VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

BUSINESS MEETING

JANUARY 23, 2023

AGENDA

PLACE: In Accordance with Government Code §54953(e)(1)(A), and in response to the declared State and Local emergencies due to the Novel Coronavirus and Local Health Officer recommendation regarding social distancing, the Board of Retirement and its legislative bodies are holding meetings electronically and can be accessed below. Pursuant to Government Code §§ 54953(e)(2) and 54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning the below mentioned business.

TIME: 9:00 a.m.

The public may listen to the Public Session and offer comments by calling: +1 669-219-2599, using Meeting ID: 836-8493-1679. Persons may also submit written comments to publiccomment@vcera.org prior to and during the Board meeting. Please include your name, agenda item, the last 4 numbers of the telephone number that will be used to call in, and your comment. Public comment emails will be read into the record or summarized if lengthy.

ITEM:

I. CALL TO ORDER

A. Roll Call.

II. APPROVAL OF AGENDA

III. CONSENT AGENDA

Notice: Any item appearing on the Consent Agenda may be moved to the Regular Agenda at the request of any Trustee who would like to propose changes to or have discussion on the item. Note that approval of meeting minutes are now part of the Consent Agenda.

A. Approve Regular and Deferred Retirements and Survivors Continuances for the Month of December 2022.

B. Receive and File Report of Checks Disbursed in December 2022.

C. Approve Meeting Minutes for Business Meeting of November 28, 2022.

IV. INVESTMENT MANAGER PRESENTATIONS

A. Receive Annual Investment Presentation, LaSalle Income & Growth Fund VIII, Matthew Walley and Joseph Munoz.

IV. INVESTMENT MANAGER PRESENTATIONS (continued)

B. Receive Annual Investment Presentation, PGIM Real Estate – U.S. Core Fund, Joanna Mulford, Kaya Murray, and Steve Moen.

V. INVESTMENT INFORMATION

VCERA – Dan Gallagher, Chief Investment Officer.
NEPC – Allan Martin.

A. $30 Million Commitment to HarbourView Royalties Fund I.
RECOMMENDED ACTION: Approve.

1. Staff Letter from Chief Investment Officer.

2. Joint Fund Recommendation Report from NEPC.

3. HarbourView Royalties Fund I Presentation: Sherrese Clarke Soares

B. $30 Million Commitment to Kennedy Lewis Capital Partners Master Fund III.
RECOMMENDED ACTION: Approve.

1. Staff Letter from Chief Investment Officer.

2. Joint Fund Recommendation Report from NEPC.

3. Kennedy Lewis Capital Partners Master Fund III Presentation: David Kennedy Chene, Darren Lewis Richman, And Ben Schryber.

C. Preliminary Performance Report Month Ending December 31, 2022.
RECOMMENDED ACTION: Receive and File.

VI. ACTUARIAL INFORMATION

A. Review and Approval of Annual Actuarial Valuation Report as of June 30, 2022 – Segal Consulting, Paul Angelo.
RECOMMENDED ACTION: Approve.
Time Certain at 9:00 a.m.

1. June 30, 2022 Actuarial Valuation Report.

B. Review of GAS 67 Actuarial Valuation Report as of June 30, 2022 – Segal Consulting, Paul Angelo.
RECOMMENDED ACTION: Receive and File.

1. June 30, 2022 GAS 67 Actuarial Valuation Report.

C. VCERA Cost-of-Living Adjustments (COLA) as of April 1, 2023.
RECOMMENDED ACTION: Approve.

1. Actuary's Annual COLA Analysis.

VII. OLD BUSINESS

A. Reconsideration of Circumstances to Enable Board to Hold Meetings via Teleconference Under the Provisions of Government Code Section 54953, Subdivision (e)(1)(A), of the Ralph M. Brown Act, Due to State of Emergency and Authorize Continued Remote Teleconference Meetings.

1. Staff Letter from Retirement Administrator.

2. Letter from Dr. Robert Levin, Ventura County Health Officer.

VIII. NEW BUSINESS

A. Periodic Review of Board Policy: Education and Travel Policy.
RECOMMENDED ACTION: Approve.

1. Staff Letter from Retirement Administrator.

2. Education and Travel Policy Proposed (Redline).

3. Education and Travel Policy Proposed (Clean).

B. Annual Appointment of Ad Hoc Personnel Review Committee for 2023.

1. Staff Letter from Retirement Administrator.

C. Consideration and Possible Action to Amend Section 813 of the VCERA Management Employees' Resolution.

1. Staff Letter from Retirement Administrator.

D. SACRS 2022-2023 Board of Director Nominations.
RECOMMENDED ACTION: No Action Recommended.

1. SACRS Notice.

E. Retirement Administrator's Report for October - December 2022.
RECOMMENDED ACTION: Receive and file.

F. Quarterly Chief Investment Officer's Report for October - December 2022.
RECOMMENDED ACTION: Receive and file.

IX. CLOSED SESSION

A. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION Significant Exposure to Litigation Pursuant to Paragraph (2) of Subdivision (d) of Section 54956.9: One (1) Case.

X. INFORMATIONAL

A. 2023 CALAPRS General Assembly Notice and Agenda.

B. UBS News Flash – California Flooding Report.

XI. PUBLIC COMMENT

XII. STAFF COMMENT

XIII. BOARD MEMBER COMMENT

XIV. ADJOURNMENT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

December 2022

FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE*	DEPARTMENT	EFFECTIVE DATE
REGULAR RETIREMENTS:						
DEBRA A	ALVAREZ	G	11/12/1989	33.02	AUDITOR CONTROLLER	11/26/2022
LUIS	BARAJAS	G	7/16/2017	5.03	DEPARTMENT OF AIRPORTS	11/1/2022
GARY MICHAEL	CLARK	G	6/3/2007	15.01	PUBLIC WORKS AGENCY	12/28/2022
JULIE M	CRUZ	G	2/6/2022	0.79	HEALTH CARE AGENCY	11/26/2022
LINDA A	ESPINOZA	G	1/24/1999	24.08	SUPERIOR COURT	11/1/2022
MATTHEW DAVID	GOE	S	8/4/2002	5.51	SHERIFF'S OFFICE (DEFERRED)	11/22/2022
CHRIS R	GONZALES	S	9/20/1998	23.93	FIRE PROTECTION DISTRICT	11/25/2022
MELINDA ANN	GREGORY	G	10/19/1997	24.04	SHERIFF'S OFFICE	11/11/2022
SALLY	HARRISON	G	6/3/2007	15.44	HUMAN SERVICES AGENCY	11/12/2022
GREGORY KENT	HAYES	S	6/1/2008	14.47 *	DISTRICT ATTORNEY	11/27/2022
SAMANTHA LEE	HAZLEWOOD	G	11/19/2008	5.98	HUMAN SERVICES AGENCY (DEFERRED)	11/29/2022
DIANA	HEYMAN	G	5/21/2008	6.54	HEALTH CARE AGENCY (DEFERRED)	11/12/2022
MICHAEL JAMES	HORN	G	12/22/1991	33.01	PUBLIC WORKS AGENCY	11/15/2022
BARBARA ANN	HUFF	G	7/16/2017	10.67	HEALTH CARE AGENCY	11/20/2022
LINDA	JANSSEN	S	12/4/2005	16.92	SHERIFF'S OFFICE	11/5/2022
VICKIE JEAN	JORDAN	G	11/8/1999	22.93	ASSESSOR	12/1/2022
PATRICIA JOANN	LONG	G	10/3/2010	5.13	HEALTH CARE AGENCY (DEFERRED)	11/3/2022
RAFAEL JR.	MEDINA	G	2/22/2011	6.44	PUBLIC WORKS AGENCY (DEFERRED)	11/15/2022
MARIA D	MORENO	G	3/27/1985	37.23	GENERAL SERVICES AGENCY	11/12/2022
KATHRINE LUCILLE	MULFORD	G	7/1/2007	15.33 *	HEALTH CARE AGENCY	10/30/2022
DANIEL WAYNE	OLSON	S	11/28/1988	34.04	FIRE PROTECTION DISTRICT	11/24/2022
JACQUELYN	OTT	G	4/15/2012	10.46	HEALTH CARE AGENCY	12/10/2022
HECTOR	REYES	G	9/3/1989	10.27 *	HUMAN SERVICES AGENCY (DEFERRED)	11/22/2022
JUAN AGUIRRE	REYNOSO	S	12/16/2012	7.24	DISTRICT ATTORNEY (DEFERRED)	12/24/2022
STEPHANIE L	SOLACE	G	7/28/1996	16.78	HEALTH CARE AGENCY	11/18/2022
BRENDA	VILLA	G	11/11/1990	31.08	HEALTH CARE AGENCY	11/19/2022
FRANCINE ELLA	VOURNAZOS	G	8/3/2014	8.14	AUDITOR CONTROLLER	12/1/2022
DARIN GORDON	YANOVER	S	6/7/1992	30.45	SHERIFF'S OFFICE	11/15/2022
TIMOTHY R	YUSS	G	11/12/1989	33.31	CHILD SUPPORT SERVICES	12/11/2022
DEFERRED RETIREMENTS:						
VANESSA MARIE	ALVAREZ	G	5/27/2012	8.31	HUMAN SERVICES AGENCY	9/21/2022
MARIANNA	ANAYA	G	7/30/2006	15.16	HUMAN SERVICES AGENCY	9/15/2022
INYITE MARIA	ANI	G	6/27/2021	0.60	HUMAN SERVICES AGENCY	9/29/2022
JOSE ANGEL	ARELLANO	G	4/12/2021	1.44	PUBLIC WORKS AGENCY	9/16/2022
CRISTINA	ARMENTA MARTINEZ	G	6/26/2022	0.29	HUMAN SERVICES AGENCY	10/11/2022
PABLO	AYON NICACIO	G	7/10/2022	0.22	HEALTH CARE AGENCY	9/27/2022
ZOE JADE	BIAS	G	6/26/2022	0.24	HUMAN SERVICES AGENCY	9/21/2022
MELISSA	CEJA	G	7/15/2018	4.14 **	HEALTH CARE AGENCY	10/22/2022
LAURA	CERMENIO	G	10/4/2020	2.00	SHERIFF'S OFFICE	10/5/2022
MITCHELL ALAN	CRAVEN	G	6/26/2011	11.26	HEALTH CARE AGENCY	10/8/2022
NICOLE FRANCINE	DE LA PARRA	G	6/27/2021	1.27	FIRE PROTECTION DISTRICT	10/1/2022
CHARLES TURALLO	DELA ROCA	G	7/24/2022	0.22	HEALTH CARE AGENCY	10/12/2022
MEGAN ELIZABETH	DORAN	G	7/1/2018	3.66	PUBLIC WORKS AGENCY	9/17/2022
ANGELIQUE MAREE	DORE	G	7/5/2016	2.47	HEALTH CARE AGENCY	10/1/2022
CLAY EDWARD	DOWNING	G	9/27/2015	6.97	COUNTY EXECUTIVE OFFICE	9/30/2022
CYNTHIA LYNN	ELLIOTT	G	6/28/2006	16.33	INFORMATION TECHNOLOGY SERVICES	11/13/2022
LUCAS R	ESCOBEDO	G	10/10/2022	0.02	VENTURA REGIONAL SANITATION DISTRICT	10/14/2022
HUEY	FAIRWEATHER	G	8/7/2022	0.16	HEALTH CARE AGENCY	10/6/2022
ANA KAREN	FERREIRA	G	6/27/2021	1.26	HEALTH CARE AGENCY	10/8/2022
KELSEY LAUREN	FLYER	G	2/9/2020	2.20	HEALTH CARE AGENCY	9/24/2022
CLAUDIA	GAONA	G	1/12/2020	2.46	CHILD SUPPORT SERVICES	10/8/2022
HILDA	GARCIA FERNANDEZ	G	10/31/2021	0.91	HEALTH CARE AGENCY	10/4/2022
ADRIANA LIZETH	GARCIA	G	10/3/2021	1.01	HEALTH CARE AGENCY	10/5/2022
ESTEBAN CABRAL	GARCIA	G	4/1/2020	2.50	HEALTH CARE AGENCY	10/10/2022
FRANCISCO JR.	GONZALEZ	G	10/2/2022	0.02	SHERIFF'S OFFICE	10/8/2022
TAMARA KATHLEEN	HOLLAND	G	4/26/2015	6.86	HEALTH CARE AGENCY	9/17/2022
KARLA	LLAMAS	G	4/4/2021	1.48	DISTRICT ATTORNEY	9/26/2022
LEORA JEAN	LOPEZ	G	2/23/2020	2.55	HEALTH CARE AGENCY	10/7/2022

