of June 30, 2021

MINUS

- The VVA allocated to Inyokern as of the same date

The UAAL for Inyokern as determined under the Declining Employer Payroll Policy as of June 30, 2021 is Inyokern's AAL minus their VVA, i.e., $274,000 - $150,000, or $124,000.

The VVA will be subtracted from the AAL as of each future valuation date to determine the updated total Inyokern UAAL. A new UAAL layer due to actuarial experience will then be calculated as the difference between that updated total UAAL amount (prior to any assumption or plan changes) and the outstanding balance of the current UAAL layer(s). A new UAAL layer due to assumption or plan changes, if any, will be calculated as the difference between the AAL for Inyokern's actives, deferred vested, retirees and beneficiaries under the new and old assumptions or plan provisions.

Each new UAAL layer will be amortized as a level dollar amount over a separate 18-year period (15-year period for plan changes).

Table of Amortization Bases for Inyokern Community Services District

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Restart Amortization	June 30, 2019	$102	18	$96	16	$10
Actuarial Loss	June 30, 2020	13	18	10	17	1
Assumption Change	June 30, 2020	5	18	0	17	0
Actuarial Loss	June 30, 2021	18	18	18	18	2
Implementation of Alameda Decision	June 30, 2021	0	15	0	15	0
Total				**$124**		**$13**

[1] Assumes payments throughout the year, calculated as a level dollar amount.

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December 2, 2021

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

**Re: Kern County Employees' Retirement Association (KCERA)
Berrenda Mesa Water District – Impact of Declining Employer Payroll Policy based on June 30, 2021 Actuarial Valuation**

Dear Dominic:

As requested, we have prepared information regarding the impact of the Declining Employer Payroll Policy (Policy) on the Berrenda Mesa Water District (Berrenda Mesa). In August 2019, the Retirement Board determined that a triggering event occurred during the 2019-20 fiscal year, resulting from this employer ceasing to enroll new hires and/or a material and expected long-lasting reduction in KCERA covered payroll.

We have determined the Valuation Value of Assets (VVA), Actuarial Accrued Liability (AAL) and resulting Unfunded Actuarial Accrued Liability (UAAL) that have been allocated to Berrenda Mesa as of June 30, 2021 based on the Policy. We have also included the employer contribution amounts for Berrenda Mesa that result from application of the Policy. These contribution amounts are also shown in the Actuarial Valuation and Review as of June 30, 2021.

Summary of Results

After applying the Policy, we have determined Berrenda Mesa's UAAL to be as follows as of June 30, 2021:

Berrenda Mesa

Unfunded Actuarial Accrued Liability as of June 30, 2021	$4,195,000

The Policy requires that the employer contribution to pay off the initial UAAL be made in level dollar amounts over a period not to exceed eighteen years. Section 6 F of the Policy further states:

> Annually, after the determination of the covered employer's initial funding obligation, as part of the regular annual actuarial valuation of the plan, KCERA's actuary will measure any change in the UAAL of the participating employer due to actuarial experience or changes in actuarial assumptions. In addition to the amortized payments for the covered employer's initial UAAL funding obligation determined as of the initial valuation, the employer will be liable for, and must contribute to KCERA, any such new UAAL determined as of subsequent valuations, based upon an amortization schedule recommended by the actuary and adopted by the Board of Retirement.

As shown in Exhibit C, this valuation reflects changes in UAAL due to both actuarial experience and changes in plan provisions. On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriff's Assn. et al., v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members for that system and other similarly situated 1937 Act county employees retirement systems. See Item (1) on page 8 of the Actuarial Valuation and Review as of June 30, 2021 for a discussion of the action taken by KCERA. We have amortized the changes in Berrenda Mesa's UAAL due to actuarial experience as a separate 18-year level dollar amortization layer and the changes in Berrenda Mesa's UAAL due to changes in plan provisions as a separate 15-year level dollar amortization layer, both using the current 7.25% discount rate. The use of 18 years and 15 years as the amortization periods for these changes in UAAL is consistent with both the Declining Employer Payroll Policy and KCERA's regular Actuarial Funding Policy, and is recommended by Segal.

We have also calculated the employer Normal Cost rate and average member contribution rate for Berrenda Mesa based only on the demographics of Berrenda Mesa's current active members. A comparison of the demographics of Berrenda Mesa as of June 30, 2021 and June 30, 2020 is provided in Exhibit A.

The following table is a summary comparison of the average contribution rates for both employers and members before and after application of the Policy.

Berrenda Mesa

	June 30, 2021		June 30, 2020	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[2] ($ in '000s)
Average Employer Rate				
Normal Cost	17.35%	$30	17.47%	$29
UAAL	247.89%	431[3]	293.38%	490[4]
Total Contributions	265.24%	$461[5]	310.85%	$519[6]
Average Member Rate	5.86%	$10	5.50%	$9

1 Based on June 30, 2021 projected compensation of $174,000.

2 Based on June 30, 2020 projected compensation of $167,000.

3 This annual UAAL contribution in dollars of $431,000 for Berrenda Mesa is equal to the level dollar layered amortization of the $4,195,000 in UAAL of $437,000 plus $1,000 in administrative expenses minus a $7,000 adjustment due to the 12-month delay between the valuation date and the plan year beginning July 1, 2022.

4 This annual UAAL contribution in dollars of $490,000 for Berrenda Mesa is equal to the level dollar layered 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.

5 Berrenda Mesa should contribute based on the dollar amounts shown (not the rates). These contribution amounts assume payment throughout the 2022-23 plan year.

6 Berrenda Mesa should contribute based on the dollar amounts shown (not the rates). These contribution amounts assume payment throughout the 2021-22 plan year.

The UAAL and employer contribution amounts for this employer are lower than that shown in our previous letter dated November 30, 2020 that included the impact of the Policy based on the previous actuarial valuation. This decrease is due to actuarial experience (primarily payee mortality experience in 2020-2021).

Declining Payroll Methodology

Based on the methodology described in the Policy, a participating employer that has a triggering event, such as ceasing to enroll new hires or a material and expected long-lasting reduction in KCERA covered payroll, would be allocated a pro-rata share of the total UAAL for their cost group. That pro-rata share would be allocated based on the employer's AAL including inactive and deferred members as compared to the AAL for all the employers within the same cost group. Note that this means that the initial UAAL payments for the employer would no longer be allocated in proportion to its covered payroll (which is expected to decline), but rather in proportion to its AAL.

The initial VVA is determined by a pro-rata allocation based on the employer's initial AAL to the AAL for all the employers within that cost group. The initial UAAL is the initial AAL minus the initial VVA. This amount is rolled forward each year using the actual contributions and benefit payments for Berrenda Mesa, and the actual (smoothed) return for all KCERA assets. The detailed calculations of the UAAL for Berrenda Mesa based on applying the Policy are shown in Exhibit B.

Assumptions used in Calculations

Unless otherwise noted, all of the above calculations are based on the June 30, 2021 actuarial valuation results including the participant data and actuarial assumptions on which that valuation was based. That valuation and these calculations were completed under the supervision of Molly Calcagno, ASA, MAAA, Enrolled Actuary.

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

Please let us know if you have any questions.

Sincerely,

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

Molly Calcagno, ASA, MAAA, EA
Actuary

Table of Plan Coverage for Berrenda Mesa Water District

Category	Year Ended June 30 2021	Year Ended June 30 2020	Change From Prior Year
Active members in valuation:			
• Number	3	3	0.0%
• Average age	49.0	48.0	1.0
• Average years of service	20.3	19.4	0.9
• Total projected compensation	$174,275	$166,588	4.6%
• Average projected compensation	$58,092	$55,529	4.6%
• Account balances	$241,676	$218,307	10.7%
• Total active vested members	3	3	0.0%
Inactive vested members:[1]			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
Retired members:			
• Number in pay status	11	12	-8.3%
• Average age	68.0	68.2	-0.2
• Average monthly benefit[2]	$4,109	$4,796	-14.3%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	2	2	0.0%
• Average age	78.2	68.6	9.6
• Average monthly benefit[2]	$5,253	$1,196	339.2%

[1] Includes inactive members due a refund of contributions.
[2] Excludes monthly benefit paid from the Supplemental Retiree Benefit Reserve.

Exhibit B

Allocated UAAL for Berrenda Mesa Water District

Here are the specific steps involved in the determination of the UAAL for Berrenda Mesa as of June 30, 2021:

Step 1: Determine the AAL for Berrenda Mesa as of June 30, 2021

The June 30, 2021 AAL of Berrenda Mesa was calculated using the membership data for Berrenda Mesa as of the same date. Berrenda Mesa's AAL as of June 30, 2021 was $9,772,000.[1]

Step 2: Determine the VVA for Berrenda Mesa as of June 30, 2021

In our previous letter dated November 30, 2020, Berrenda Mesa's portion of the VVA as of June 30, 2020 was $5,383,000.

To determine the VVA for Berrenda Mesa as of June 30, 2021, the June 30, 2020 amount is rolled forward using the actual contributions and benefit payments for Berrenda Mesa, and the actual (smoothed) return for all KCERA assets. The VVA as of June 30, 2021 is calculated in the following table:

		Year Ended June 30, 2021
1	Rate of Return[2]	7.93%
2	VVA as of June 30, 2020	$5,383,000
3	Employer Contributions	469,986
4	Member Contributions	9,369
5	Benefit Payments	703,585
6	Interest Crediting[3]	417,981
7	VVA as of June 30, 2021	$5,577,000[4,5]

The VVA for Berrenda Mesa as of June 30, 2021 is $5,577,000.[4]

[1] This amount has been reduced by $3,000 in transfer liability from Berrenda Mesa to the County and assumes none of the transfer liability from the County will be allocated to Berrenda Mesa.

[2] Based on VVA rate of return for all KCERA assets.

[3] Equals [(2) x (1)] plus [(3) + (4) – (5)] x [(1) / 2].

[4] This has been rounded to the nearest $1,000.

[5] The gain from investments is $36,000.

Step 3: Determine the UAAL for Berrenda Mesa as of June 30, 2021

Berrenda Mesa's UAAL as of June 30, 2021 is equal to:

- The AAL for Berrenda Mesa's actives, deferred vested, retirees and beneficiaries as of June 30, 2021

MINUS

- The VVA allocated to Berrenda Mesa as of the same date

The UAAL for Berrenda Mesa as determined under the Declining Employer Payroll Policy as of June 30, 2021 is Berrenda Mesa's AAL minus their VVA, i.e., $9,772,000 - $5,577,000, or $4,195,000.

The VVA will be subtracted from the AAL as of each future valuation date to determine the updated total Berrenda Mesa UAAL. A new UAAL layer due to actuarial experience will then be calculated as the difference between that updated total UAAL amount (prior to any assumption or plan changes) and the outstanding balance of the current UAAL layer(s). A new UAAL layer due to assumption or plan changes, if any, will be calculated as the difference between the AAL for Berrenda Mesa's actives, deferred vested, retirees and beneficiaries under the new and old assumptions or plan provisions.

Each new UAAL layer will be amortized as a level dollar amount over a separate 18-year period (15-year period for plan changes).

Table of Amortization Bases for Berrenda Mesa Water District

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Restart Amortization	June 30, 2019	$4,147	18	$3,896	16	$406
Actuarial Loss	June 30, 2020	556	18	535	17	54
Assumption Change	June 30, 2020	267	18	258	17	26
Actuarial Gain	June 30, 2021	(495)	18	(495)	18	(49)
Implementation of Alameda Decision	June 30, 2021	1	15	1	15	0
Total				**$4,195**		**$437**

[1] Assumes payments throughout the year, calculated as a level dollar amount.

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December 2, 2021

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

**Re: Kern County Employees' Retirement Association (KCERA)
FY 2022-2023 Required Contributions with Adjustments to Reflect Three-Year Phase-in of Increases in Employer Unfunded Actuarial Accrued Liability (UAAL) Contribution Rate Due to Assumption Changes**

Dear Dominic:

In January 2021, the Board elected to phase-in (over a three-year period) the impact of the new actuarial assumptions on the employer Unfunded Actuarial Accrued Liability (UAAL) contribution rates for Safety, as calculated in the June 30, 2020 actuarial valuation. This letter provides the second year "phased-in" employer contribution rates for the 2022-2023 fiscal year by cost group in the enclosed Exhibit A. The impact of the new actuarial assumptions on the UAAL is not "phased-in" for the County General,[1] Courts or District cost groups, and the impact on the Normal Cost is not phased-in for any employers.

Phased-in Contribution Rates for 2022-2023

The full impact of the adopted actuarial assumptions on the Safety employer UAAL contribution rate for the 2021-2022 fiscal year based on the June 30, 2020 actuarial valuation is 2.62% of payroll. This percentage is the portion of the increase in the Safety employer UAAL contribution rate from the 2020 valuation that will be phased-in over three years. The phase-in of this change in the Safety employer UAAL contribution rate will not have any impact on the employer UAAL contribution rates for the County General,[1] Courts or District cost groups as assets are tracked separately for each of these cost groups.

Exhibit A shows the "phased-in" employer contribution rates for the 2022-2023 fiscal year. The UAAL rates for Safety shown in this Exhibit (as compared with those in the June 30, 2021 actuarial valuation) reflect only two-thirds of the increase in the UAAL rate due to the new actuarial assumptions in the June 30, 2020 actuarial valuation. Note that different changes are reflected in the detailed components (Basic, 2% COLA and 0.5% COLA) of the employer contribution rates depending on the effect of the new actuarial assumptions on that specific rate

[1] Including the Hospital Authority.

component. Employer contribution rates for the County General,[1] Courts and District cost groups are also shown, but they do not reflect the phase-in.