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

December 2022

FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE*	DEPARTMENT	EFFECTIVE DATE
NELLIE GARCIA	LOPEZ	G	7/7/2013	7.30	HUMAN SERVICES AGENCY	10/5/2022
MARICOR MAULAWIN	MADRILEJOS	G	5/7/2017	4.69	HEALTH CARE AGENCY	10/1/2022
KATHRYN LOUISE	MASON	G	9/26/2017	3.59	GENERAL SERVICES AGENCY	9/22/2022
ANDREZ MEZA	MENDEZ	G	4/19/2021	1.42	PUBLIC WORKS AGENCY	9/16/2022
JAIRO	MENJIVAR	G	3/22/2021	1.50	PUBLIC WORKS AGENCY	9/17/2022
THAMARAISELVAN	NATARAJ	G	12/12/2016	5.93	INFORMATION TECHNOLOGY SERVICES	12/3/2022
IRENE	ORTEGA	G	7/24/2022	0.22	HEALTH CARE AGENCY	10/14/2022
JAVIER G	PADILLA	G	10/28/2012	9.91	HUMAN SERVICES AGENCY	10/8/2022
IVONNE KRISTINE MENDEZ	PEACOCK	G	5/19/2019	3.01	SUPERIOR COURT	10/14/2022
GILBERT T	PUNSALAN	G	3/3/2022	0.59	AUDITOR CONTROLLER	10/8/2022
PETE	QUIJADA	G	3/20/2011	10.95	HUMAN SERVICES AGENCY	9/17/2022
HEIDI TERESA	RAMIREZ	G	10/31/2021	0.95	HEALTH CARE AGENCY	10/13/2022
JOANNA	RENTERIA	G	7/29/2018	3.52	SUPERIOR COURT	10/8/2022
REBECCA RUTH	ROWE	G	1/10/2021	1.77	VENTURA COUNTY LIBRARY	10/14/2022
ALEXANDRA	SAGASTA	G	1/27/2019	3.65	HUMAN SERVICES AGENCY	10/3/2022
LOURDES IVETTE	SALCIDO	G	11/14/2021	0.15	HEALTH CARE AGENCY	1/8/2022
RANDI LYNN	SANTA CRUZ	G	8/16/2015	3.84	HEALTH CARE AGENCY	2/8/2020
JENNIFER A	SAVAGE	G	10/23/2016	5.83	HUMAN SERVICES AGENCY	9/17/2022
DIURKA LISETH	SOTOMAYOR	G	6/27/2021	0.83	HEALTH CARE AGENCY	9/20/2022
MARISA	STAKER	G	7/10/2022	0.20	SUPERIOR COURT	9/22/2022
ROBIN AMANDA	THOMPSON	G	11/6/2005	16.24	HEALTH CARE AGENCY	9/24/2022
DANA DOUGLAS	VINKE	G	1/13/2019	3.81 *	VENTURA COUNTY LIBRARY	9/17/2022
PHILLIP LEE	YOCHAM	G	5/4/2015	7.46	VENTURA COUNTY LIBRARY	10/22/2022

SURVIVORS' CONTINUANCES:

CAROLYN B	BOLES
KAREN C	BRATTON
RONALD L	DUDLEY
VIRGINIA R	KAMPFER
ZENAIDA D	KUNTZMAN
KATHLEEN M	MANDELL,
CAROL A	MILLER
EARL W	WAKELEE
RAYMOND J	WOSINSKI

*** = Excludes reciprocal service or service from any previous retirements**
**** = Member establishing reciprocity**

Ventura County Retirement Assn

Check Register - Standard

Period: 06-23 As of: 1/6/2023

Company: VCERA

Acct / Sub: 10300 000000

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
029751	CK	12/7/2022	CULLIGAN CULLIGAN OF VENTURA COUNTY	06-23		002559	VO	ADMIN EXP	12/6/2022	0.00	72.50
029752	CK	12/7/2022	DIGITALDEP DIGITAL DEPLOYMENT	06-23		002560	VO	IT	12/6/2022	0.00	650.00
029753	CK	12/7/2022	EXECUTIVED EXECUTIVE DATA SYSTEMS, INC.	06-23		002561	VO	IT	12/6/2022	0.00	585.00
029754	CK	12/7/2022	HOAGWILL WILL HOAG	06-23		002567	VO	TRAVEL REIMB	12/6/2022	0.00	140.50
029755	CK	12/7/2022	JACKROTHBE JACK ROTHBERG, MD	06-23		002562	VO	DISABILITY EXP	12/6/2022	0.00	2,625.00
029756	CK	12/7/2022	ROBERTSJOR JORDAN ROBERTS	06-23		002568	VO	TRAVEL REIMB	12/6/2022	0.00	326.49
029757	CK	12/7/2022	SHREDITUSA SHRED-IT	06-23		002563	VO	ADMIN EXP	12/6/2022	0.00	249.27
029758	CK	12/7/2022	SHULTZVIVI VIVIAN W SHULTZ, ESQ	06-23		002566	VO	DISABILITY EXP	12/6/2022	0.00	1,274.90
029759	CK	12/7/2022	SOFTWAREON SOFTWARE ONE, INC.	06-23		002564	VO	IT	12/6/2022	0.00	94.74
029760	CK	12/7/2022	STAPLESADV STAPLES	06-23		002565	VO	ADMIN EXP	12/6/2022	0.00	384.71
029761	CK	12/14/2022	ACCESSINFO ACCESS INFORMATION PROTECTED	06-23		002569	VO	ADMIN EXP	12/14/2022	0.00	453.18
029762	CK	12/14/2022	BANKOFAMER BUSINESS CARD	06-23		002570	VO	IT/ADMIN EXP	12/14/2022	0.00	1,404.11
029763	CK	12/14/2022	CALAPRS CA ASSOCIATION OF PUBLIC RET SYSTEMS	06-23		002571	VO	ADMIN EXP	12/14/2022	0.00	50.00
029764	CK	12/14/2022	CULLIGAN CULLIGAN OF VENTURA COUNTY	06-23		002572	VO	ADMIN EXP	12/14/2022	0.00	52.00

Ventura County Retirement Assn

Check Register - Standard

Period: 06-23 As of: 1/6/2023

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
029765	CK	12/14/2022	FEDEX FEDEX	06-23		002573	VO	DISABILITY EXP	12/14/2022	0.00	119.82
029766	CK	12/14/2022	ICEMILLER ICE MILLER LLP	06-23		002574	VO	LEGAL FEES	12/14/2022	0.00	4,680.00
029767	CK	12/14/2022	LINEASOLUT LINEA SOLUTIONS	06-23		002577	VO	ADMIN EXP	12/14/2022	0.00	967.50
029768	CK	12/14/2022	NASSOSJONA JONATHAN T. NASSOS, MD INC	06-23		002576	VO	DISABILITY EXP	12/14/2022	0.00	2,996.62
029769	CK	12/14/2022	ROSENTHAL JOHN L ROSENTHAL, ATTORNEY AT LAW	06-23		002575	VO	DISABILITY EXP	12/14/2022	0.00	17,385.00
029770	CK	12/14/2022	STATESTREE STATE STREET BANK AND TRUST	06-23		002578	VO	CUSTODIAL FEES	12/14/2022	0.00	28,464.90
029771	CK	12/14/2022	TEAMLEGAL TEAM LEGAL, INC.	06-23		002579	VO	DISABILITY EXP	12/14/2022	0.00	548.40
029772	CK	12/14/2022	THOMSONREU THOMSON REUTERS- WEST	06-23		002580	VO	ADMIN EXP	12/14/2022	0.00	571.02
029773	CK	12/21/2022	ATTMOBILIT AT&T MOBILITY	06-23		002581	VO	IT	12/20/2022	0.00	424.85
029774	CK	12/21/2022	CAPITALECO CAPITAL ECONIMICS NA LTD	06-23		002582	VO	INVESTMENT FEES	12/20/2022	0.00	8,750.00
029775	CK	12/21/2022	FEDEX FEDEX	06-23		002584	VO	DISABILITY EXP	12/20/2022	0.00	37.66
029776	CK	12/21/2022	HARONIANED EDWIN HARONIAN, MD INC	06-23		002583	VO	DISABILITY EXP	12/20/2022	0.00	2,913.46
029777	CK	12/21/2022	MOONCREST MOONCREST PROPERTY COMPANY	06-23		002586	VO	ADMIN EXP	12/20/2022	0.00	23,046.96
029778	CK	12/21/2022	NASSOSJONA JONATHAN T. NASSOS, MD INC	06-23		002585	VO	DISABILITY EXP	12/20/2022	0.00	350.00
029779	CK	12/21/2022	NEPC NEPC, LLC	06-23		002587	VO	INVESTMENT FEES	12/20/2022	0.00	82,499.99

Ventura County Retirement Assn

Check Register - Standard

Period: 06-23 As of: 1/6/2023

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
029780	CK	12/21/2022	NOSSAMAN NOSSAMAN LLP	06-23		002589	VO	LEGAL FEES	12/21/2022	0.00	52,417.83
029781	CK	12/21/2022	TIMEWARNER TIME WARNER CABLE	06-23		002588	VO	IT	12/20/2022	0.00	229.98
029782	CK	12/28/2022	ADP ADP, INC	06-23		002590	VO	ADMIN EXP	12/27/2022	0.00	3,284.22
029783	CK	12/28/2022	CALAPRS CA ASSOCIATION OF PUBLIC RET SYSTEMS	06-23		002591	VO	ADMIN EXP	12/27/2022	0.00	2,500.00
029784	CK	12/28/2022	HANSONBRID HANSON BRIDGETT LLP	06-23		002592	VO	LEGAL FEES	12/27/2022	0.00	2,197.80
029785	CK	12/28/2022	MAIRENAKAR KARLA MAIRENA	06-23		002595	VO	ADMIN EXP	12/27/2022	0.00	54.60
029786	CK	12/28/2022	SOFTWAREON SOFTWARE ONE, INC.	06-23		002593	VO	IT	12/27/2022	0.00	126.00
029787	CK	12/28/2022	SPRUCEGROV SPRUCEGROVE INVESTMENT MGMT	06-23		002594	VO	INVESTMENT FEES	12/27/2022	0.00	47,462.31

Check Count: 37

Acct Sub Total: **290,391.32**

Check Type	Count	Amount Paid
Regular	37	290,391.32
Hand	0	0.00
Electronic Payment		0.00
Void	0	0.00
Stub	0	0.00
Zero	0	0.00
Mask	0	0.00
Total:	**37**	**290,391.32**

Legend:
CK - Check
VC – Voided Check.
ZC – Zero check. Voided check that was not reissued.

Company Disc Total **0.00**

Company Total **290,391.32**

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

BUSINESS MEETING

NOVEMBER 28, 2022

MINUTES

STAFF PRESENT:

Linda Webb, Retirement Administrator
Lori Nemiroff, General Counsel
Dan Gallagher, Chief Investment Officer
La Valda Marshall, Chief Financial Officer
Leah Oliver, Chief Technology Officer
Shalini Nunna, Retirement Benefits Manager
Josiah Vencel, Retirement Benefits Manager
Brian Owen, Sr. Information Technology Specialist
Jess Angeles, Communications Officer
Chris Ayala, Program Assistant

PLACE: In Accordance with Government Code §54953(e)(1)(A), and in response to the declared State and Local emergencies due to the Novel Coronavirus and Local Health Officer recommendation regarding social distancing, the Board of Retirement and its legislative bodies are holding meetings electronically and can be accessed below. Pursuant to Government Code §§ 54953(e)(2) and 54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning the below mentioned business.

TIME: 9:00 a.m.

ITEM:

I. CALL TO ORDER

A. Roll Call.

Chair Sedell called the Business Meeting of November 28, 2022, to order at 9:00 a.m.

Roll Call:

Trustees Present: Aaron Grass, Art Goulet, Steven Hintz, Tommie Joe, Kelly Long, Jordan Roberts, Robert Ashby, Mike Sedell

Trustees Absent: Cecilia Hernandez-Garcia, Will Hoag

II. APPROVAL OF AGENDA

Chair Sedell suggested that the Board change the order of a few items on the agenda. He said that the Board would not need to go into Closed Session to discuss item VIII.A., "CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION Significant Exposure to Litigation Pursuant to Paragraph (2) of Subdivision (d) of Section 54956.9: One (1) Case: Administrative Appeal Filed by VCPFA re Exclusion of Standby Pay". Also, agenda item, III.D. "Approve Meeting Minutes for Business meeting of October 24, 2022", should be taken off of the Consent Agenda, since there were some suggested changes to those minutes, and move agenda item, VII.A., "VCERA Resolution re Appeals Process for Benefit Determinations Arising Out of *Alameda*, and; Alameda Administrative Appeal by the Ventura County Professional Firefighters' Association (VCPFA) of VCERA Exclusion of Standby Pay from Compensation Earnable", so that it follows agenda III, "Consent Agenda".

MOTION: Approve as Amended.

Moved by Joe, seconded by Hintz.

Vote: Motion carried
Yes: Ashby, Grass, Goulet, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: Hernandez-Garcia
Abstain: -

III. CONSENT AGENDA

Notice: Any item appearing on the Consent Agenda may be moved to the Regular Agenda at the request of any Trustee who would like to propose changes to or have discussion on the item. Note that approval of meeting minutes was now part of the Consent Agenda.

A. Approve Regular and Deferred Retirements and Survivors Continuances for the Month of October 2022.

B. Receive and File Report of Checks Disbursed in October 2022.

C. Approve Meeting Minutes for Disability Meeting of October 3, 2022.

D. Approve Meeting Minutes for Business meeting of October 24, 2022.

Ms. Webb noted that as Chair Sedell had said, the Board would be voting on items A through C of the Consent Agenda, since item D was removed for discussion, and would therefore be voted on separately.

MOTION: Receive and File, Items A to C.

Moved by Long, seconded by Goulet.

Vote: Motion carried
Yes: Ashby, Grass, Goulet, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: Hernandez-Garcia
Abstain: -

Ms. Webb explained that there were some suggested corrections that were not substantive to the minutes of October 24th, that were submitted by Trustee Goulet and had been forwarded to the Board, prior to the meeting.

MOTION: Approve Meeting Minutes for Business meeting of October 24, 2022, as Amended.

Moved by Hintz, seconded by Joe.

Vote: Motion carried
Yes: Ashby, Grass, Goulet, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: Hernandez-Garcia
Abstain: -

After the vote on the item, the Board advanced to agenda item, VII.A., "VCERA Resolution re Appeals Process for Benefit Determinations Arising Out of *Alameda*, and; Alameda Administrative Appeal by the Ventura County Professional Firefighters' Association (VCPFA) of VCERA Exclusion of Standby Pay from Compensation Earnable".

IV. INVESTMENT MANAGER PRESENTATIONS

A. Annual Investment Presentation from BlackRock: Victoria Choi, Gordon Readey, Christian De Leon and Alli Leiva.

Victoria Choi, Gordon Readey, Christian De Leon and Alli Leiva reviewed BlackRock's organizational changes and discussed the firm's investment outlook, portfolio strategy, composition, and investment portfolio performance, and then responded to trustee questions.

V. INVESTMENT INFORMATION

VCERA – Dan Gallagher, Chief Investment Officer.
NEPC – Allan Martin.

A. Annual Presentation by Abbott Capital Management and NEPC of CA Govt. Code Section 7514.7 Annual Report.
RECOMMENDED ACTION: Receive and File

Mr. Gallagher said that the next item was presented to the Board to satisfy the requirements of California Government Code Section 7514.7, for an annual mandatory disclosure. The combined

Private Equity reports were presented by Abbott. Afterwards, NEPC presented their report on Private Credit, Real Estate, Real Assets, and Infrastructure Funds.

MOTION: Receive and File.

Moved by Ashby, seconded by Joe.

Vote: Motion carried
Yes: Ashby, Grass, Goulet, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: Hernandez-Garcia
Abstain: -

B. Quarterly Investment Performance Report for the Period of Ending on September 30, 2022.
RECOMMENDED ACTION: Receive and File

C. Preliminary Performance Report Month Ending October 31, 2022.
RECOMMENDED ACTION: Receive and File.

Mr. Martin presented the Quarterly Investment Performance Report for the Period of Ending on September 30, 2022, and the Preliminary Performance Report for Month Ending September 30, 2022.

Trustee Hernandez-Garcia arrived at the meeting at, 9:54 a.m., before the vote on the item.

MOTION: Receive and File Quarterly Investment Performance Report for the Period of Ending on September 30, 2022 and Preliminary Performance Report Month Ending October 31, 2022.

Moved by Goulet, seconded by Ashby.

Vote: Motion carried
Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: -
Abstain: -

VI. OLD BUSINESS

A. Reconsideration of Circumstances to Enable Board to Hold Meetings via Teleconference Under the Provisions of Government Code Section 54953, Subdivision (e)(1)(A), of the Ralph M. Brown Act, Due to State of Emergency and Authorize Continued Remote Teleconference Meetings.