All of these rates may be adopted in conjunction with the June 30, 2021 actuarial valuation for the fiscal year that extends from July 1, 2022 through June 30, 2023.

Unless otherwise noted, all of the above calculations are based on the June 30, 2021 actuarial valuation results including the participant data and actuarial assumptions on which that valuation was based. That valuation and these projections were completed under the supervision of Molly Calcagno, ASA, MAAA, Enrolled Actuary.

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

Please let us know if you have any questions.

Sincerely,

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

Molly Calcagno, ASA, MAAA, EA
Actuary

ST/jl
Enclosures

Segal

Recommended Employer Contribution Rates – Current Valuation AFTER Reflecting Three-Year Phase-In

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
County General Tier I without Courts								
Normal Cost	13.36%	$18,085	4.26%	$5,767	1.33%	$1,800	18.95%	$25,652
UAAL	21.29%	28,820	2.97%	4,020	5.53%	7,486	29.79%	40,326
Total Contributions	**34.65%**	**$46,905**	**7.23%**	**$9,787**	**6.86%**	**$9,286**	**48.74%**	**$65,978**
County General Tier IIA without Courts								
Normal Cost	3.87%	$2,538	2.15%	$1,410	0.66%	$432	6.68%	$4,380
UAAL	21.29%	13,961	2.97%	1,948	5.53%	3,626	29.79%	19,535
Total Contributions	**25.16%**	**$16,499**	**5.12%**	**$3,358**	**6.19%**	**$4,058**	**36.47%**	**$23,915**
County General Tier IIB without Courts								
Normal Cost	4.88%	$10,453	1.03%	$2,206	0.32%	$686	6.23%	$13,345
UAAL	21.29%	45,603	2.97%	6,362	5.53%	11,845	29.79%	63,810
Total Contributions	**26.17%**	**$56,056**	**4.00%**	**$8,568**	**5.85%**	**$12,531**	**36.02%**	**$77,155**
County General without Courts – Combined								
Normal Cost	7.49%	$31,076	2.26%	$9,383	0.70%	$2,918	10.45%	$43,377
UAAL	21.29%	88,384	2.97%	12,330	5.53%	22,957	29.79%	123,671
Total Contributions	**28.78%**	**$119,460**	**5.23%**	**$21,713**	**6.23%**	**$25,875**	**40.24%**	**$167,048**
Courts Tier I								
Normal Cost	10.59%	$1,381	4.26%	$555	1.33%	$174	16.18%	$2,110
UAAL	21.29%	2,776	2.97%	387	5.53%	721	29.79%	3,884
Total Contributions	**31.88%**	**$4,157**	**7.23%**	**$942**	**6.86%**	**$895**	**45.97%**	**$5,994**
Courts Tier IIA								
Normal Cost	4.16%	$136	2.15%	$71	0.66%	$22	6.97%	$229
UAAL	21.29%	699	2.97%	97	5.53%	181	29.79%	977
Total Contributions	**25.45%**	**$835**	**5.12%**	**$168**	**6.19%**	**$203**	**36.76%**	**$1,206**
Courts Tier IIB								
Normal Cost	4.88%	$741	1.03%	$156	0.32%	$49	6.23%	$946
UAAL	21.29%	3,234	2.97%	451	5.53%	841	29.79%	4,526
Total Contributions	**26.17%**	**$3,975**	**4.00%**	**$607**	**5.85%**	**$890**	**36.02%**	**$5,472**

[1] Based on June 30, 2021 projected compensation.

Recommended Employer Contribution Rates – Current Valuation AFTER Reflecting Three-Year Phase-In

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
Courts – Combined								
Normal Cost	7.17%	$2,258	2.48%	$782	0.77%	$245	10.42%	$3,285
UAAL	21.29%	6,709	2.97%	935	5.53%	1,743	29.79%	9,387
Total Contributions	**28.46%**	**$8,967**	**5.45%**	**$1,717**	**6.30%**	**$1,988**	**40.21%**	**$12,672**
County Safety Tier I								
Normal Cost	17.47%	$16,460	6.47%	$6,096	2.08%	$1,960	26.02%	$24,516
UAAL	35.04%	33,015	6.66%	6,275	12.87%	12,126	54.57%	51,416
Total Contributions	**52.51%**	**$49,475**	**13.13%**	**$12,371**	**14.95%**	**$14,086**	**80.59%**	**$75,932**
County Safety Tier IIA								
Normal Cost	10.84%	$825	4.97%	$378	1.56%	$119	17.37%	$1,322
UAAL	35.04%	2,666	6.66%	507	12.87%	979	54.57%	4,152
Total Contributions	**45.88%**	**$3,491**	**11.63%**	**$885**	**14.43%**	**$1,098**	**71.94%**	**$5,474**
County Safety Tier IIB								
Normal Cost	9.75%	$3,583	2.41%	$886	0.77%	$282	12.93%	$4,751
UAAL	35.04%	12,875	6.66%	2,447	12.87%	4,729	54.57%	20,051
Total Contributions	**44.79%**	**$16,458**	**9.07%**	**$3,333**	**13.64%**	**$5,011**	**67.50%**	**$24,802**
County Safety – Combined								
Normal Cost	15.06%	$20,868	5.31%	$7,360	1.70%	$2,361	22.07%	$30,589
UAAL	35.04%	48,556	6.66%	9,229	12.87%	17,834	54.57%	75,619
Total Contributions	**50.10%**	**$69,424**	**11.97%**	**$16,589**	**14.57%**	**$20,195**	**76.64%**	**$106,208**
All County with Courts – Combined								
Normal Cost	9.26%	$54,202	2.99%	$17,525	0.95%	$5,524	13.20%	$77,251
UAAL	24.55%	143,649	3.84%	22,494	7.27%	42,534	35.66%	208,677
Total Contributions	**33.81%**	**$197,851**	**6.83%**	**$40,019**	**8.22%**	**$48,058**	**48.86%**	**$285,928**
District Category I Tier I								
Normal Cost	15.68%	$677	4.26%	$184	1.33%	$57	21.27%	$918
UAAL	26.85%	1,159	4.60%	199	5.85%	253	37.30%	1,611
Total Contributions	**42.53%**	**$1,836**	**8.86%**	**$383**	**7.18%**	**$310**	**58.57%**	**$2,529**

[1] Based on June 30, 2021 projected compensation.

Recommended Employer Contribution Rates – Current Valuation AFTER Reflecting Three-Year Phase-In

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category I Tier IIA								
Normal Cost	4.43%	$30	2.15%	$14	0.66%	$5	7.24%	$49
UAAL	26.85%	180	4.60%	31	5.85%	40	37.30%	251
Total Contributions	**31.28%**	**$210**	**6.75%**	**$45**	**6.51%**	**$45**	**44.54%**	**$300**
District Category I Tier IIB								
Normal Cost	4.88%	$59	1.03%	$12	0.32%	$4	6.23%	$75
UAAL	26.85%	324	4.60%	55	5.85%	71	37.30%	450
Total Contributions	**31.73%**	**$383**	**5.63%**	**$67**	**6.17%**	**$75**	**43.53%**	**$525**
District Category I – Combined								
Normal Cost	12.35%	$766	3.39%	$210	1.09%	$66	16.83%	$1,042
UAAL	26.85%	1,663	4.60%	285	5.85%	364	37.30%	2,312
Total Contributions	**39.20%**	**$2,429**	**7.99%**	**$495**	**6.94%**	**$430**	**54.13%**	**$3,354**
District Category II Tier I								
Normal Cost	12.58%	$178	4.26%	$60	1.33%	$20	18.17%	$258
UAAL	26.85%	381	4.60%	65	5.85%	83	37.30%	529
Total Contributions	**39.43%**	**$559**	**8.86%**	**$125**	**7.18%**	**$103**	**55.47%**	**$787**
District Category II Tier IIB								
Normal Cost	4.88%	$50	1.03%	$11	0.32%	$3	6.23%	$64
UAAL	26.85%	275	4.60%	47	5.85%	60	37.30%	382
Total Contributions	**31.73%**	**$325**	**5.63%**	**$58**	**6.17%**	**$63**	**43.53%**	**$446**
District Category II Tier III								
Normal Cost	5.84%	$0	1.20%	$0	0.37%	$0	7.41%	$0
UAAL	26.85%	0	4.60%	0	5.85%	0	37.30%	0
Total Contributions	**32.69%**	**$0**	**5.80%**	**$0**	**6.22%**	**$0**	**44.71%**	**$0**
District Category II – Combined								
Normal Cost	9.34%	$228	2.89%	$71	0.94%	$23	13.17%	$322
UAAL	26.85%	656	4.60%	112	5.85%	143	37.30%	911
Total Contributions	**36.19%**	**$884**	**7.49%**	**$183**	**6.79%**	**$166**	**50.47%**	**$1,233**

[1] Based on June 30, 2021 projected compensation.

Segal

Recommended Employer Contribution Rates – Current Valuation AFTER Reflecting Three-Year Phase-In

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category III Tier I (Buttonwillow)								
Normal Cost	10.20%	$4	4.26%	$2	1.33%	$0	15.79%	$6
UAAL	26.85%	11	4.60%	2	5.85%	2	37.30%	15
Total Contributions	**37.05%**	**$15**	**8.86%**	**$4**	**7.18%**	**$2**	**53.09%**	**$21**
District Category III Tier I (SJVAPCD)								
Normal Cost	9.38%	$1,612	2.13%	$366	0.67%	$115	12.18%	$2,093
UAAL	26.85%	4,615	4.60%	791	5.85%	1,005	37.30%	6,411
Total Contributions	**36.23%**	**$6,227**	**6.73%**	**$1,157**	**6.52%**	**$1,120**	**49.48%**	**$8,504**
District Category III Tier IIA (Buttonwillow)								
Normal Cost	3.70%	$0	2.15%	$0	0.66%	$0	6.51%	$0
UAAL	26.85%	0	4.60%	0	5.85%	0	37.30%	0
Total Contributions	**30.55%**	**$0**	**6.75%**	**$0**	**6.51%**	**$0**	**43.81%**	**$0**
District Category III Tier IIA (SJVAPCD)								
Normal Cost	5.31%	$50	1.08%	$10	0.34%	$4	6.73%	$64
UAAL	26.85%	255	4.60%	44	5.85%	56	37.30%	355
Total Contributions	**32.16%**	**$305**	**5.68%**	**$54**	**6.19%**	**$60**	**44.03%**	**$419**
District Category III Tier IIB								
Normal Cost	4.88%	$466	1.03%	$98	0.32%	$30	6.23%	$594
UAAL	26.85%	2,561	4.60%	439	5.85%	558	37.30%	3,558
Total Contributions	**31.73%**	**$3,027**	**5.63%**	**$537**	**6.17%**	**$588**	**43.53%**	**$4,152**
District Category III – Combined								
Normal Cost	7.69%	$2,132	1.72%	$476	0.54%	$149	9.95%	$2,757
UAAL	26.85%	7,442	4.60%	1,276	5.85%	1,621	37.30%	10,339
Total Contributions	**34.54%**	**$9,574**	**6.32%**	**$1,752**	**6.39%**	**$1,770**	**47.25%**	**$13,096**
District Category V Tier I								
Normal Cost	18.64%	$14	4.26%	$3	1.33%	$1	24.23%	$18
UAAL	26.85%	20	4.60%	3	5.85%	5	37.30%	28
Total Contributions	**45.49%**	**$34**	**8.86%**	**$6**	**7.18%**	**$6**	**61.53%**	**$46**

[1] Based on June 30, 2021 projected compensation.

Recommended Employer Contribution Rates – Current Valuation AFTER Reflecting Three-Year Phase-In

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
District Category V Tier IIA								
Normal Cost	4.43%	$18	2.15%	$9	0.66%	$3	7.24%	$30
UAAL	26.85%	110	4.60%	19	5.85%	24	37.30%	153
Total Contributions	**31.28%**	**$128**	**6.75%**	**$28**	**6.51%**	**$27**	**44.54%**	**$183**
District Category V Tier IIB								
Normal Cost	4.88%	$38	1.03%	$8	0.32%	$3	6.23%	$49
UAAL	26.85%	210	4.60%	36	5.85%	46	37.30%	292
Total Contributions	**31.73%**	**$248**	**5.63%**	**$44**	**6.17%**	**$49**	**43.53%**	**$341**
District Category V – Combined								
Normal Cost	5.46%	$70	1.55%	$20	0.61%	$7	7.62%	$97
UAAL	26.85%	340	4.60%	58	5.85%	75	37.30%	473
Total Contributions	**32.31%**	**$410**	**6.15%**	**$78**	**6.46%**	**$82**	**44.92%**	**$570**
District Category VI Tier I								
Normal Cost	18.64%	$50	4.26%	$11	1.33%	$4	24.23%	$65
UAAL	26.85%	72	4.60%	12	5.85%	16	37.30%	100
Total Contributions	**45.49%**	**$122**	**8.86%**	**$23**	**7.18%**	**$20**	**61.53%**	**$165**
District Category VI Tier IIB								
Normal Cost	4.88%	$0	1.03%	$0	0.32%	$0	6.23%	$0
UAAL	26.85%	0	4.60%	0	5.85%	0	37.30%	0
Total Contributions	**31.73%**	**$0**	**5.63%**	**$0**	**6.17%**	**$0**	**43.53%**	**$0**
District Category VI – Combined								
Normal Cost	18.64%	$50	4.26%	$11	1.33%	$4	24.23%	$65
UAAL	26.85%	72	4.60%	12	5.85%	16	37.30%	100
Total Contributions	**45.49%**	**$122**	**8.86%**	**$23**	**7.18%**	**$20**	**61.53%**	**$165**
Declining Employers Tier I (Berrenda)								
Normal Cost	12.18%	$21	4.02%	$7	1.15%	$2	17.35%	$30
UAAL	159.50%	278	48.27%	84	40.12%	69	247.89%	431
Total Contributions[2]	**171.68%**	**$299**	**52.29%**	**$91**	**41.27%**	**$71**	**265.24%**	**$461**

[1] Based on June 30, 2021 projected compensation.
[2] These Districts are declining employers and they should contribute based on dollar contribution amounts shown (not rates).