1. Staff Letter from Retirement Administrator.

2. Letter from Dr. Robert Levin, Ventura County Health Officer.

Ms. Webb said that the agenda item should be a very familiar one to the Board, at this point, since they were required to consider it every 30 days in order to continue to allow for Trustees to attend remotely. Also, there was no change to the item since the last time they considered it, except for the dates of the new 30-day period, to ensure that the Board could continue with their hybrid meetings.

MOTION: Approve 30-Day Teleconferencing for the Period of November 28, 2022 – December 28, 2022.

Moved by Long, seconded by Joe.

Vote: Motion carried
Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: -
Abstain: -

After the vote on this item, the Board advanced to agenda item, VII.B., " Recommendation to Approve PEPRA Annual Pensionable Compensation Limits for 2023".

VII. NEW BUSINESS

A. VCERA Resolution re Appeals Process for Benefit Determinations Arising Out of *Alameda*, and; Alameda Administrative Appeal by the Ventura County Professional Firefighters' Association (VCPFA) of VCERA Exclusion of Standby Pay from Compensation Earnable: **RECOMMENDED ACTION: (1) Consider and take possible action to amend Alameda Appeals Resolution to permit Board to refer fully-briefed appeals to a referee for proposed findings of fact and a recommended decision under Government Code sections 31533 and 31534; and (2) Refer VCPFA appeal to referee under amended Resolution, and send to referee the parties' submissions.**

1. Staff Letter from Retirement Administrator.

2. Proposed Amended Resolution Entitled "Approval of Appeals Process for Benefit Determinations Arising out of the Alameda Supreme Court Decision ("Alameda Appeals") – REDLINE.

3. Proposed Amended Resolution Entitled "Approval of Appeals Process for Benefit Determinations Arising out of the Alameda Supreme Court Decision ("Alameda Appeals") – CLEAN.

4. Parties' Submissions to be Provided to Referee for VCPFA Appeal, if Applicable.

    1. Opening Statement re Exclusion of Standby Pay for Ventura County Firefighters.

        a. VCPFA Appeal Exhibit A, Letter from President of VCPFA to County of Ventura, Auditor Controller Regarding Payroll Codes.

        b. VCPFA Appeal Exhibit B, Work Schedule for VCPFA, May 2021 to April 2022.

        c. VCPFA Appeal Exhibit C, Ventura County Fire Department, Standing Order for Wildland Fire Season.

        d. Declaration of Kevin Aguayo in Support of Ventura County Professional Firefighters' Association Alameda Appeal.

    2. Reply Statement re Exclusion from Compensation Earnable of Standby Pay, Received by Ventura County Firefighters on and after January 1, 2013.

a. VCERA Response Exhibit A, VCERA Resolution Regarding Pensionable Compensation Determinations.

b. VCERA Response Exhibit B, VCERA Resolution Regarding Alameda Implementation to Compensation Earnable and Pensionable Compensation.

c. VCERA Response Exhibit C, VCERA Resolution to Implement the Decision of the CA Supreme Court Regarding “Compensation Earnable and Pensionable Compensation”.

d. VCERA Response Exhibit D, VCERA Retirement Administrator Letter Regarding the Ratification of Pay Codes Impacted by the October 12, 2020, Board Resolution Regarding Alameda Implementation.

e. VCERA Response Exhibit E, VCERA Business Meeting Minutes for May 24, 2021.

f. VCERA Response Exhibit F, VCERA Resolution, Appeals Process for Benefit Determinations Arising Out of the Alameda Supreme Court Decision (“Alameda Appeals”) to Reply Statement by VCERA.

g. VCERA Response Exhibit G, MOA Between VCFPD and the VCPFA, August 1, 2021 – July 31, 2024.

h. VCERA Response Exhibit H, MOA Between VCFPD and the VCPFA, July 31, 2018 – July 31, 2021.

i. VCERA Response Exhibit I, Example of Standby Pay Earned for 2013 to 2022.

j. VCERA Response Exhibit J, Letter from D. Mastagni, Esq., Appeal of Exclusion of Standby Pay for Ventura County Firefighters, Dated February 28, 2022.

k. VCERA Response Exhibit K, Letter from VCERA Retirement Administrator to D. Mastagni, Esq., Appeal of Exclusion of Standby Pay for Certain Members of the VCPFA., Dated March 25, 2022.

l. VCERA Response Exhibit L, County of Ventura, Job Code & Salary Listing by Title, for Pay Period 2022-14.

Ms. Webb noted that, as the Board was aware the VCPFA had appealed the Exclusion of Standby Pay for specific scenarios and positions, and it had been previously set for today's meeting, however, it had been taken off the calendar and in its place on the agenda was a recommendation to take possible action to amend the appeals resolution that the Board had previously passed, in order to allow the Board to refer a fully briefed appeal to a Hearing Officer for Proposed Findings of Facts, So, the recommendation today from Staff, and from VCERA’s Fiduciary Counsel was to consider the proposed amended appeals process, which was listed under VII.A.2., on the agenda which includes a red line and clean version of the proposed resolution. Also, the second part of that recommendation was that if the Board did approve the amended appeals process, staff would refer the VCPFA Appeal to a Hearing Officer, under the amended resolution, along with the party submissions.

Chair Sedell explained that the item had been brought before the Board as a result of conversations he had with some concerned members of the Board, regarding the volume of information in a disability case that they were receiving, while trying to fully go through every detail in a case, to try and make some kind of a decision that very supremely important. The Board was concerned because their decisions were impacting members lives, but VCERA had Hearing Officers that routinely heard this level of detail, and so after discussing the issue, they felt it was appropriate for the Board to consider having a hearing officer review the case, and so this was why the item brought it back in this version. This also allowed the members and the public to understand the value to them of having a hearing officer review these types of disability cases, because a hearing officer had been reviewing complicated and lengthy cases their whole life, while try and come up with some type of legal, if not quasi-legal decision, but he felt that it would be something that the Board should decide.

Trustee Goulet said that he was concerned about the related staff letter because it stated that the panel of Hearing Officers would be developed in conjunction with the Board Chair, but time and time again the Board Chair had said that the Board should separate policy from administration. So, it seemed to him that the appropriate action would be to leave the selection of the panel of hearing officer to staff to develop, so that they could return to the Board with a recommended panel for the Board to consider.

Ms. Webb noted that they originally planned to do exactly as Trustee Goulet suggested, but during a discussion with VCERA's Fiduciary Counsel, it was pointed out that the appeal she had responded to as the Retirement Administrator had issued the rejection. This meant that they could appeal it, and therefore she was now a party in the case, technically. Therefore, it would be more appropriate for her not to be the one that developed the panel of hearing officers, because it could be considered a conflict of interest.

Ms. Nemiroff pointed out that staff would have primary responsibility for selecting the panel and recommending the panel, but that actual assignment to a hearing officer would be done between her and the Board Chair, since she was not a party to the case at this time. So, there would be two steps that needed to be taken, one was the selection of the hearing officer panel, which was something that staff could be directly involved in. However, the second step would be the assigning of a particular appeal case to a hearing officer, which should be done by the Board Chair and General Counsel.

Trustee Goulet then said that if that was the way it would go down, then he had no problem with that recommendation.

Trustee Joe asked what the associated cost would be.

Ms. Nemiroff said that VCERA would be paying the same hourly rate that they normally paid to VCERA's hearing officers, but because it's on documentary evidence, it will not be nearly as expensive as their disability hearings, because they would only be sending fully briefed cases to a hearing officer.

Ms. Webb added that the hearing officer would completely review all of the materials that had been submitted by all parties and then make a ruling from the documentary evidence. So, staff could not predict how many hours that would take, but based on their experience, it would be less expensive than a typical disability case.

Trustee Joe then asked if any of the other Retirement System governed under CERL had done this as well.

Ms. Nemiroff said that San Bernardino County's Retirement System had sent at least a couple dozen of these types of cases to hearing officers, and this was how staff was able to see that the hearing officers were doing a good job with these cases, by coming back to the Board with a fully briefed summary of evidence and recommendation of findings of fact and conclusions of law. Also, most retirement systems that were processing appeals were sending these to hearing officers, and there were now a number of hearing officers with experience with these cases, that staff now felt more comfortable recommending that they be sent to a hearing officer.

Trustee Joe thanked Ms. Nemiroff for the explanation.

MOTION: Approve Proposed Amended Resolution for Approval of Appeals Process for Benefit Determinations Arising Out of the Alameda Supreme Court Decision (“Alameda Appeals”) and Refer Pending VCPFA to a Referee.

Moved by Hintz, seconded by Joe.

Vote: Motion carried
Yes: Ashby, Grass, Goulet, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: Hernandez-Garcia
Abstain: -

After the vote on the item, the Board returned to agenda item, “Annual Investment Presentation from BlackRock: Victoria Choi, Gordon Readey, Christian De Leon and Alli Leiva”.

B. Recommendation to Approve PEPRA Annual Pensionable Compensation Limits for 2023.
RECOMMENDED ACTION: Approve.

1. Staff Letter from Retirement Administrator.

2. California Actuarial Advisory Panel PEPRA Pension Compensation Limits for the Calendar Year 2023.

Ms. Webb explained that the California Actuarial Advisory Panel met each year to calculate the compensation limits for retirement for PEPRA members. Therefore, they recently meet this year, and these calculations were listed, both in the staff letter and in the attachment from Segal. They may notice that the amounts to be approved for the current year were $146,042, integrated with Social Security, so that would be General members, and the $175,250, not integrated with Social Security, would pertain to PEPRA Safety members. Therefore, the information was detailed in the calculation of the report, and so staff was recommending the items approval.

MOTION: Approve and Adopt the 2023 PEPRA Compensation Limits of $146,042 and $175,250 as Calculated by The California Actuarial Advisory Panel (CAAP).

Moved by Joe, seconded by Hernandez-Garcia .

Vote: Motion carried
Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: -
Abstain: -

C. Board Authorization of VCERA's CIO, Dan Gallagher to Accept on Behalf of VCERA the Advisory Board Seat offered for VWH Master Fund III.
RECOMMENDED ACTION: Approve.