Recommended Employer Contribution Rates – Current Valuation AFTER Reflecting Three-Year Phase-In

	June 30, 2021 Actuarial Valuation							
	Basic		2% COLA		0.5% COLA		Total	
	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)	Rate	Estimated Annual Amount[1] ($ in '000s)
Declining Employers Tier I (Inyokern)								
Normal Cost	N/A	$0	N/A	$0	N/A	$0	N/A	$0
UAAL	N/A	10	N/A	1	N/A	2	N/A	13
Total Contributions[2]	**N/A**	**$10**	**N/A**	**$1**	**N/A**	**$2**	**N/A**	**$13**
Declining Employers – Combined								
Normal Cost	12.07%	$21	4.02%	$7	1.15%	$2	17.24%	$30
UAAL	165.52%	288	48.85%	85	40.80%	71	255.17%	444
Total Contributions	**177.59%**	**$309**	**52.87%**	**$92**	**41.95%**	**$73**	**272.41%**	**$474**
All Districts – Combined								
Normal Cost	8.58%	$3,267	2.09%	$795	0.66%	$251	11.33%	$4,313
UAAL	27.48%	10,461	4.80%	1,828	6.02%	2,290	38.30%	14,579
Total Contributions	**36.06%**	**$13,728**	**6.89%**	**$2,623**	**6.68%**	**$2,541**	**49.63%**	**$18,892**
All Employers – Combined								
Normal Cost	9.22%	$57,469	2.94%	$18,320	0.93%	$5,775	13.09%	$81,564
UAAL	24.73%	154,110	3.90%	24,322	7.19%	44,824	35.82%	223,256
Total Contributions	**33.95%**	**$211,579**	**6.84%**	**$42,642**	**8.12%**	**$50,599**	**48.91%**	**$304,820**

[1] Based on June 30, 2021 projected compensation.

[2] These Districts are declining employers and they should contribute based on dollar contribution amounts shown (not rates).

Recommended Employer Contribution Rates – Current Valuation AFTER Reflecting Three-Year Phase-In

	June 30, 2021 Projected Compensation ($ in '000s)		June 30, 2021 Projected Compensation ($ in '000s)
County General Tier I without Courts	$135,368	District Category I Tier I	$4,318
County General Tier IIA without Courts	65,575	District Category I Tier IIA	672
County General Tier IIB without Courts	214,201	District Category I Tier IIB	1,206
Courts Tier I	13,038	District Category II Tier I	1,418
Courts Tier IIA	3,281	District Category II Tier IIB	1,025
Courts Tier IIB	15,192	District Category II Tier III	0
County Safety Tier I	94,220	District Category III Tier I (Buttonwillow)	40
County Safety Tier IIA	7,608	District Category III Tier I (SJVAPCD)	17,188
County Safety Tier IIB	36,744	District Category III Tier IIA (Buttonwillow)	0
		District Category III Tier IIA (SJVAPCD)	951
		District Category III Tier IIB	9,540
		District Category V Tier I	76
		District Category V Tier IIA	410
		District Category V Tier IIB	783
		District Category VI Tier I	267
		District Category VI Tier IIB	0
		Declining Employers Tier I (Berrenda)	174
		Declining Employers Tier I (Inyokern)	0
		All Districts	$38,068
All County with Courts	$585,227	Total	$623,295

Note: As of June 30, 2021, the COLA Contribution Reserve was zero and, therefore, not available to offset the 2% COLA contribution rate.

Kern County Employees' Retirement Association

Governmental Accounting Standards Board Statement 67 (GAS 67) Actuarial Valuation

As of June 30, 2021

Segal

Segal

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December 2, 2021

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

Dear Board Members:

We are pleased to submit this Governmental Accounting Standard (GAS) 67 Actuarial Valuation as of June 30, 2021. It contains various information that will need to be disclosed in order to comply with GAS 67.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist KCERA in preparing items related to the pension plan in their financial report. The census and financial information on which our calculations were based was provided by KCERA. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Molly Calcagno, ASA, 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 herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Association.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal

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

Molly Calcagno, ASA, MAAA, EA
Actuary

ST/jl

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statement 67 (GAS 67) as of June 30, 2021. This valuation is based on:

- The benefit provisions of KCERA, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2020, provided by KCERA;
- The assets of the Plan as of June 30, 2021, provided by KCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2021 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2021 valuation.

General observations on the GAS 67 actuarial valuation

1. The Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Employers and plans should develop and adopt funding policies under current practices.
2. When measuring pension liability, GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as KCERA uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is generally determined on the same basis as KCERA's Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.
3. The Plan's Fiduciary Net Position includes assets held for the Supplemental Retiree Benefit Reserve (SRBR). The TPL reflects all future projected benefits expected to be paid from the SRBR for members as of the valuation date.
4. The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded

Actuarial Accrued Liability (UAAL) on a market value basis. The exception is that the NPL is reduced by the excess of the SRBR assets over the TPL associated with the SRBR benefits.

Highlights of the valuation

1. For this report, the reporting dates for the Plan are June 30, 2021 and June 30, 2020. The NPL was measured as of June 30, 2021 and June 30, 2020, respectively, and was determined based upon rolling forward the results from actuarial valuations as of June 30, 2020 and June 30, 2019. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement dates.
2. The NPL decreased from $2.66 billion as of June 30, 2020 to $1.89 billion as of June 30, 2021 primarily due to the 23.68% return on the market value of assets during 2020-2021 (that was higher than the assumed return of 7.25%), changes in plan provisions, and gains from lower than expected salary increases during 2019-2020 (because liabilities are rolled forward from June 30, 2020 to June 30, 2021, this change is not reflected until this valuation as of June 30, 2021). Changes in these values during the last two fiscal years ending June 30, 2021 and June 30, 2020 can be found in *Section 2, Schedule of changes in Net Pension Liability* on page 19.
3. All results shown in this report are on a combined basis including both the regular statutory (non-SRBR) benefits and the SRBR benefits. For purposes of illustration, separate values for the TPL, Plan's Fiduciary Net Position and NPL for the regular statutory (non-SRBR) benefits and the SRBR benefits as of June 30, 2021 are shown in the table below:

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

4. The discount rate used to determine the TPL and NPL as of June 30, 2021 and June 30, 2020 was 7.25%, following the same assumptions used by the Association in the funding valuations as of the same dates. The detailed derivation of the discount rate of 7.25% used in the calculation of the TPL and NPL as of June 30, 2021 can be found in *Section 3, Appendix A*. 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 SRBR asset pools. Various other information that is required to be disclosed can be found throughout *Section 2*.

5. As discussed in our letter dated September 11, 2015 regarding the treatment of the SRBR for financial reporting purposes, Actuarial Standard of Practice (ASOP) No. 4 ("Measuring Pension Obligations and Determining Pension Plan Costs or Contributions") states that some plan provisions, including "gain sharing" provisions, "may create pension obligations that are difficult to appropriately measure using traditional valuation procedures." ASOP No. 4 further states that "for such plan provisions, the actuary should consider using alternative valuation procedures, such as stochastic modeling … to reflect the impact of variations in experience from year to year." The 50% allocation of future excess earnings to the SRBR for KCERA is a clear example of the gain sharing provisions referenced by ASOP No. 4.

   After several meetings with KCERA and its auditors, and based on information regarding another SRBR system that included discussions with GASB staff, it was previously determined that future allocations to the SRBR should be treated as an additional "outflow" (i.e., assets not available to fund the benefits included in the determination of the TPL) against the Plan's Fiduciary Net Position in the GASB crossover test[1] (see *Section 3, Appendix A*).

   However, as noted earlier in this report, the Plan's Fiduciary Net Position includes assets held for the SRBR, and the TPL includes all projected future benefits expected to be paid from the SRBR for members as of the valuation date. This treatment was also discussed with KCERA and its auditors and determined to be appropriate. Therefore, any outflows due to the 50/50 excess earnings allocation would not affect the outcome of the crossover test since the crossover test is performed based on the combined results of the statutory (non-SRBR) benefits and the SRBR.

6. Based on discussions with KCERA and their auditors, starting with the June 30, 2016 measurement date for the employers, employer paid member contributions are excluded from employer contributions in the determination of the Actuarially Determined Contribution (ADC). The amount of employer paid member contributions was estimated by first determining what the employer contribution rates would have been during the year, excluding any employer paid member contributions. The actual employer contribution rates were then adjusted by the ratio of the employer contribution rates determined above and the employer contribution rates determined in the annual actuarial valuation. The result is the employer contributions excluding any employer paid member contributions. This change has not been applied on a retroactive basis prior to the 2015-2016 fiscal year.

7. On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriffs' Assn. et al. v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for Legacy members and pensionable compensation for PEPRA members. In response, the Board adopted Resolution 2020-1, which detailed the implementation of the Alameda decision including reclassifying certain pay items for inclusion in compensation earnable and pensionable compensation. The results in this valuation reflect the reclassification of those pay

[1] The purpose of the GASB crossover test is to determine if the full expected return (or 7.25% in this case) can be used as the discount rate to determine the TPL and the NPL. That is, if there is no crossover point where the projected benefit payments would exceed the Plan's Fiduciary Net Position, then the full expected return assumption can be used. As detailed later in this report, KCERA does pass the crossover test, which means that the full 7.25% investment rate of return assumption can be used as the discount rate to determine the TPL and the resulting NPL.

codes as well as the recovery or refunds of benefits and/or member contributions previously paid in conjunction with these pay items, which decreased the NPL by $29.9 million.

8. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2021. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the Plan Year. Moreover, this actuarial valuation is based on Plan data as of June 30, 2020 and it does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2020. While it is impossible to determine how the pandemic will affect market conditions and other demographic experience of the Plan in future valuations, Segal is available to prepare projections of potential outcomes upon request.

Summary of key valuation results

Measurement Date		June 30, 2021	June 30, 2020
Disclosure elements for plan year ending June 30:	• Service Cost[1]	$123,394,292	$124,145,681
	• Total Pension Liability	7,306,894,934	7,100,695,964
	• Plan's Fiduciary Net Position	5,417,513,179	4,438,794,794
	• Net Pension Liability	1,889,381,755	2,661,901,170
Schedule of contributions for plan year ending June 30:	• Actuarially determined contributions[2]	$268,626,000	$273,909,000
	• Actual employer contributions[2]	268,626,000	273,909,000
	• Contribution deficiency / (excess)	0	0
Demographic data for plan Year ending June 30:[3]	• Number of retired members and beneficiaries	8,835	8,667
	• Number of inactive vested members[4]	3,517	3,143
	• Number of active members	9,072	9,326
Key assumptions as of June 30:	• Investment rate of return	7.25%	7.25%
	• Inflation rate	2.75%	2.75%
	• Projected salary increases[5]	General: 4.00% to 8.75% and Safety: 3.75% to 12.00%	General: 4.00% to 8.75% and Safety: 3.75% to 12.00%

1 Excludes administrative expense load. The service cost is based on the previous year's valuation, meaning the June 30, 2021 and June 30, 2020 values are based on the valuations as of June 30, 2020 and June 30, 2019, respectively. The key assumptions in the June 30, 2019 valuation were as follows:

Investment rate of return:	7.25%
Inflation rate:	3.00%
Projected salary increases:	General: 4.00% to 9.00% and Safety: 4.00% to 12.50%. Includes inflation at 3.00% plus real across-the-board salary increase of 0.50% plus merit and promotional increases that vary by service

2 See footnote (1) under *Section 2, Schedule of contributions* on page 20.

3 Data as of June 30, 2020 is used in the measurement of the TPL as of June 30, 2021.

4 Includes terminated members due a refund of member contributions.

5 Includes inflation at 2.75% plus real across-the-board salary increase of 0.50% plus merit and promotional increases that vary by service.

Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by KCERA. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	The valuation is based on the market value of assets as of the measurement date, as provided by KCERA.
Actuarial assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The valuation is prepared at the request of the Board to assist KCERA in preparing items related to the pension plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
If KCERA is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

As Segal has no discretionary authority with respect to the management or assets of KCERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to KCERA.

Section 2: GAS 67 Information

General information about the pension plan

Plan Description

Plan administration. The Kern County Employees' Retirement Association (KCERA) was established by the County of Kern in 1945. KCERA is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.), the California Public Employees' Pension Reform Act (CalPEPRA) and the bylaws, procedures and policies adopted by the KCERA Board. KCERA is a cost-sharing multiple employer defined benefit public employee retirement system whose main function is to provide retirement, disability, death, beneficiary, cost-of-living and supplemental retirement benefits to the General and Safety members employed by the County of Kern. KCERA also provides retirement benefits to the employee members of the Berrenda Mesa Water District, Buttonwillow Recreation and Park District, East Kern Cemetery District, Inyokern Community Services District, Kern County Water Agency, Kern Mosquito and Vector Control District, North of the River Sanitation District, San Joaquin Valley Unified Air Pollution Control District, Shafter Recreation and Park District, West Side Cemetery District, West Side Mosquito and Vector Control District, West Side Recreation and Park District, the Kern County Superior Court, and the Kern County Hospital Authority.