1. Staff Letter from Chief Investment Officer.

Mr. Gallagher said the item was a request for authorization for him to accept a seat on the Advisory Board for VWH Master Fund III, with the advantages referenced in the accompanying staff letter. Generally, Abbott Capital Management would take Advisory Board seats for these types of funds, however, VCERA didn't have any exposure on advisory boards for private credit. If approved there would be an informational advantage, as well as a voting advantage for VCERA, since they could vote for their own interest, even if there was a potential conflict with other Limited Partners, which was pretty standard for LPACS. The amount of time that would be required was minimal, unless in-person attendance at a meeting was required, but even then, the only additional time required would be travel time, otherwise the commitment would only take an hour to two hours, twice a year. He also believed it was a particularly advantageous opportunity, because of the fact that it provided not only insight into this particular fund, but he would also get a little more information about what was going on in the Private Credit market, in general. There would also be an opportunity for networking with other Limited Partners that could have more detailed knowledge of potential investment opportunities for VCERA to build out the private credit program.

Chair Sedell asked how many of these advisory boards was VCERA participating in currently and how many of those did he actually need to attend or normally attend, versus those he could attend online, given that if he was required to attend in-person, it would naturally require more time to attend due to travel. So, he would just like to get a sense of how many we have involvement with and what kind of travel requirements were involved, if any.

Mr. Gallagher said he believed that VCERA had about four or maybe five funds, where VCERA held LPAC seats on advisory boards. Also, because they just went through the pandemic, all of the associated meetings had basically been held remotely. Also, in terms of the amount of time required for their seats on Pantheon's and Harbourvest's advisory boards, Pantheon's meetings were always in London, so they usually started around 5 a.m., and Harbourvest alternated between their Boston and London offices, so their meetings started between 2 a.m. and 5 a.m. Therefore, it didn't require any time away from his normal business hours, so he did not anticipate that there would be lot of additional time required for this new advisory board seat.

<u>MOTION</u>: Approve and Authorize CIO to Accept on Behalf of VCERA the Advisory Board Seat Offered for WHH Master Fund III and Authorize Attendance at Future Advisory Board Meetings.

Moved by Joe, seconded by Roberts.

Vote: Motion carried
Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Sedell
No: -
Absent: -
Abstain: -

D. Request for Authorization for VCERA CTO to Pursue a Three-Year Presidential Term on the Public Retirement Information Systems Management (PRISM) Board.
RECOMMENDED ACTION: Approve.

1. Memorandum from CTO to Retirement Administrator.

Ms. Webb pointed out that VCERA's Chief Technology Officer, Leah Oliver already served on the PRISM boar, which was the Public Retirement Information Managers national organization, and they were currently calling for candidates to run for office, and she would like to run for president. She supported this request from Ms. Oliver, and she presently spent approximately five hours a month on PRISM business, which she tends to do on her own time and this new position would require about

10 to 15 hours a month, but she did not have any reservations about it interfering with Ms. Oliver's regular work responsibilities. She believed it would be a feather in both Ms. Oliver's cap and VCERA's, since she would be in a position to review and plan their agendas, which heard things like, cyber security. Therefore, she believed it was a worthwhile endeavor and she supported Ms. Oliver's run for that office.

Trustee Goulet said that what was missing from the request was a definitive statement regarding the advantages VCERA would derive from this substantial commitment of time, which was primarily organizing conferences and finding places to these conferences. So, he felt that it was too much time spent away from VCERA, considering that VCERA's IT department was a three-person department, in which case the department head would be gone or not available about eight to ten percent of her time.

Ms. Webb noted that eight to ten percent of her time would be an overstatement, given that she tended to do most of it on her own time. Also, the associated costs for required travel was covered by PRISM. So, VCERA would not incur any costs and her obligations at this point had not caused any issues with her not completing any of her work assignments, however she understood Trustee Goulet's concerns.

Trustee Long asked Ms. Oliver to explain what the benefits would be for her to run for President of their Board, because she believed it was good for people to understand what the benefits to VCERA were for an employee to be a part of an association.

Ms. Oliver said that sitting on the PRISM board would entail a lot more than just organizing conferences. In her current role as the West District director, she was responsible for the western half of the United States and Canada, so she would represent the public pension and retirement systems who participated in PRISM, which meant she would get to interact with other public retirement systems and participate in discussions with them about the things they were currently doing in their organizations, as well as the challenges they were having, and the legal implications of things such as the Alameda Decision. She would also get the chance to interact with VCERA's current sponsors and upcoming sponsors, which gave her insight into some of the businesses that VCERA may interact with and or could potentially interact with, to determine if those are organizations that VCERA would like to do business with. PRISM also provided assistance to all of the pension systems, so she would be able to take this information back to VCERA, to use while she was making decisions regarding, managing services, cyber security, vendors selection for pension administration systems, which she would not normally have the opportunity to do if she was not working in depth with PRISM.

Ms. Webb added that the agendas of PRISM's meetings had various IT related topics and Ms. Oliver would have a more active role in choosing their agendas items and topics and agendas consisted of and be able to prioritize the issues that PRISM attendees were hearing and learning about. She would also be able to seek out and learn more about the presenters, which could only be benefit to VCERA as it expanded her knowledge.

Trustee Goulet then send that his concern was that she was already deriving the majority of the benefit as a current member of their board, which he didn't have any problem with. It was the extra time that would be spent as president; Therefore, he just didn't see the benefit that would be derived by VCERA.

Trustee Long said that she appreciated Trustee Goulet's comments because they all had their own opinions as to what the benefits were of being on a board or an association. She was currently on many boards, so she appreciated Ms. Oliver's time and effort in participating in PRISM's organization, and she actually saw a huge value in her time spent on that board. So, she wanted to thank her for serving, and she would definitely support Ms. Oliver in this endeavor.

Chair Sedell, then said that he echo the comments made by Trustee Long, because he's been involved in a number of other boards and organizations, and he always felt that it was it helped bring him growth in his various positions, as well as to the organizations he represented. Also, the fact that she was doing her job, and he did not think there was any doubt that she was a great job. So, if she felt that she had the time to take on that role, he had no qualms whatsoever so, he would also be supportive of this endeavor.

Trustee Hintz said that he couldn't imagine that the Board would ever seriously consider denying a staff member the opportunity to improve their own status, education, or image. It had never happened in his office, in 12 years he was there, and he believed everybody wanted to improve themselves, which only improved their organization.

MOTION: Approve CTO to Pursue a Three-Year Presidential Term on the Public Retirement Information Systems Management (PRISM) Board.

Moved by Hintz, seconded by Long.

Vote: Motion carried
Yes: Grass, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Sedell
No: Goulet
Absent: -
Abstain: -

E. Proposed Board of Retirement Meeting Calendar for 2023.
RECOMMENDED ACTION: Approve.

1. Staff Letter from Retirement Administrator.

2. Proposed Board Meeting Calendar for 2023.

Ms. Webb said the VCERA's bylaws indicate that meetings shall generally be held on the first and third Monday of each month. For the last several years, there has been only one meeting in April and December. Also, an effort is made to avoid back-to-back meetings and holidays to try to ensure enough attendance for a quorum.

Trustee Long asked if the Board would be able to cancel a meeting or put a special meeting on calendar if necessary. Ms. Webb confirmed the Board did indeed have this discretion.

Ms. Webb expressed her preference in having fewer meetings per year, because though it made for longer meetings, it was often difficult for staff prepare for two meetings a month.

Chair Sedell noted that the Board had had this conversation before and the dilemma they had was trying to ensure that enough board members could stay the whole day to ensure a quorum. He would like some kind of commitment from all the board members that they would be able to stay through an entire day if they chose to combine more meetings.

Trustee Roberts said he was in favor of combining meetings to once per month as it would be easier to commit the time away from his work responsibilities.

Trustee Ashby said it seemed more practical to give up one day a month rather than two, especially considering that sometimes both meetings in that month consume most of the day anyway.

Trustee Hintz said that the Board may need to call for special meetings to deal with problems that could not wait up to four weeks until the next meeting. He said he is in favor of keeping the two meetings per month, as a general rule.

Chair Sedell said that he had concerns with creating more committees to take the work of the Board away from the Board.

Trustee Roberts made a motion to request that staff bring back two different versions of the calendar for 2023. One with the traditional 2 meetings a month, and the other with primarily one Board meeting per month.

Trustee Long said she would second the motion, but she wanted to note she did not want combined meetings to slow down the Board's ability to hear the disability cases for members.

<u>MOTION</u>: Bring Back a Proposed 2023 Board Traditional Calendar and a Calendar with One Board Meeting a Month.

Moved by Roberts, seconded by Long.

Vote: Motion carried
Yes: Hernandez-Garcia, Long, Roberts, Sedell
No: Grass, Goulet, Joe
Absent: -
Abstain: Hintz

F. Proposed 2023 Calendars of Investment Presentations and Investment On-Site Due Diligence. **RECOMMENDED ACTION: Approve.**

1. Staff Letter from Chief Investment Officer.

2. Proposed 2023 Board Calendar for Investment Presentations.

3. Proposed 2023 Board Calendar for On-Site Due Diligence.

Mr. Gallagher said that he was unsure if the Board wanted to adopt the proposed 2023 Calendars for Investment Presentations and Investment On-Site Due Diligence, as these calendars would be subject to Board meeting calendar that that they had decided to bring back at the next meeting. They may want to consider postponing this item as well.

Chair Sedell noted that the investment presentations would end up being pretty much the same, but unless there was an objection, he would urge staff to bring this item back at the next meeting as well.

Chair Sedell said that the Board would be going into their Closed Session meeting, but before they did, they would hear the rest of the agenda. The Board would not be returning to the public meeting because they planned to adjourn at the end of the Closed Session.

After the discussion on this item, the Board advanced to agenda item, IX., "Informational".

VIII. <u>CLOSED SESSION</u>

A. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION Significant Exposure to Litigation Pursuant to Paragraph (2) of Subdivision (d) of Section 54956.9: One (1) Case: Administrative Appeal Filed by VCPFA re Exclusion of Standby Pay.