The management of KCERA is vested with the KCERA Board of Retirement. The Board consists of nine members and two alternate members. The County Treasurer is elected by the general public and is a member of the Board of Retirement by law. Four members are appointed by the Board of Supervisors, one of whom may be a County Supervisor; two members are elected by the general membership; one member and one alternate member are elected by the safety membership; and one member and one alternate member are elected by the retired members of the Association. All members of the Board of Retirement serve terms of three years except for the County Treasurer whose term runs concurrent with his term as County Treasurer.

Plan membership. At June 30, 2021, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	8,835
Inactive vested members entitled to, but not yet receiving benefits[1]	3,517
Active members	9,072
Total	**21,424**

[1] Includes terminated members due a refund of member contributions.

Note: Data as of June 30, 2021 is not used in the measurement of the TPL as of June 30, 2021.

Section 2: GAS 67 Information

Benefits provided. KCERA provides retirement, disability, beneficiary, cost-of-living and supplemental retirement 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 first full biweekly payroll period following the date of employment. There are separate retirement benefits for General and Safety members. Safety membership is extended to those involved in active law enforcement, fire suppression, and certain probation officers.

General members (excluding Tier III) are eligible to retire once they attain the age of 70 regardless of service or at age 50 and have acquired 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 once they have attained the age of 70 regardless of service or at age 52 and have acquired 5 or more years of retirement service credit.

Safety members are eligible to retire once they attain the age of 70 regardless of service or at age 50 and have acquired 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 upon age at retirement, final average compensation, years of retirement service credit and retirement plan and tier.

General member benefits for Tier I and Tier II are calculated pursuant to the provisions of California Government Code Sections 31676.17 and 31676.01, respectively. The monthly allowance is equal to 1/50th of final average compensation times years of accrued retirement service credit times age factor from Section 31676.17 (Tier I) or 1/90th of final average compensation 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 final average compensation 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 the provisions of California Government Code Sections 31664.1 and 31664, respectively. The monthly allowance is equal to 3% of final average compensation times years of accrued retirement service credit times age factor from 31664.1 (Tier I) or 1/50th (or 2%) of final average compensation 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 final average compensation. There is no final average compensation limit on the maximum retirement benefit for General Tier III members. However, 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. For members with membership dates on or after January 1, 2013 the maximum amount of pensionable compensation that can be taken into account for 2021 is equal to $128,059 for those enrolled in Social Security. 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.

Final average compensation consists of the highest 12 consecutive months of pensionable 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 pensionable 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 choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse or domestic partner. An eligible surviving spouse or domestic partner is one married to or registered with the member one year prior to the effective retirement date. Certain surviving spouses or domestic partners may also be eligible if marriage or domestic partnership was at least two years prior to the date of death and the surviving spouse or domestic partner has attained age 55 on or prior to the date of death. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow 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 to a surviving spouse, domestic partner, or named beneficiary having an insurable interest in the life of the member.

KCERA provides an annual cost-of-living benefit to all retirees. The cost-of-living adjustment, based upon the Consumer Price Index for the Los Angeles-Long Beach-Anaheim Area, is capped at 2.5%.

The County of Kern and contracting districts contribute to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Retirement. Employer contribution rates are adopted annually based upon recommendations received from KCERA's actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2021 for 2020-2021 (based on the June 30, 2019 valuation) was 47.09% of compensation.

Members are required to make contributions to KCERA regardless of the retirement plan or tier in which they are included. The average member contribution rate as of June 30, 2021 for 2020-2021 (based on the June 30, 2019 valuation) was 6.67% of compensation.

Net Pension Liability

The components of the Net Pension Liability were as follows:

Measurement Date	June 30, 2021	June 30, 2020
Total Pension Liability	$7,306,894,934	$7,100,695,964
Plan's Fiduciary Net Position	(5,417,513,179)	(4,438,794,794)
Net Pension Liability	**$1,889,381,755**	**$2,661,901,170**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	74.14%	62.51%

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 (plan assets) 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.

Plan provisions. The plan provisions used in the measurement of the NPL as of June 30, 2021 and June 30, 2020 are the same as those used in the KCERA actuarial valuation as of June 30, 2021 and June 30, 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. The TPLs as of June 30, 2021 and June 30, 2020 that were measured by actuarial valuations as of June 30, 2020 and June 30, 2019, respectively, used the same actuarial assumptions and actuarial cost method as the June 30, 2021 and June 30, 2020 funding valuations. The actuarial assumptions used in the June 30, 2021 and June 30, 2020 funding valuations were based on the result of an experience study for the period from July 1, 2016 through June 30, 2019. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Inflation:	2.75%
Salary increases:	General: 4.00% to 8.75% and Safety: 3.75% to 12.00%, varying by service, including inflation
Investment rate of return:	7.25%, net of pension plan investment expense, including inflation.
Administrative expenses	0.90% of payroll allocated to both the employer and the member based on the components of the total average contribution rate (before expenses) for the employer and the member.
Other assumptions:	Same as those used in the June 30, 2021 funding valuations. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2016 through June 30, 2019.

Section 2: GAS 67 Information

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, we have 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 is determined as if the current benefit accrual rate had always been in effect.

Determination of discount rate and investment rates of return

In the most recent experience study performed in 2020, the long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation but before deducting investment expenses are shown in the following table. This information was used in the derivation of the long-term expected investment rate of return assumption for the June 30, 2021 actuarial valuation. This information will be subject to change every three years based on the results of an actuarial experience study.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Global Equity	37%	6.51%
Core Fixed Income	14%	1.09%
High Yield Corporate Credit	6%	3.38%
Emerging Market Debt Blend	4%	3.41%
Commodities	4%	3.08%
Core Real Estate	5%	4.59%
Private Real Estate	5%	9.50%
Midstream	5%	8.20%
Capital Efficiency Alpha Pool	5%	2.40%
Hedge Fund	10%	2.40%
Private Equity	5%	9.40%
Private Credit	5%	5.60%
Cash	-5%	0.00%
Total	**100%**	

Section 2: GAS 67 Information

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

Discount rate sensitivity

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 Discount Rate (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

Schedule of changes in Net Pension Liability – Last two fiscal years

Measurement Date	June 30, 2021	June 30, 2020
Total Pension Liability		
• Service cost	$123,394,292	$124,145,681
• Interest	510,015,072	481,972,182
• Change of benefit terms	(32,128,915)	0
• Differences between expected and actual experience	(16,282,256)	(23,990,792)
• Changes of assumptions	0	151,378,797
• Benefit payments, including refunds of member contributions	(378,799,223)	(361,094,367)
Net change in Total Pension Liability	**$206,198,970**	**$372,411,501**
Total Pension Liability – beginning	**7,100,695,964**	**6,728,284,463**
Total Pension Liability – ending	**$7,306,894,934**	**$7,100,695,964**
Plan's Fiduciary Net Position		
• Contributions – employer[1]	$268,625,636	$273,908,831
• Contributions – employee[1]	53,789,028	57,862,386
• Net investment income	1,043,360,706	127,861,224
• Benefit payments, including refunds of member contributions	(378,799,223)	(361,094,367)
• Administrative expense	(6,060,675)	(5,523,340)
• Other	(2,197,087)[2]	0
Net change in Plan's Fiduciary Net Position	**$978,718,385**	**$93,014,734**
Plan's Fiduciary Net Position – beginning	**4,438,794,794**	**4,345,780,060**
Plan's Fiduciary Net Position – ending	**$5,417,513,179**	**$4,438,794,794**
Net Pension Liability – ending	**$1,889,381,755**	**$2,661,901,170**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	74.14%	62.51%
Covered payroll[3]	$604,320,398	$607,695,110
Net Pension Liability as percentage of covered payroll	312.65%	438.03%

1 See footnote (1) under *Section 2, Schedule of contributions* on page 20.

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.

Notes to Schedule: Benefit changes: Reclassification of certain pay items for inclusion in compensation earnable and pensionable compensation.

Schedule of contributions – Last ten fiscal years

Year Ended June 30	Actuarially Determined Contributions[1]	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll[2]	Contributions as a Percentage of Covered Payroll
2012	$189,837,000	$189,837,000	$0	$526,079,162	36.09%
2013	211,677,000	211,677,000	0	516,465,189	40.99%
2014	220,393,000	220,393,000	0	533,850,811	41.28%
2015	215,477,000	215,477,000	0	531,598,183	40.53%
2016	216,229,000	216,229,000	0	537,539,991	40.23%
2017	224,351,000	224,351,000	0	546,671,003	41.04%
2018	242,534,000	242,534,000	0	576,728,789	42.05%
2019	229,120,000	229,120,000	0	579,071,865	39.57%
2020	273,909,000	273,909,000	0	607,695,110	45.07%
2021	268,626,000	268,626,000	0	604,320,398	44.45%

1 All “Actuarially Determined Contributions” through June 30, 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.

See accompanying notes to this schedule on next page.

Section 2: GAS 67 Information

Notes to Schedule:

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 end of 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
Remaining amortization period:	14.5 years as of June 30, 2021 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:	Market value of assets (MVA) 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 market value basis and are recognized semi-annually over a five-year period. The AVA cannot be less than 50% of MVA, nor greater than 150% of MVA. The Actuarial Value of Assets (AVA) is reduced by the value of the non-valuation reserves.

Section 2: GAS 67 Information

Actuarial assumptions:

Valuation Date:	June 30, 2019 Valuation Date (used for the year ended June 30, 2021 ADC)
Investment rate of return:	7.25%, net of pension plan investment expenses, including inflation
Inflation rate:	3.00%
Administrative expense	0.90% of payroll allocated to both the employer and member based on the components of the total contribution rate (before expenses) for the employer and member
Real across-the-board salary increase:	0.50%
Projected salary increases:[1]	General: 4.00% to 9.00% and Safety: 4.00% to 12.50%
Cost of living adjustments:	2.50% (actual increases contingent upon CPI increases with a 2.50% maximum)
Other assumptions:	Same as those used in the June 30, 2019 funding actuarial valuation

[1] Includes inflation at 3.00% plus real across-the-board salary increase of 0.50% plus merit and promotional increases.

Appendix A: Projection of Plan's Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2021 ($ in millions)

Year Beginning July 1,	Projected Beginning Plan's Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2020	$4,439	$322	$381	$6	$1,043	$5,418
2021	5,418	332	423	5	389	5,710
2022	5,710	328	422	5	410	6,021
2023	6,021	324	439	5	432	6,333
2024	6,333	315	456	5	453	6,640
2025	6,640	305	474	4	474	6,941
2026	6,941	307	492	4	496	7,247
2027	7,247	310	511	4	517	7,560
2028	7,560	313	530	4	539	7,878
2029	7,878	316	550	4	562	8,201
2060	7,532	1	715	0	519	7,338
2061	7,338	1	702	0	505	7,142
2062	7,142	0	689	0	492	6,945
2063	6,945	0	674	0	478	6,749
2064	6,749	0	659	0	464	6,554
2095	8,924	0	36	0	646	9,533
2096	9,533	0	29	0	690	10,195
2097	10,195	0	22	0	738	10,911
2098	10,911	0	17	0	790	11,684
2099	11,684	0	13	0	847	12,518
2127	82,664	0	0 *	0	5,993	88,657
2128	88,657					
2128	Discounted Value: 50 **					

* Less than $1 million, when rounded.

** $88,657 million when discounted with interest at the rate of 7.25% per annum has a value of $50 million (or 0.91% of the Plan's Fiduciary Net Position) as of the June 30, 2021 measurement date.

Notes:

1. Amounts may not total exactly due to rounding.
2. Amounts shown in the year beginning July 1, 2020 row are actual amounts, based on the financial statements provided by KCERA.
3. Certain years have been omitted from the table.
4. Column (a): Except for the "discounted value" shown for 2128, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.
5. Column (b): Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2020); plus employer contributions to the unfunded actuarial accrued liability; plus employer and employee contributions to fund each year's annual administrative expenses, based on the Plan's funding policy. Contributions are assumed to occur halfway through the year, on average.
6. Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2020. The projected benefit payments reflect the cost of living increase assumption of 2.50% per annum and include projected benefits associated with the Supplemental Retiree Benefit Reserve. Benefit payments are assumed to occur halfway through the year, on average.
7. Column (d): Projected administrative expenses are calculated as approximately 0.90% of the closed group payroll. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.25% per annum.
9. As illustrated in this Exhibit, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2021 shown earlier in this report, pursuant to Paragraph 44 of GASB Statement No. 67.
10. This projection is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 67. The terms may have different meanings in other contexts.

Actuarial Present Value of Projected Benefit Payments:	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation:	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date:	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution:	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs):	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad Hoc Postemployment Benefit Changes:	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Automatic Cost-of-Living Adjustments (Automatic COLAs):	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic Postemployment Benefit Changes:	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Cost-of-Living Adjustments:	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan):	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered Payroll:	Payroll on which contributions to the pension plan are based.
Defined Benefit Pension Plans:	Pension plans that are used to provide defined benefit pensions.