B. PUBLIC EMPLOYEE PERFORMANCE EVALUATION
Title: Chief Investment Officer
(Government Code section 54957(b)(1))

IX. INFORMATIONAL

A. Notice of Nuveen to Acquire Arcmont Asset Management.

B. CALAPRS Advanced Course in Retirement Plan Administration.

C. Western Asset Management 134th Rose Parade Invitation.

Mr. Gallagher said the notice from Nuveen regarding the acquisition of Arcmont was preliminary. Also, NEPC had reviewed and was supportive of it, and would continue to monitor the transaction.

X. PUBLIC COMMENT

None.

XI. STAFF COMMENT

Ms. Webb updated the Board on the 2 recruitments for the VCERA's vacant positions. Later in the week, she and Ms. Oliver would be interviewing candidates for the Senior Information Technology Specialist position. The following week, applicant interviews for VCERA's Chief Operations Officer (COO) position were scheduled.

XII. BOARD MEMBER COMMENT

None.

The Board then ended the Public Meeting, before entering the Closed Session meeting.

XIII. ADJOURNMENT

The Chair said the Board would adjourn the meeting at the conclusion of Closed Session.

Respectfully submitted,

Linda Webb

LINDA WEBB, Retirement Administrator

Approved,

____
MIKE SEDELL, Chair

LaSalle Value Partners US

Presentation to Ventura County Employees' Retirement Association - LaSalle Income & Growth Fund VIII

January 23, 2023

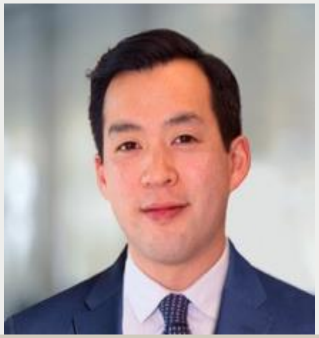
Today's Speakers

Matthew Walley

Senior Managing Director
Investor Relations

- Mr. Walley is a Senior Managing Director in the Investor Relations team. He is responsible for serving institutional clients in the Western US and brings over 20 years of marketing and client services experience to this position.

- Mr. Walley is based out of the San Francisco office and is a member of the Pension Real Estate Association, the State Association of County Retirement Systems (California) and the California Association of Public Retirement System.



Joseph Munoz

President of LVP US,
Americas Co-CIO

- Mr. Muñoz is responsible for the strategy, operations, investor relationships and investment activities of the LVP US Series. Since joining the firm, he has completed over $8B in transactions across property types and has also held roles where he was responsible for asset management, financings, dispositions and capital formation.

- Mr. Muñoz is based in Chicago. He also serves as the Co-CIO of the Americas and a member of LaSalle's Americas Investment Committee and Management Board.

LaSalle®

LaSalle Investment Management is one of the world's leading real estate investment managers. We build long-term and trusted relationships with our clients – wherever they are and wherever they invest.

With over 40 years of experience, LaSalle manages capital on behalf of a diverse client base, representing pension funds, insurance companies, sovereign wealth funds, endowments and high net worth investors from across the globe. We offer a range of products, investing in commingled funds, separate accounts, private equity and debt and real estate securities. We also manage co-investments, strategic partnerships, joint ventures and club structures targeting large-scale transactions.

$82B	950+	500	23	15
Global AUM	Employees	Institutional clients	Global offices	Countries

Information provided above is as of June 30, 2022.

Independent subsidiary of Jones Lang LaSalle Inc.

One of the world's largest real estate services companies

Jones Lang LaSalle Incorporated

$19.4 billion in total revenue in 2021

Listed on the New York Stock Exchange (NYSE: JLL)

Fortune 500 company

Named one of the "World's Most Ethical Companies" for 15 consecutive years (2007-2021) by Ethisphere Institute[1]

One of FORTUNE Magazine's 'World's Most Admired Companies' four years in a row[2]

LaSalle

$79 billion in assets under management[3]

Wholly owned, operationally independent subsidiary of Jones Lang LaSalle Incorporated

Solely focused on real estate investment management

Direct and indirect private real estate equity, private real estate debt and public real estate securities

JLL

90,000+ employees in 300 offices in over 80 countries

- Capital Markets
- Global Corporate Finance
- Tenant Representation
- Land Sale and Acquisitions
- Valuation and Appraisal
- Property Management
- Agency Leasing
- Facility Services
- Retail Services
- Project Management

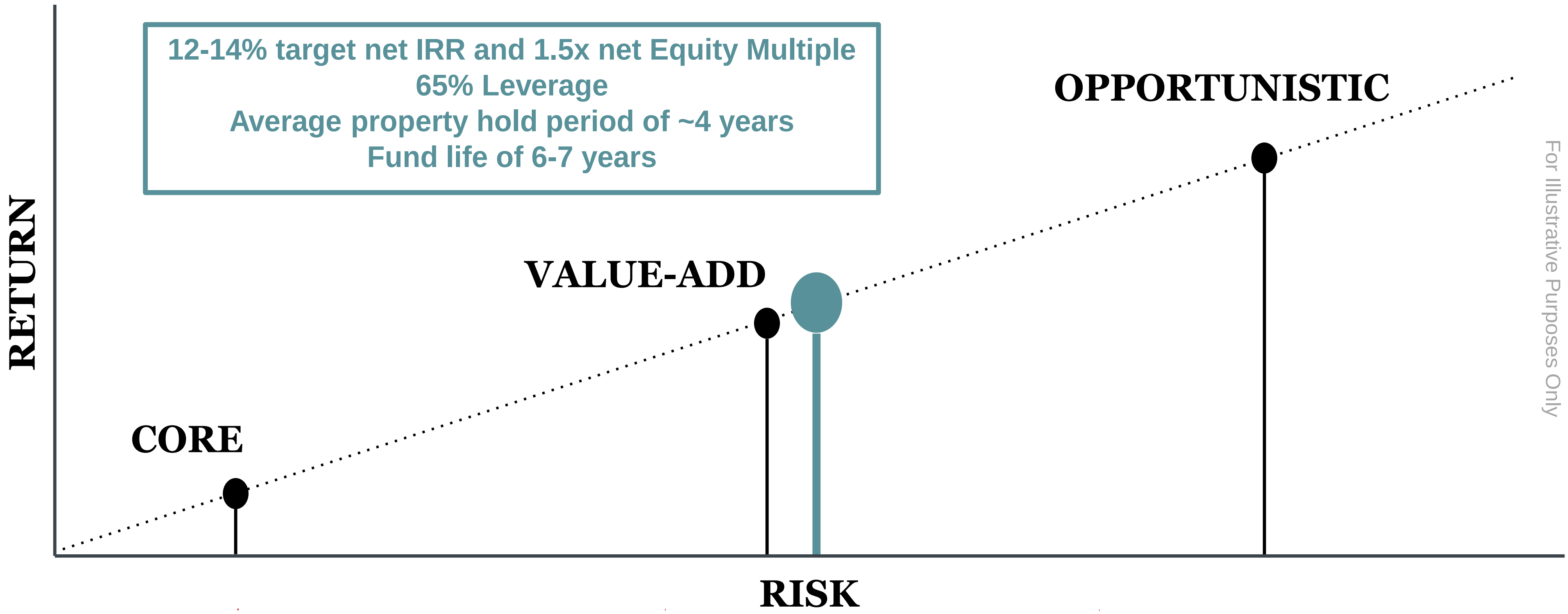
As of September 30, 2022.

[1] https://www.worldsmostethicalcompanies.com/

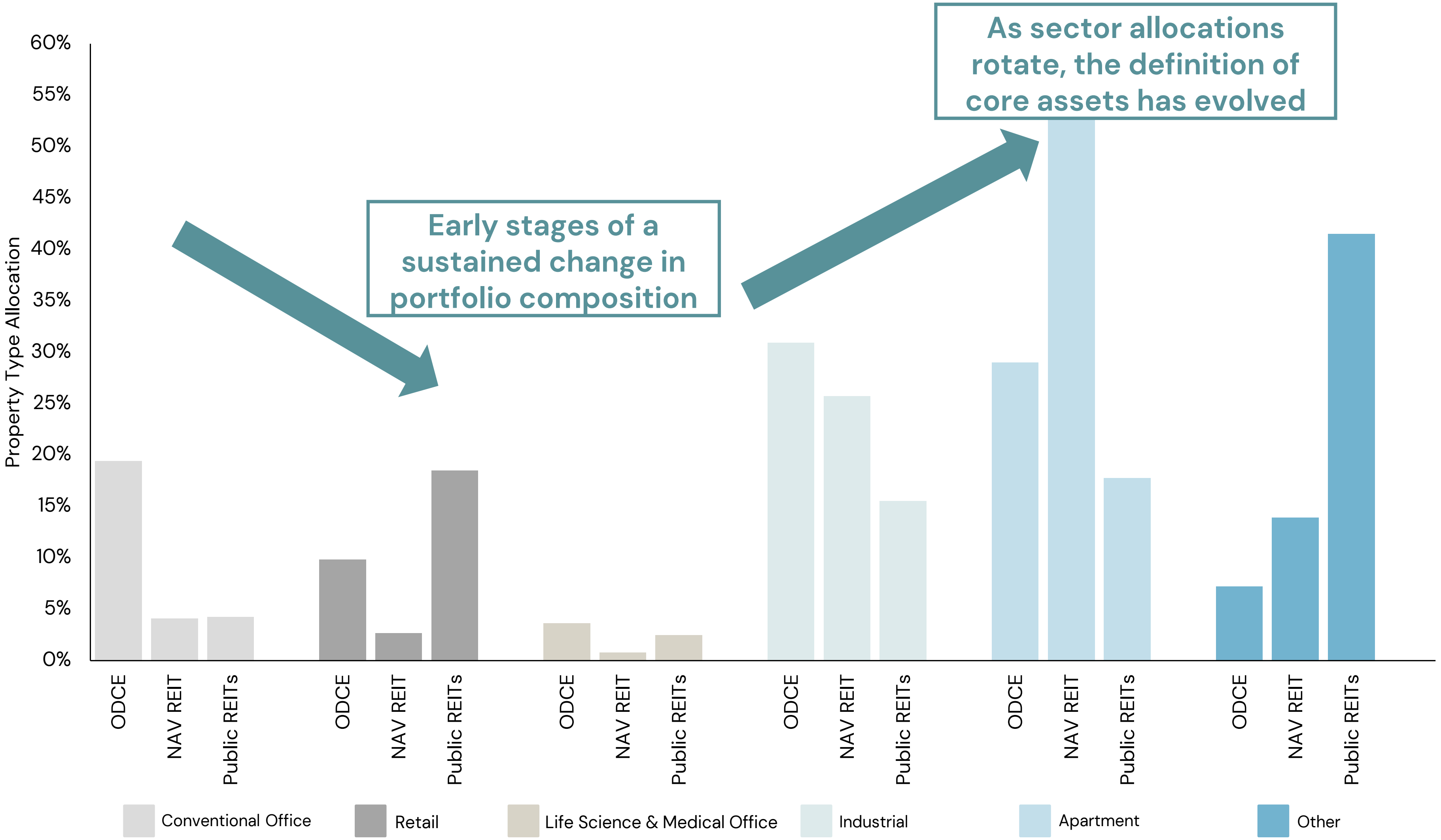
[2] http://fortune.com/worlds-most-admired-companies/

[3] This number reflects the assets under management of all of LaSalle's investment advisory affiliates.