Section 3: Appendices

Defined Benefit Pensions:	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement 67.)
Defined Contribution Pension Plans:	Pension plans that are used to provide defined contribution pensions.
Defined Contribution Pensions:	Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount Rate:	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: 1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension Plan's Fiduciary Net Position is projected (under the requirements of Statement 67) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.
Entry Age Actuarial Cost Method:	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.
Inactive Employees:	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Multiple-Employer Defined Benefit Pension Plan:	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Net Pension Liability (NPL):	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.

Other Postemployment Benefits:	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Pension Plans:	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
Pensions:	Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.
Plan Members:	Individuals that are covered under the terms of a pension plan. Plan members generally include (1) employees in active service (active plan members) and (2) terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).
Postemployment:	The period after employment.
Postemployment Benefit Changes:	Adjustments to the pension of an inactive employee.
Postemployment Healthcare Benefits:	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
Projected Benefit Payments:	All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.
Public Employee Retirement System:	A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.
Real Rate of Return:	The rate of return on an investment after adjustment to eliminate inflation.
Service Costs:	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Single-Employer Defined Benefit Pension Plan (Single-Employer Pension Plan):	A defined benefit pension plan that is used to provide pensions to employees of only one employer.
Termination Benefits:	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total Pension Liability (TPL):	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement 67.

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Kern County Employees' Retirement Association

Supplemental Retiree Benefit Reserve (SRBR) Actuarial Valuation and Review

As of June 30, 2021

Segal

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December 2, 2021

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

Dear Board Members:

We are pleased to submit this Supplemental Retiree Benefit Reserve (SRBR) Actuarial Valuation and Review as of June 30, 2021. It summarizes the actuarial data used in the SRBR valuation, analyzes the preceding year's experience, and determines the funding status of the SRBR benefits.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Retirement Association. The census information and financial information on which our calculations were based was prepared by the staff of the Association. That assistance is gratefully acknowledged.

The actuarial calculations were directed under the supervision of Molly Calcagno, ASA, MAAA and 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 herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Association.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary	Molly Calcagno, ASA, MAAA, EA Actuary

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report was prepared by Segal to present a valuation of the Kern County Employees' Retirement Association ("KCERA" or "the Association") Supplemental Retiree Benefit Reserve (SRBR) benefits as of June 30, 2021. The valuation was performed to determine the funding status of the SRBR benefits. The measurements shown in this actuarial valuation may not be applicable for other purposes. In particular, the measures herein are not necessarily appropriate for assessing the sufficiency of current plan assets to cover the estimated cost of settling the plan's accrued benefit obligations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The funded status information presented in this report is based on:

- The benefit provisions of the SRBR, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2021, provided by KCERA;
- The SRBR Reserve value as of June 30, 2021, provided by KCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2021 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2021 valuation; and
- The SRBR policy adopted by the Board of Retirement.

Note that the investment return assumption of 7.25% used in this report was determined without taking into consideration any impact of the 50/50 excess earnings allocation between the retirement and SRBR asset pools. More details regarding this can be found in the actuarial valuation for funding purposes.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Association's liabilities associated with the SRBR benefits. Our calculations are based upon member data and financial information provided to us by the Association's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with prior year's information.

Valuation Highlights

1. Under the Board's SRBR policy, the SRBR funding status is calculated by comparing the SRBR Reserve excluding the court ordered Allocated SRBR Reserve (i.e., the 0.5% COLA Reserve), to the current actuarial funding target, which is the present value of all projected future SRBR benefit payments for all KCERA's current plan members.
2. Additional or increased SRBR benefits may be adopted if the Present Value of SRBR Benefits (PVB) is more than 120% funded in the last two consecutive valuations. In addition, the SRBR policy also describes certain conditions that should be considered prior to adopting additional or increased SRBR benefits. These conditions include the funding status of the SRBR benefits, the potential impact of any deferred investment gains or losses not yet recognized in the asset smoothing method and any recent or potential changes in actuarial assumptions.
3. The funding status of the SRBR benefits increased from 151.1% as of June 30, 2020 to 157.7% as of June 30, 2021 prior to reflecting any deferred investment gains or losses. The funding status of the SRBR benefits is 171.3% as of June 30, 2021 after reflecting any deferred investment gains or losses as of the same date.
4. The increase in the funding status for the SRBR benefits was due to the passage of time (i.e., expected changes in the funding status); an investment gain because the rate of return on the available SRBR (after smoothing) during 2020-2021 was about 7.5%, which is greater than the 7.25% assumption (based on the June 30, 2020 valuation); lower inflation as compared to expected; and other liability gains.
5. In the June 30, 2020 valuation, we assumed that the Consumer Price Index (CPI) would increase by 2.75% from 2019 to 2020, based on our long-term assumption for inflation used in that valuation. The actual increase in the CPI from 2019 to 2020 was 1.6%. Because the CPI increased by less than 2.5% (the maximum COLA possible), COLA bank balances were drawn down to supplement COLAs when available. Current SRBR Tier 3 benefits mostly stayed the same because CPI increases in recent years were lower than the COLA increases for most retirees. However, future projected increases in SRBR Tier 3 benefits for current retirees are expected to occur later than previously expected. This led to the part of the increase in the funding ratio that was due to low inflation, as described above.

6. The following table compares the reserves and liabilities for the SRBR benefits as of June 30, 2020 and of June 30, 2021:

		June 30, 2021	June 30, 2020
1	Available SRBR Reserves		
	a. Total SRBR	$151,852,000	$159,691,000
	b. 0.5% COLA Account	23,054,000	33,210,000
	c. Available SRBR Reserve **(1a – 1b)**	$128,798,000	$126,481,000
2	Present Value of SRBR Benefits (PVB)		
	a. Approved Benefits	$80,509,000	$82,278,000
	b. Future Benefits	1,146,000	1,406,000
	c. Total **(2a + 2b)**	$81,655,000	$83,684,000
3	PVB minus Reserves **(2c) – (1c)**	-$47,143,000	-$42,797,000
4	Funding Ratio **(1c) ÷ (2c)**	157.7%	151.1%

7. As of the June 30, 2021 valuation, the net deferred investment gains were 7.9% of the market value of assets. The Board's SRBR policy requires that the funding status be more than 120% in two consecutive valuations prior to implementing any benefit increases, taking into account the current status of deferred investment gains and losses not yet recognized under the asset smoothing method. Consistent with this requirement, we have increased the available SRBR Reserve by this amount to account for these gains. The results before and after reflecting the deferred investment gains are as follows:

		June 30, 2021 After Reflecting Deferred Gains	June 30, 2021 Before Reflecting Deferred Gains
1	Available SRBR Reserves	$139,876,000	$128,798,000
2	Present Value of SRBR Benefits (PVB)	81,655,000	81,655,000
3	PVB minus Reserves **(2) – (1)**	-$58,221,000	-$47,143,000
4	Funding Ratio **(1) ÷ (2)**	171.3%	157.7%

8. The Actuarial Standards Board approved Actuarial Standard of Practice No. 51 (ASOP 51) regarding risk assessment, which was first effective with KCERA's June 30, 2019 SRBR actuarial valuation. ASOP 51 requires actuaries to identify and assess risks that "may reasonably be anticipated to significantly affect the plan's future financial condition". Examples of key risks listed that are particularly relevant to KCERA's SRBR are asset/liability mismatch risk, investment risk, and longevity risk.

Section 1: Actuarial Valuation Summary

The actuary's initial assessment can be strictly a qualitative discussion about potential adverse experience and the possible effect on future results, but it may also include quantitative numerical demonstrations where informative.

Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the plan. We were engaged to perform a detailed analysis of the potential range of the impact of risk relative to the SRBR's future financial condition based on the June 30, 2018 actuarial valuation. That analysis can be found in our separate risk assessment report dated September 4, 2019.

We have also included a discussion of key risks that may affect the Association in *Section 2, Subsection D*.

Summary of SRBR Valuation Results

		Death Benefit	SRBR1	SRBR2	SRBR3	SRBR4	Total
Present Value of SRBR Benefits (PVB):	• Active members	$2,961,000	$936,000	$0	$0	$8,876,000	$12,773,000
	• Inactive vested members	722,000	617,000	0	0	2,581,000	3,920,000
	• Retirees and Beneficiaries	13,088,000	23,557,000	1,901,000	6,153,000	20,263,000	64,962,000
	• Total	$16,771,000	$25,110,000	$1,901,000	$6,153,000	$31,720,000	$81,655,000
Available SRBR Reserves:	• Total SRBR						$151,852,000
	• Additional 0.5% COLA Account						23,054,000
	• Available SRBR Before Reflecting Deferred Investment Gains/Losses						$128,798,000
	• Available SRBR After Reflecting Deferred Investment Gains/Losses						139,876,000
Funding Ratio:	• SRBR Benefits Before Reflecting Deferred Investment Gains/Losses						157.7%
	• SRBR Benefits After Reflecting Deferred Investment Gains/Losses						171.3%

Important Information about Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by KCERA. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	The valuation is based on the Market Value of Assets as of the measurement date, as provided by KCERA. The Association uses a “Valuation Value of Assets” that differs from market value to gradually reflect six-month changes in the Market Value of Assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan’s assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The actuarial valuation is prepared at the request of the Association. Segal is not responsible for the use or misuse of its report, particularly by any other party.

An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan. Future contribution requirements may differ from those determined in the valuation because of:

- Differences between actual experience and anticipated experience;
- Changes in actuarial assumptions or methods; and
- Changes in statutory provisions.

If the Association is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.

Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Association should look to their other advisors for expertise in these areas.

As Segal has no discretionary authority with respect to the management or assets of the plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the plan.

Section 2: Actuarial Valuation Results

A. Introduction

Additional benefits may be provided to KCERA active and retired members under the plan provisions adopted by the County as provided under article 5.5 of the County Employees Retirement Association Law of 1937 (CERL). These are the Supplemental Retiree Benefit Reserve (SRBR) benefits.

Article 5.5 governs the crediting of interest to reserves and the allocation of Undistributed Earnings. Undistributed Earnings are the amounts that remain after earnings have been used to credit interest to the plan's reserves. They are generally thought of as earnings in excess of those assumed to be earned under the actuarial valuation assumptions.

Under the provisions of Article 5.5, and in accordance with the Board's Interest Crediting Policy, if Undistributed Earnings remain, then 50% of those Earnings are allocated to the SRBR and the remaining 50% are allocated as additional interest credits to all other reserve funds excluding the Contingency Reserve and the SRBR.

A summary of the benefits provided by the SRBR is displayed in *Section 3, Exhibit 2*. Note that, in addition to the benefits summarized in *Section 3, Exhibit 2*, the KCERA Board has set aside a portion of the SRBR reserve to help pay for an additional 0.5% COLA adopted under the Ventura Settlement. The assets and liabilities related to this additional 0.5% COLA are included in the regular valuation and are therefore excluded from this SRBR valuation.

B. Demographic Data

The table below provides a summary of the number of members eligible for Approved Benefits as of June 30, 2021. It also contains information on the monthly SRBR benefits in pay status as of June 30, 2021.

Each of the various SRBR benefits and their eligibilities are described in *Section 3, Exhibit 2*.

Table of Coverage

	Members Eligible for Approved Benefits as of June 30, 2021	Death Benefits	SRBR1	SRBR2	SRBR3	SRBR4
1	Active members	9,072	226	—	—	6,626
2	Inactive vested members	3,517	133	—	—	2,870
3	Retirees and Beneficiaries	7,573	6,415	234	226	8,818
4	Total	20,162	6,774	234	226	18,314
5	Total monthly benefits in pay status as of June 30, 2021		$208,300	$33,100	$75,500	$171,700
6	Average monthly benefits in pay status as of June 30, 2021		$32	$141	$334	$19

C. Funding Status

Undistributed Earnings are the only source of funding for the SRBR Benefits. By their very nature, Undistributed Earnings are produced on an inconsistent basis and cannot be relied upon on to appear in any single period.

The actuarial assumptions and methods used to determine the Present Value of SRBR Benefits (PVB) are shown in *Section 3, Exhibit 1*. These are the same assumptions and methods used in the regular June 30, 2021 KCERA valuation.

KCERA's funding target for the SRBR is based on the PVB. They include all Tier 1, Tier 2, Tier 4 and Death Benefits, as well as all current and projected future Tier 3 benefits.

The table below shows the funding status of the SRBR benefits before reflecting deferred investment gains or losses.

Funding Status of SRBR Benefits before Reflecting Deferred Investment Gains or Losses

			June 30, 2021	June 30, 2020
1	Available SRBR Reserves before Reflecting Deferred Investment Gains or Losses			
	a.	Total SRBR	$151,852,000	$159,691,000
	b.	0.5% COLA Account	23,054,000	33,210,000
	c.	Available SRBR Reserve **(1a – 1b)**	$128,798,000	$126,481,000
2	Present Value of SRBR Benefits (PVB)			
	a.	Death Benefits	$16,771,000	$16,480,000
	b.	SRBR1	25,110,000	25,992,000
	c.	SRBR2	1,901,000	2,304,000
	d.	SRBR3	6,153,000	7,205,000
	e.	SRBR4	31,720,000	31,703,000
	f.	Total	$81,655,000	$83,684,000
3	PVB minus Reserves **(2f) – (1c)**		-$47,143,000	-$42,797,000
4	Funding Ratio before Reflecting Deferred Investment Gains or Losses **(1c) ÷ (2f)**		157.7%	151.1%

Section 2: Actuarial Valuation Results

The Board's SRBR policy requires that the funding status be more than 120% in two consecutive valuations, *taking into account the current status of deferred investment gains and losses not yet recognized under the asset smoothing method* and any recent or potential changes in actuarial assumptions, prior to implementing any benefit increases.