LaSalle Income & Growth Fund VIII Risk/Return Objective

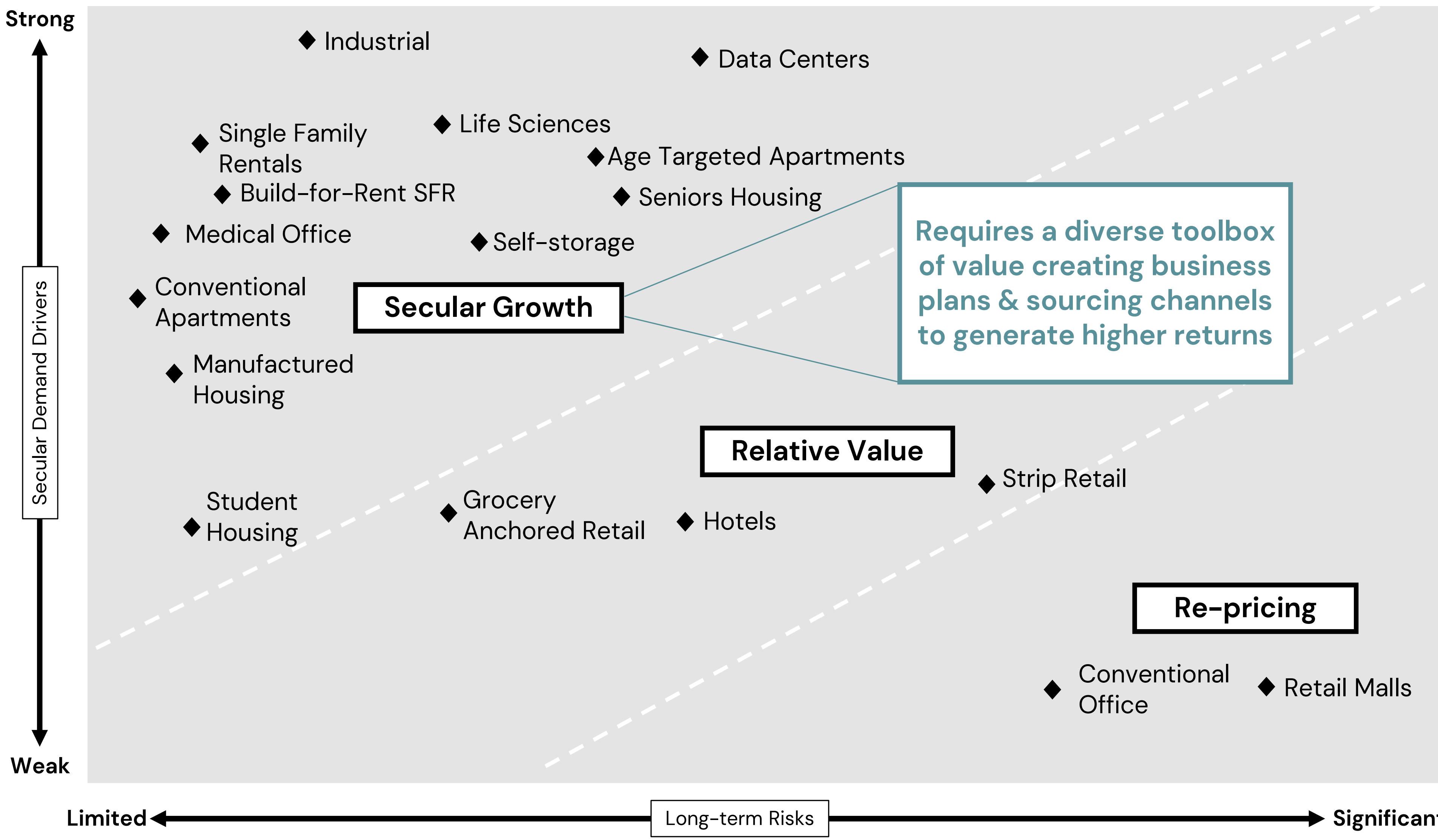


Core real estate: rotation of sector allocation



Source: NCREIF, Nareit All REITs Index, LaSalle Investment Management. NCREIF data as of Q3 2022, Nareit data as December 30, 2022. NTR Data is from Company Reports based on most recent available as of January 10, 2023 and is mostly as of September 30, 2022.
Note: No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Focus on Secular Growth US Real Estate



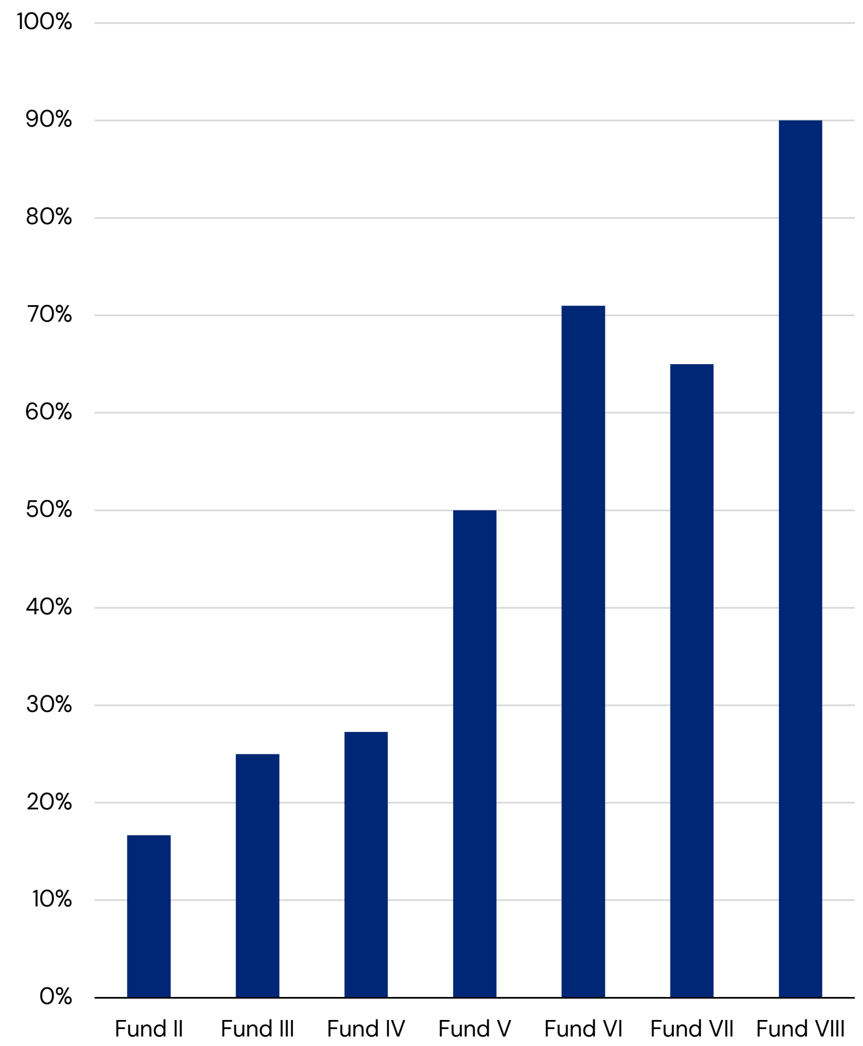
Source: LaSalle Investment Management. Updated May 2022.
As based on market assumptions, opinions and research by LaSalle's Research and Strategy group at the time of this presentation.
No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

LaSalle's advantage: Diverse methods to access investment opportunities

Direct	25+ person team focused on new acquisition activity
Joint Venture	Relationship based sourcing through a JV partner network fostered over the Series' 26-year operating history
Strategic Exclusivity	Co-GP programmatic JVs, operating platform & pursuit cost arrangements create first rights on investment pipeline (examples: BLVD SFR, Sterling Bay, etc.)