The table below shows the funding status of the SRBR benefits after reflecting deferred investment gains or losses.

Funding Status of SRBR Benefits after Reflecting Deferred Investment Gains or Losses

		June 30, 2021	June 30, 2020
1	Available SRBR Reserves after Reflecting Deferred Investment Gains or Losses	$139,876,000	$120,891,000
2	Present Value of SRBR Benefits (PVB)		
	a. Death Benefits	$16,771,000	$16,480,000
	b. SRBR1	25,110,000	25,992,000
	c. SRBR2	1,901,000	2,304,000
	d. SRBR3	6,153,000	7,205,000
	e. SRBR4	31,720,000	31,703,000
	f. Total	$81,655,000	$83,684,000
3	PVB minus Reserves **(2f) – (1)**	-$58,221,000	-$37,207,000
4	Funding Ratio after Reflecting Deferred Investment Gains or Losses **(1)** ÷ **(2f)**	171.3%	144.5%

Section 2: Actuarial Valuation Results

The funding status of the SRBR benefits as measured by the funding ratio increased from 151.1% as of June 30, 2020 to 157.7% as of June 30, 2021 prior to reflecting any deferred investment gains or losses.

The following table details the changes in the funding ratio from the prior year's valuation to the current year's valuation.

The increase in the funding status for the SRBR benefits was due to the passage of time (i.e., expected changes in the funding status); an investment gain because the rate of return on the available SRBR (after smoothing) during 2020-2021 was about 7.5%, which is greater than the 7.25% assumption (based on the June 30, 2020 valuation); lower inflation as compared to expected; and other liability gains.

Reconciliation of Funding Ratio for SRBR Benefits

1	**Funding Ratio as of June 30, 2020**		**151.1%**
2	Changes due to:		
	a.	Passage of Time (Expected Changes)	4.4%
	b.	Investment Gain	0.3%
	c.	Inflation Gain	0.5%
	d.	Other Liability Gain	1.4%
	f.	Total	6.6%
3	**Funding Ratio as of June 30, 2021**		**157.7%**

Note: Results are prior to reflecting any deferred investment gains or losses as of each valuation date.

D. Risk Assessment

Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the plan.

Our separate risk assessment report dated September 4, 2019 contains a detailed analysis of the potential range of future measurements, including measurements specific to the SRBR. This section provides descriptions and basic assessments of the primary risks that are likely to have an ongoing influence on the plan’s financial condition, as well as a reference to historical trends and maturity measures.

Risk Assessments

- Asset/Liability Mismatch Risk (the potential that future plan experience does not affect asset and liability values in the same way, causing them to diverge)

  The most significant asset/liability mismatch risk to the plan is investment risk, as discussed below. In fact, investment risk has the potential to impact asset/liability mismatch in two ways. The first mismatch is evident in annual valuations: when asset values deviate from assumptions, they are typically independent from liability changes. The second mismatch can be caused when systemic asset deviations from assumptions may signal the need for an assumption change, which causes liability values and contribution rates to move in the opposite direction from any changes in the expected experience of asset growth rates.

  Asset/liability mismatch can also be caused by demographic assumption risk such as longevity, which affects liabilities but have no impact on asset levels. This risk is also discussed below.

- Investment Risk (the risk that investment returns will be different than expected)

  The investment return assumption is a long-term, static assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. That volatility can cause significant changes in the financial condition of the plan, affecting both funded status and contribution rates. The inherent year-to-year volatility is reduced by smoothing through the Actuarial Value of Assets, however investment experience can still have a sizable impact.

- Longevity Risk (the risk that mortality experience will be different than expected)

  The actuarial valuation includes current life expectancy assumptions and an expectation of future improvement in life expectancy, which are significant assumptions given the relatively long duration of liabilities for pension plans. Emerging plan experience that does not match these expectations will result in increases or decreases in the actuarially determined contribution over time. This risk can be reduced by using tables appropriate for the plan (public experience tables) that are weighted by benefit levels, and by using generational mortality projections.

- Other Risks

  In addition to longevity, the valuation includes a variety of other assumptions that are unlikely to match future experience exactly. One example is projected salary scales over time. As salary is central to the determination of benefits paid in retirement, deviations from the projected salary scales could have a material impact on the benefits anticipated for each member. Examples of demographic assumptions include retirement, termination and disability assumptions, and will likely vary in significance for different groups (for example, disability assumptions are typically more significant for safety groups).

For the evaluation of historical trends and maturity measures, please see *Section 2, Subsection J* of the June 30, 2021 Actuarial Valuation and Review for KCERA.

Section 3: Actuarial Valuation Basis

Exhibit 1: Actuarial Assumptions and Methods

Actuarial Assumptions:	The same actuarial assumptions used in the KCERA June 30, 2021 Actuarial Valuation and Review.
Actuarial Cost Method:	Not applicable, because only the Present Value of SRBR Benefits (PVB) is determined in this report.
Actuarial Value of Assets:	Supplemental Retiree Benefit Reserve value as of valuation date.
Changed Actuarial Assumptions and Methods:	There have been no changes in actuarial assumptions or methods since the last valuation.

Exhibit 2: Summary of Plan Provisions

This exhibit summarizes the major provisions of the plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Benefits Provided:	The SRBR currently provides five categories of benefits:
Tier 1	$35.50 per month payable to retirees who were hired on or before July 1, 1994. Upon the death of the retired member, 60% of the Tier 1 SRBR benefit continues to the retired member's beneficiary.
Tier 2	Three additional monthly stipends payable to retirees: • $1.372 per year of service for members who retired prior to 1985. This was granted July 1, 1994. • $5.470 per year of service for members who retired prior to 1985. This was granted July 1, 1996. • $10.276 per year of service for members who retired prior to 1981. This was granted July 1, 1997. Upon the death of the retired member, 60% of the Tier 2 SRBR benefit continues to the retired member's beneficiary.
Tier 3	Additional benefits to maintain 82% purchasing power protection. Upon death, this benefit continues to be paid to the retired member's beneficiary based on the applicable continuation percentage under the member's form of payment elected at retirement. There is a cap on the maximum annual inflation used in the calculation of the SRBR Tier 3 benefits of 4%.
Tier 4	$21 per month granted starting July 1, 2018, payable to retirees who were hired prior to July 1, 2018. Upon the death of the retired member, 60% of the Tier 2 SRBR benefit continues to the retired member's beneficiary.
Death Benefit	An additional one-time post-retirement death benefit of $5,000 is paid to a retired member's beneficiary upon the death of the retired member.
Changed Plan Provisions:	There have been no changes in plan provisions since the last valuation.

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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, Executive Director

Matthew Henry, Assistant Executive Director

Angela Kruger, Financial Officer

Kern County Employees' Retirement Association (KCERA)

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INTRODUCTORY SECTION

KERN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

KCERA

PRUDENT INVESTMENT • QUALITY SERVICE

December XX,

Dear Board Members:

Dominic D. Brown

Executive Director

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

PPCC

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2021

Presented to

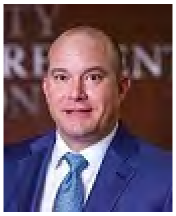
Kern County Employees' Retirement Association

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
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

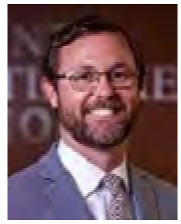
Bradly Brandon
Elected by Safety Members
Term expires on December 31, 2021

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

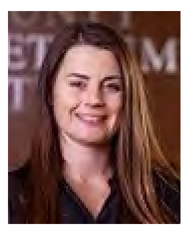
Jordan Kaufman
Member, Investment Committee
Appointed by Statute



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

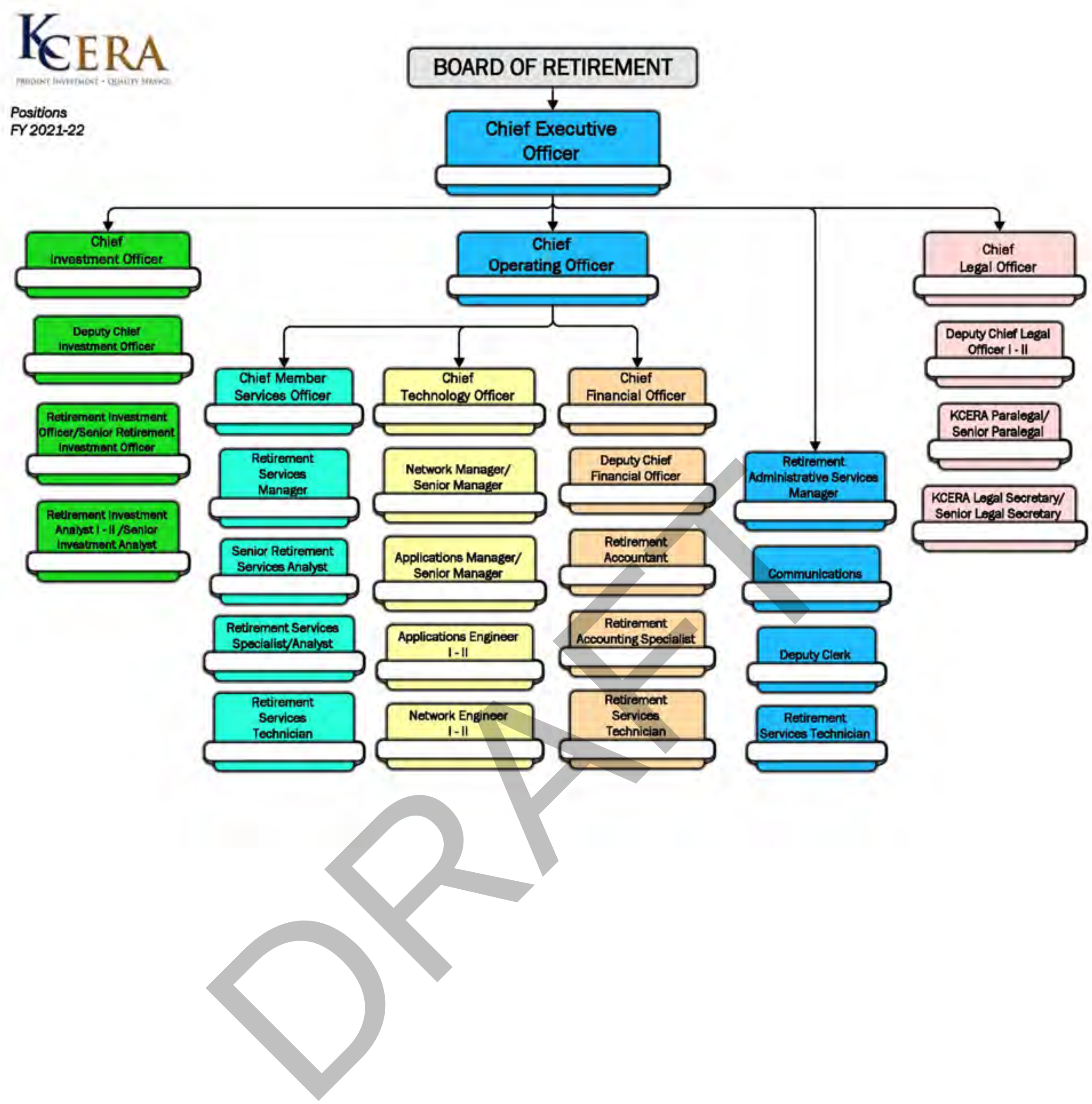
Edward Robinson
Elected by General Members
Term expires on December 31, 2022

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


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

As of June 30, 2021

ACTUARY

The Segal Company, Inc.

AUDITORS

CliftonLarsonAllen, LLP
Cheiron

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

Refer to the Investment Section for a list of Investment Managers, pg 73 and the Schedule of Investment Management Fees pgs 76-79

FINANCIAL SECTION

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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 and other demographic changes. Employer contributions decreased by $(5.3) million, or (1.9)%, which was primarily due to decrease in covered payroll. The average employer contribution rate increased 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 valuation, the funded ratio for KCERA was 67.1% compared to the funded ratio of 64.4% as of June 30, 2020. The decrease 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 members contributions in 2021 was a largely 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 the investment return (after "smoothing") less than the return assumption.

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	6,514	2,062	4,452	(285)	4,737
Administrative Expenses	6,061	538	5,523	719	4,804
Total Deductions	**387,058**	**20,441**	**366,617**	**20,039**	**346,578**
Increase (Decrease) in Net Position	**$ 978,717**	**$ 885,702**	**$ 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	**$ 5,417,512**	**$ 978,717**	**$ 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 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 Financial Officer, at angela.kruger@kcera.org or (661) 381-7700.

As of June 30, 2021 and 2020

	2021	2020
	(In thousands)	
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	1,218	6,298
Equipment/Computers	813	609
Accumulated Depreciation	(339)	(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	6,514	4,452
Administrative Expenses	6,061	5,523
Total Deductions	**387,058**	**366,617**
Net Increase	**978,717**	**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	**$ 5,417,512**	**$ 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 June 30, 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 Maturities (in years) as of June 30, 2020				
Investment Type	**Fair Value**	**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	Fair Value	Investment Maturities (in years) as of June 30, 2020				Maturity Not Determined
		Less than 1	1-5	6-10	More than 10	
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**

Foreign Currency	Equities	Fixed Income	Cash	Cash Collateral/ Variation Margin	Swaps/Options	Total
	As of June 30, 2021					*(In thousands)*
Brazilian real	$ —	$ 14,629	$ (6,065)		$ 28	$ 8,592
Canadian dollar	—	654	3,986	—		4,640
Chinese yuan renminbi	—	3,752	2,856		(63)	6,545
Colombian peso	11,112	8,744	(1,574)		69	18,351
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**

Foreign Currency	Equities	Fixed Income	Cash	Cash Collateral/ Variation Margin	Swaps/Options	Total
	As of June 30, 2020					*(In thousands)*
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, 2019 *(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	$80,266,011	$7,306,894,934
Plan Fiduciary Net Position	5,288,714,922	126,481,333	5,417,513,179
Net Pension Liability (Asset)	**$1,938,995,874**	**$(46,215,322)**	**$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 June 30, 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 June 30, 2020 that were measured by actuarial valuations as of June 30, 2020 and June 30, 2019, respectively, used the same actuarial assumptions and actuarial cost method as the June 30, 2020 and June 30, 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, 2021 funding valuation. These assumptions were developed in the analysis of actuarial experience for the period July 1, 2016 through June 30, 2020.

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, 2020.

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%
Total	100%		**8.00%***

**Includes inflation at 2.75%*

Discount rate. The discount rate used to measure the TPL was 7.25% as of June 30, 2021 and June 30, 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 June 30, 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, 2021	June 30, 2020
Actuarial Assumptions:		
Investment rate of return	7.25%, net of investment expenses, including inflation	7.25%, net of investment expenses, including inflation
Inflation rate	2.75%	2.75%
Real across-the-board salary increase	0.50%	0.50%
*Projected salary increases**	General: 4.00% to 8.75% Safety: 3.75% to 12.00%	General: 4.00% to 8.75% Safety: 3.75% to 12.00%
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.	0.90% of payroll allocated to both the employer and member based on the components of the total average contribution rate (before expenses)
Cost-of-living adjustments	2.5% (actual increases based on CPI increases with a 2.5% maximum)	2.5% (actual increases based on CPI increases with a 2.5% maximum)
Other assumptions	Same as those used in the June 30, 2021 funding actuarial valuation	Same as those used in the June 30, 2020 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	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.*

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	—	34705
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	3,783,690	2,600,791
Commodities	1,457,520	2,139,458
Midstream Energy	525,498	—
Real estate	3,509,355	4,211,708
Opportunistic	3,258,096	—
Private equity/Credit funds	8,455,076	3,811,689
Hedge funds	34,122,569	15,061,468
Cash and Overlay	192,627	—
Total Investment Manager Fees	**59,795,716**	**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	301,811	96,546
Due diligence	—	9,021
Real estate	45,600	20,194
Total Other Investment Expenses	**2,660,911**	**1,868,718**
Total Fees and Other Investment Expenses	**62,456,627**	**34,406,549**
Securities Lending rebates and bank fees	40,503	55,392
Total Investment Expenses	**$ 62,497,130**	**$ 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

Verus

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.

<u>Capital Markets Review</u>

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.

Verus

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.

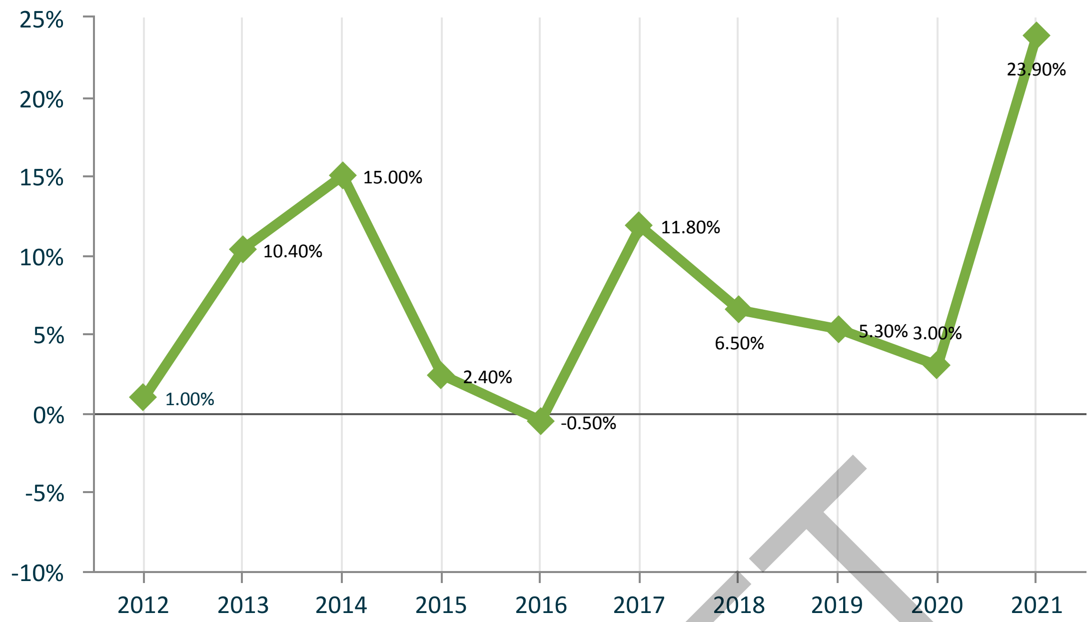
The Board of Retirement adopted the current asset allocation policy in December 2020. KCERA's strategic target asset allocation and actual asset allocation as of June 30, 2021 are as follows:

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%		

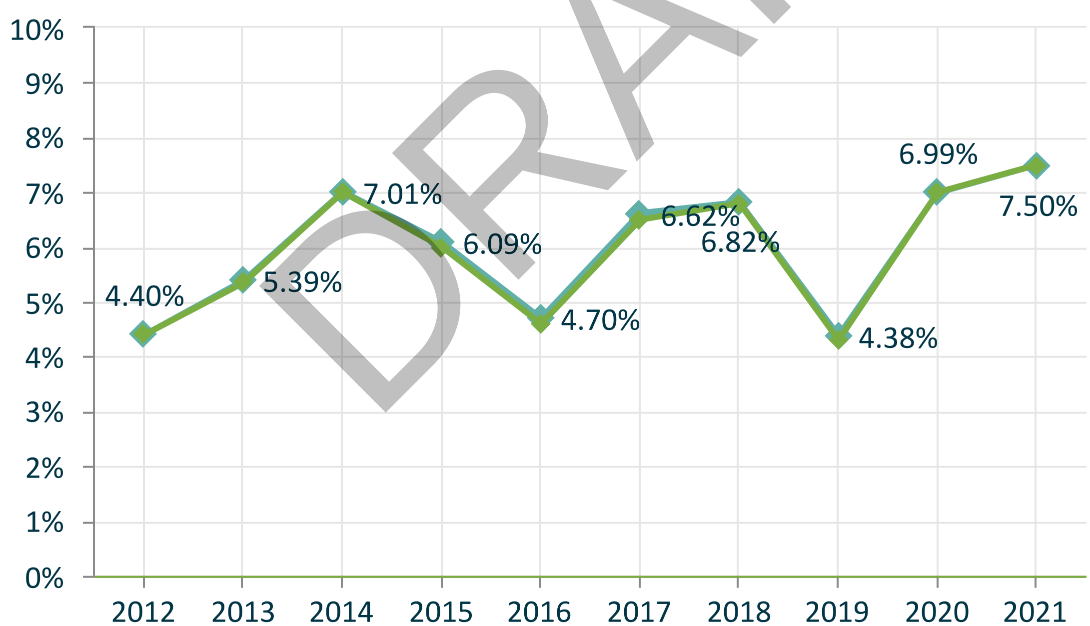
Type of Investment	Fair Value (In thousands)	% of Total Fair Value
Domestic Equity:		
All Cap Passive	$ 364,341	6.70 %
Large Cap Enhanced	196,534	3.61 %
Small Cap Growth	56,852	1.05 %
Small Cap Value	95,584	1.76 %
Total Domestic Equities	713,311	13.12 %
International /Global Equity		
Large Cap	264,510	4.86 %
Global	313,376	5.76 %
Small Cap	310,426	5.71 %
Emerging Markets	289,543	5.33 %
Total International Equities	1,177,855	21.66 %
Fixed Income		
Core	180,212	3.31 %
Core Plus	430,548	7.92 %
Structured Debt	130,701	2.40 %
High Yield	181,482	3.34 %
Emerging Markets	276,842	5.09 %
Total Fixed Income	1,199,785	22.06 %
Real Estate		
Core	269,838	4.96 %
Value Added	116,663	2.15 %
Property	3,998	0.07 %
Total Real Estate	390,499	7.18 %
Alternate Investments		
Private Credit	228,159	4.20 %
Private Equities	97,275	1.79 %
Opportunistic	82,523	1.52 %
Hedge Funds	765,727	14.08 %
Commodities	345,848	6.36 %
Total Alternative Investments	1,519,532	27.95 %
Cash and Equivalents	436,433	8.00 %
Total Investments	**$ 5,437,415**	**99.97 %**
KCERA Capital Assets	1,858	
KCERA Receivables/Payables	(203,280)	
Fiduciary Net Position	**$ 5,235,993**	

*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	Annualized 5-Year	Annualized 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	327,319	309,659
Total Emerging Markets Debt Managers	**1,634,478**	**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)	481,736	1,449,326
Total Core Real Estate Managers	**1,423,157**	**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)	455,786	280,484
Brighton Park Capital	282,133	—
LGT Crown Global	611,722	—
Pantheon Ventures, Inc. (Fund V)	—	—
Pantheon Ventures, Inc. (Fund VI)	3,964	127,842
Pantheon Ventures, Inc. (Fund VII)	232,890	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	**2,790,069**	**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)	517,438	—
HIG	1,299,245	428,473
Magnetar Constellation Fund V	690,455	—
TSSP Adjacent Opportunities Partners (B)	1,582,927	—
Total Private Credit Managers	**5,665,007**	**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	192,627	—
Total Overlay Managers	**192,627**	**—**
Total Investment Managers' Fees	**$ 59,795,716**	**$ 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	47,653	15,955
Nossaman LLP	227,758	50,571
Due Diligence Travel Expenses		
Trustees / KCERA Management	—	9,021
Security Lending Bank Fees		
Deutsche Bank	40,503	55,392
Real Estate Expenses		
KCERA Property Inc.	45,600	20,194
Total Other Investment Expenses	**1,845,563**	**1,643,542**
Total Investment Fees and Services	**$62,497,130**	**$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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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

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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
Senior Vice President & Actuary

Molly Calcagno, ASA, MAAA, EA
Actuary

JAC/bbf
Enclosures

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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 82
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 83.

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 %**

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**

KCERA 2021 - Schedule of Funding Progress & Schedule of Employer Contributions

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

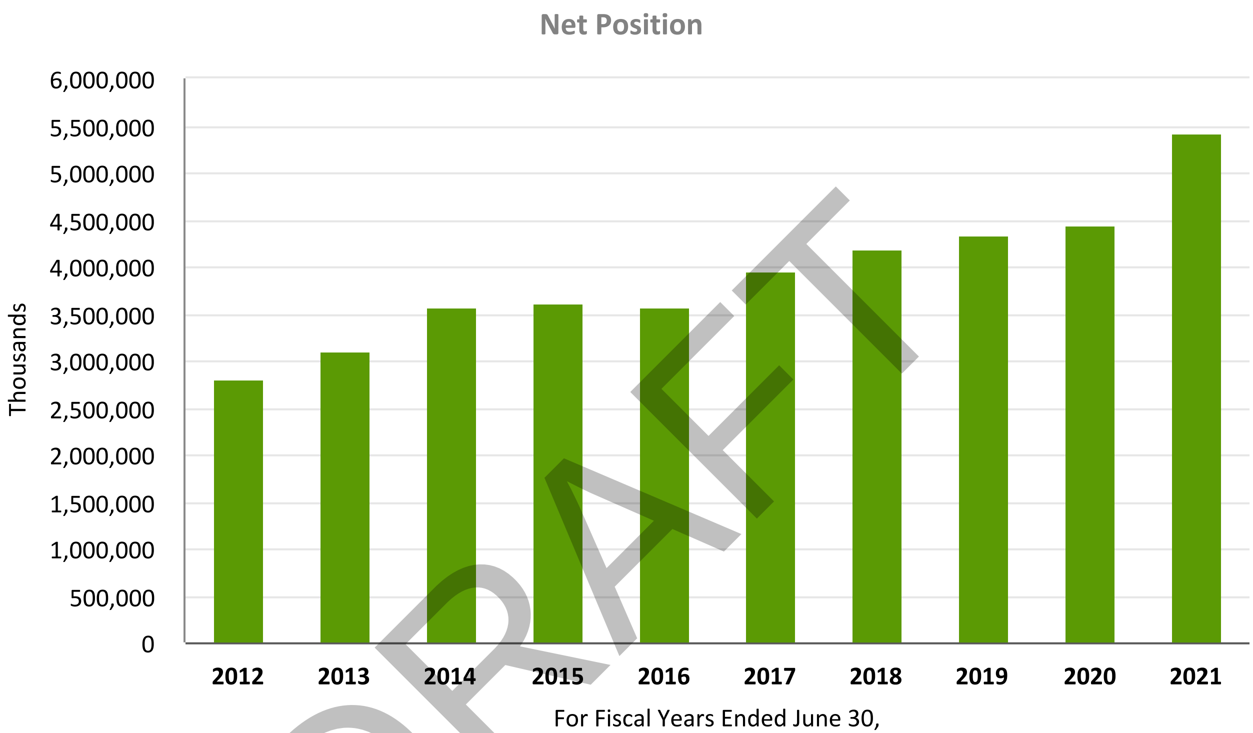
Each April 1, retiree benefits are adjusted by the percentage change in the Consumer Price Index for the preceding calendar year (capped at 2.5%).

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



KCERA 2021 - Schedule of Changes in Fiduciary Net Position

(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	$ 280,812
Member Contributions*	34,649	52,503	50,132	57,862	41,602
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.*

KCERA 2021 - Schedule of Benefit Expenses by Type

(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	5,206
Safety	1,206	724	1,218	1,326	1,307
Total	3,924	3,690	4,737	4,452	6,513
Total Benefit Expenses	**$ 305,817**	**$ 321,613**	**$ 341,774**	**$ 361,094**	**$ 380,996**

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						
						Unmodified		
		Option 1	Option 2	Option 2	Option 4	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**

No Material to be Distributed

No Material
to be Distributed

No Material to be Distributed

No Material
to be Distributed

CHIEF EXECUTIVE OFFICER'S REPORT

KCERA | DOMINIC D. BROWN | DECEMBER 2021

OFFICE UPDATE

- Elections – Board election will be held on December 14
- Winter Recess – The KCERA office will be closed starting December 23, and will reopen January 3
- New County Compensation Structure – KCERA budget and staff will be impacted by new MOUs and Resolution
- Facilities – Solar installation is in progress
- Staffing – Recruitments ongoing for Deputy Chief Legal Officer, Accountant, Senior Retirement Services Analyst, Retirement Services Analyst, Retirement Services Specialist, and Retirement Services Technician
  - Board-approved Reorganization is being implemented with County Human Resources
- Disability – A total of 29 member files were presented to the Board of Retirement in 2021
- Service Purchases – 2019 (Done!), 2020 (1 in progress), 2021 (62 in backlog, including 6 in process)
- *Alameda* Decision – Final analysis completed and prepared for presentation to Board

OPERATIONS ACTIVITY

- Member Services
  - 21 new retirements and calculations
  - 61 death benefit calculations
  - 82 service-credit purchase calculations
  - 79 retirement estimates
  - 99 new active members
  - 110 terminations with disposition packets
  - 24 in-person appointments
  - 138 walk-ins
  - 657 phone calls
  - 129 emails
- Accounting & Reporting
  - KCERA has received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the 2020 Annual Comprehensive Financial Report (ACFR)
  - Staff successfully completed the 2021 ACFR and providing information to Segal for the annual actuarial valuation
- Information Technology
  - Multiple plan sponsors are planning to switch payroll providers (again), and IT is working to ensure data integrity and a smooth transition

UPCOMING EVENTS

- Special Board of Retirement – To discuss emergency teleconference findings
- Finance Committee – Next meeting will be scheduled early in 2022 to continue SRBR discussions
- Administrative Committee – No meetings currently scheduled
- Investment Committee – Scheduled on December 14
- KCERA Property, Inc. – No meetings currently scheduled
- Board of Retirement – Next regular monthly meeting will be on January 19

CIO REPORT

INVESTMENT PROGRAM UPDATE | December 2021

Rebalancing

NOVEMBER ACTIVITY

- Reduce Public Equity
    - -20M Parametric S&P 500 exposure
    - -5M Parametric Russell 2000
    - -35M Mellon Stock Index Fund
- Increase Core Fixed Income
    - +45M Mellon Aggregate Bond Index Fund

Trimmed public equity overweight

Increased Core Fixed Income, as allocation was below the lower end of the policy range of 12%; allocation now stands at 12.8% vs. 14% target

Reporting period covers 10/26/2021 to 11/30/2021

Asset Class	Actual	Target	Difference
Public Equity	40.5%	37%	+3.5%
Fixed Income	23.5%	24%	-0.5%
Core	12.8%	14%	-1.2%
Credit	5.9%	6%	-0.1%
Emerging Market Debt	4.8%	4%	+0.8%
Commodities	5.1%	4%	+1.1%
Midstream	4.9%	5%	-0.1%
Hedge Funds	10.6%	10%	+0.6%
Alpha Pool	4.9%	5%	-0.1%
Core Real Estate	5.3%	5%	+0.3%
Opportunistic	2.7%	0%	+2.7%
Private Markets	7.8%	15%	-7.2%
Cash	-5.3%	-5%	-0.3%

Positioning

ACTUAL VS POLICY TARGET

Public equity overweight decreased due to reduction to public equity and market pull back.

Fixed Income underweight reduced due to additional $45M allocated to Mellon Aggregate Bond Index, which brought Core Fixed Income within the policy range.

Hedge Funds moved closer to the target weight (10%), due to redemptions that are in process (Magnetar, Myriad, River Birch).

Private Markets continues to be a key focus; the allocation should reach 15% target around 2025.

Private Markets underweight continues to be reallocated to Public Equity and other asset classes where we see opportunity, including EM Debt, Commodities, and Opportunistic. *Historically, Private Credit and Private Real Estate underweights were allocated to Core Fixed Income.*

As of November 30, 2021. Source: KCERA.

Key Initiatives

Enhancing return while managing risk

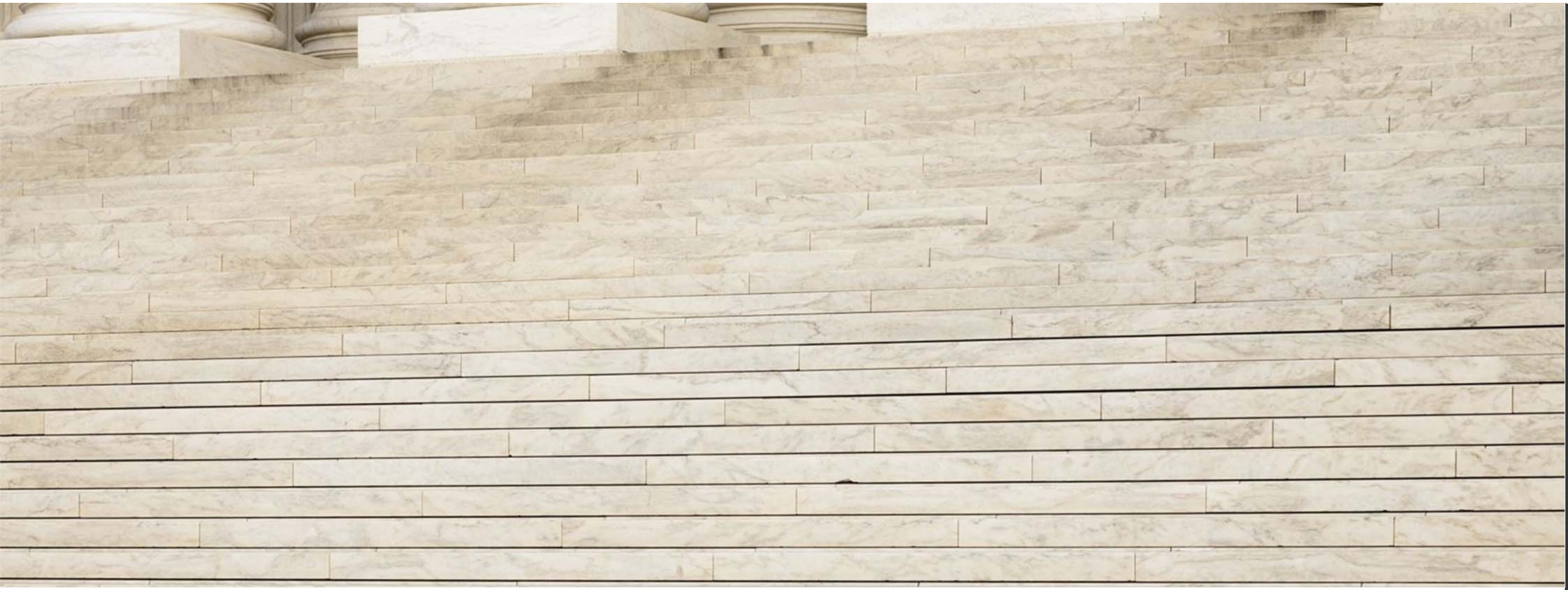
- Capital Efficiency
  - Analysis of multi-beta exposure
- Discretionary global macro as a portfolio diversifier
- Multi-asset and tactical asset allocation research
- Opportunistic investments
- Private Markets
  - Continued program build-out
  - Performance report and Venture education at December Board meeting
  - Annual Plan early 2022
- Tail hedge research

Investment Committee Meetings

Next Meeting December 14th

Topics to be discussed include:
- Private credit fund recommendation
- Capital efficiency diversifying betas
- Fee analysis

The last IC meeting was held on September 22nd.



CLO Report December 2021

Jennifer Esquivel Zahry, Chief Legal Officer

Maggie Peralta-Lee, Senior Paralegal

Irma Jimenez, Senior Legal Secretary

LACERA lawsuit

- Mandamus and Declaratory relief action against County of Los Angeles related to the County's October 2021 decision to reject "June 2021 Personnel Decisions" made by LACERA's Boards.
- The "June 2021 Personnel Decisions" included the creation of two positions, along with changes to titles and salaries for existing positions.
- LA County's Argument – The County controls and authorizes the classifications, titles, salaries, and terms and conditions of employment for all LACERA personnel because such personnel are county employees.
- LACERA's Argument – The CERL vests LACERA's Boards with plenary authority and fiduciary responsibility over the administration of the system in a manner that will assure prompt delivery of benefits. LACERA further asserts that the County's failure to implement the LACERA Boards' decision disenfranchises the LACERA members who elected their Trustees.
- Relief Sought: LACERA seeks a writ of mandate requiring the County to adopt LACERA's June 2021 Personnel Decisions. LACERA further seeks a declaration confirming that its Boards have authority over LACERA's management and administration, which includes the authority to appoint and set classifications, titles, and salaries for the personnel at LACERA, and that the County has a ministerial duty to implement such decisions.

CATEGORIES	Pending CLO Review
Operational Contracts	3
Investment/ Custodial Documents	3
Disability Matters	3
Community Property Matters	4
PRA Requests	5
Staff Inquiries	15
Administrative Appeals – Response to Objections	5
Board/Committee Meetings	5
Special Projects	3

DECEMBER CALENDAR

EDELSTEIN GILBERT ROBSON & SMITH LLC

Donald B. Gilbert   Michael R. Robson   Trent E. Smith   Jason D. Ikerd Associate   Bridget E. McGowan Associate

December 2, 2021

TO: State Association of County Retirement Systems

FROM: Edelstein Gilbert Robson & Smith, LLC

RE: Legislative Update – December 2021

General Update

Friday, September 10, marked the last day of the first year of the 2021-22 Legislative Session. The Legislature sent 836 bills to the Governor's desk at the end of session. By the bill signing deadline of October 10, the Governor signed 770 of those bills and vetoed only 66.

The Legislature remains on interim recess through the fall. Session will reconvene in January, when Legislators will return to Sacramento to introduce new legislation and continue work on two-year bills.

In the meantime, legislative staff are packing up their offices in the State Capitol building and are beginning the move to the newly constructed "Swing Space" building on O Street in preparation for the remodeling of the State Capitol. The State Capitol Annex, the part extending off the historic capitol building that houses legislative offices, is being demolished and rebuilt. The project is anticipated to take 3-5 years. During this time, all legislative business aside from Floor Sessions will occur in this new "Swing Space." It remains to be seen if operations in this new building will impact the way the public and advocates interface with legislators and their staff throughout the legislative process. Because of the layout of the building, the Legislature is discouraging organizations to hold "capitol days" due to limited space for large groups to hold private meetings.

Redistricting

Every 10 years, after the census, the number of representatives sent to Congress from each state is reapportioned, while State and local governments draw new political boundaries to reflect changes and shifts in population. For congressional and legislative districts, new lines are drawn by an independent Redistricting Commission that ensures that new legislative and congressional lines balance populations with the requirements of the Voting Rights Act to ensure there is no discrimination in district maps.

California is in the midst of this process now, having just released draft maps for the state's Congressional, State Assembly, and State Senate districts in mid-November. Now that draft maps have been released, public input will follow into December. The Commission may adjust the lines further based on this public input. Final maps must be approved and submitted to the Secretary of State by December 27.

Due to lagging population growth and a higher growth rate in Texas and other states, California will lose a Congressional seat for the first time in state history. For state legislative districts, we could see some legislators have their homes drawn out of the districts they currently serve – state legislators must live in the district they represent, forcing tough choices like running against a colleague or moving to a nearby city that remained in their prior district.

Once the official lines are adopted at the end of the year, we will have a better sense of how they will impact the 2022 primary and general election races.

Ballot Initiative Process

Although the Legislature is on recess, Californians via the direct democracy ballot initiative process have been busy proposing and qualifying initiatives for the 2022 ballot.

As in previous election years, 2022 is shaping up to be a busy initiative election year with dozens of proposals pending review in the Attorney General's (AG) office. At this point, there are 21 measures at the AG for review right now. Once the review process is complete, these measures will join the 16 measures that are currently out for signature gathering. For those that gather enough signatures, they will join the three measures that have already qualified for the November ballot.

Not all proposed initiatives will qualify for the ballot – some will fall short of the number of required signatures, and some will get dropped by their proponents.