Persistent Access to Opportunity
Allows for more targeted acquisitions and limited competition situations

Off-Market & Negotiated Investments



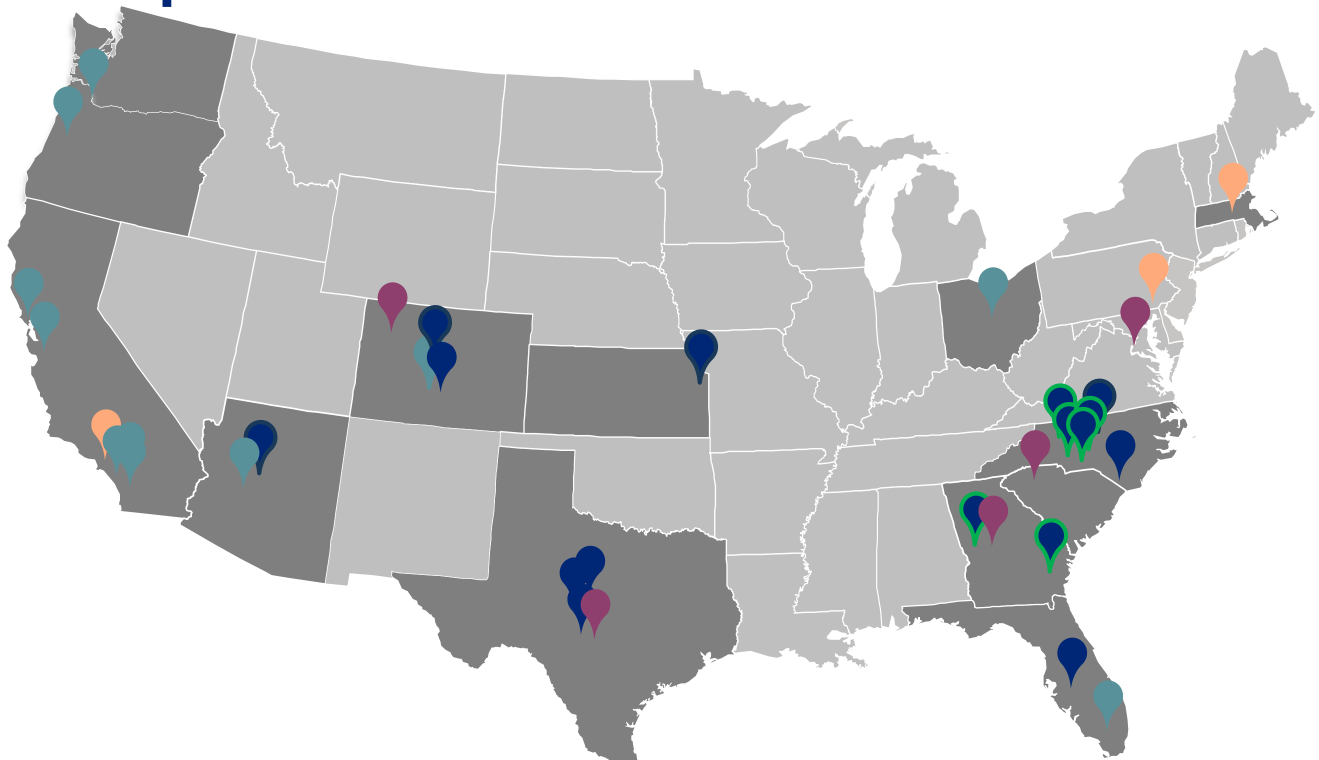
The above investment summary is provided as an example of the type of actions being pursued by LaSalle to execute its strategy for the Fund, which is subject to change without notice. No investment strategy or methodology can reduce all risks of investing in the Fund and a loss of investor capital is possible.
This is for informational purposes only. Past performance does not predict future returns.

Execution through diverse property business plans

Market / Sector conviction	Leverage research capabilities and market knowledge to identify assets positioned for outsized rent growth and/or improved exit liquidity
Undervalued basis	Pursue opportunities with attractive pricing and/or structured entry points
Asset repositioning	Invest in property improvements or make operational adjustments to increase rents and propel NOI growth
Current cash flow	Utilize financing as a tool to generate attractive stabilized cash yields
Risk mitigated development	Capture development cap rate “spread” while minimizing risk around entitlements and development costs
Portfolio aggregation	Build portfolios of small balance assets to exit as a large portfolio at a premium

The information on this page is provided for illustrative purposes only and is subject to change without notice. No investment strategy or methodology can reduce all risk.

Portfolio Map



Residential

Juncture
Alpharetta, GA
Acquired 10/19
Sold 12/21

Ardmore Apartments
Various Southeast
Acquired 2020
Sold 2022

Sage Plum Creek
Kyle, TX
Acquired 9/20

Sage Mesa
Phoenix, AZ
Acquired 12/20

Avenida Loveland
Loveland, CO
Acquired 4/21

BLVD SFR Venture
Various US
Acquired 2021/2022

1700 Place
Charlotte, NC
Acquired 5/21

Wolf Creek
Overland Park, KS
Acquired 12/21

Ansley Park Apartments
Wilmington, NC
Acquired 7/22

Deer Creek
Fort Worth, TX
Acquired 7/22

Crest Mobile Estates
Colorado Springs, CO
Acquired 8/22

Southward MHC
McKinney, TX
Acquired 8/22

Industrial

Parc Santa Fe
Denver, CO
Acquired 12/19

Lathrop Gateway Ph. III
Lathrop, CA
Acquired 6/20

Coffee Creek Industrial
Portland, OR
Acquired 12/20

Vancouver Logistics
Vancouver, WA
Acquired 1/21

Napa 55
Napa, CA
Acquired 8/21

Lathrop Gateway Ph. II
Lathrop, CA
Acquired 8/21

Groveport South Logistics
Groveport, OH
Acquired 9/21

Bickman Industrial
Glendale, AZ
Acquired 12/21

Ethanac Menifee
Menifee, CA
Acquired 12/21

Industrial Outdoor Storage Venture
Various
Acquired 2022/2023

Life Science & Office

4 Hutton Centre
Santa Ana, CA
Acquired 6/19

One Kenmore Square
Boston, MA
Acquired 5/21

3801 Chestnut
Philadelphia, PA
Acquired 1/22

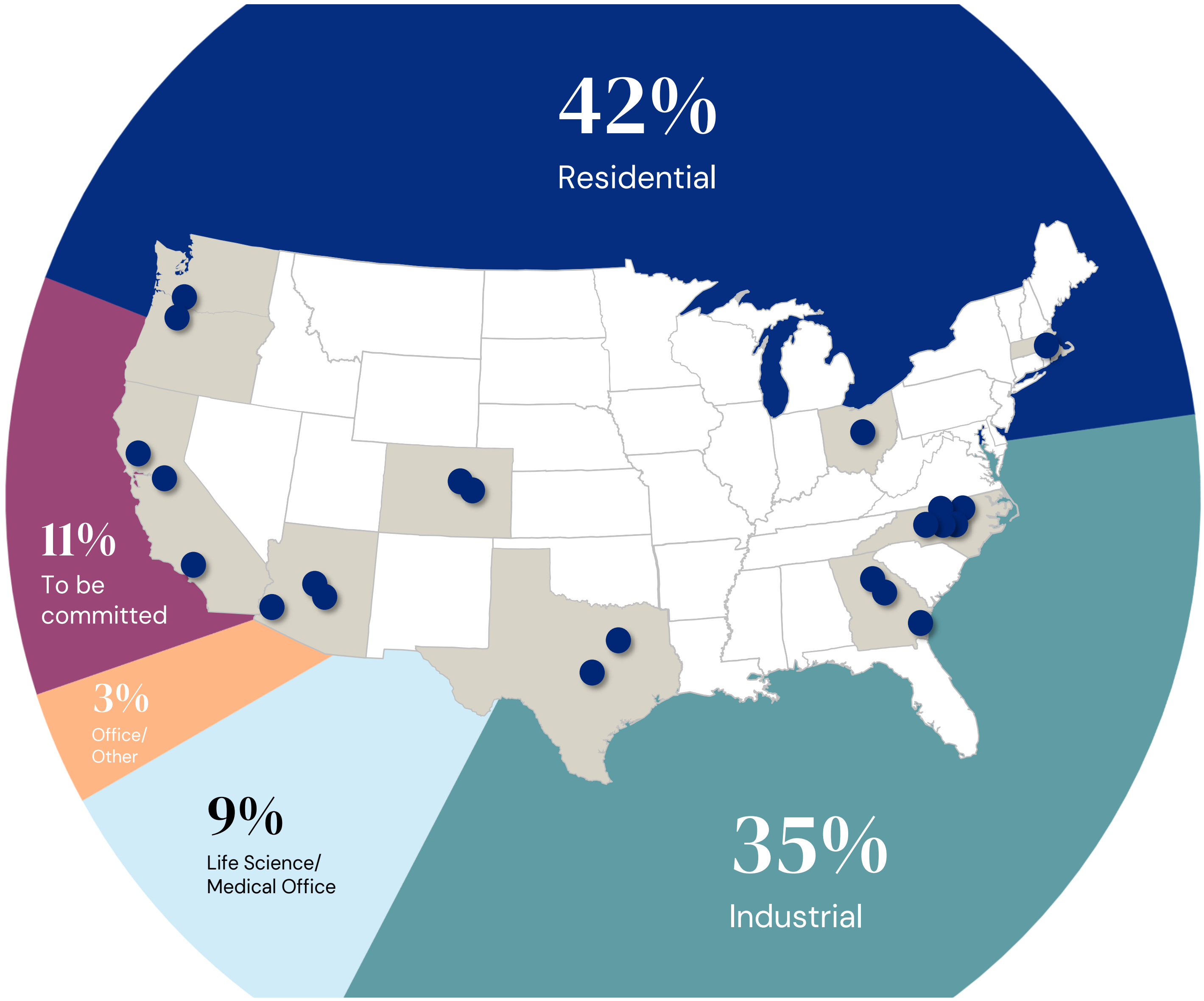
Pipeline

Industrial Outdoor Storage Venture
Various

Manufactured Housing Programmatic Venture
Various

Preferred Equity Modular Apartments
Greenville, SC

Fund VIII Portfolio Construction



Information as of September 30, 2022 based on total committed capital including approved deals by investment committee of the Fund. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Investment Snapshot

VCERA

60%

of Equity Commitments Called

$60 of $100M

VCERA

89%

of Equity Capital Committed

$89 of $100M

VCERA

$25.2M

Cumulative Distributions

(as of Nov 2022)

I&G VIII

49%

Portfolio LTV as of Q3 2022

I&G VIII

97%

of Investment Period Elapsed
35 of 36 months

I&G VIII

12%+ | 1.5x

Target Net IRR | Equity Multiple

VCERA

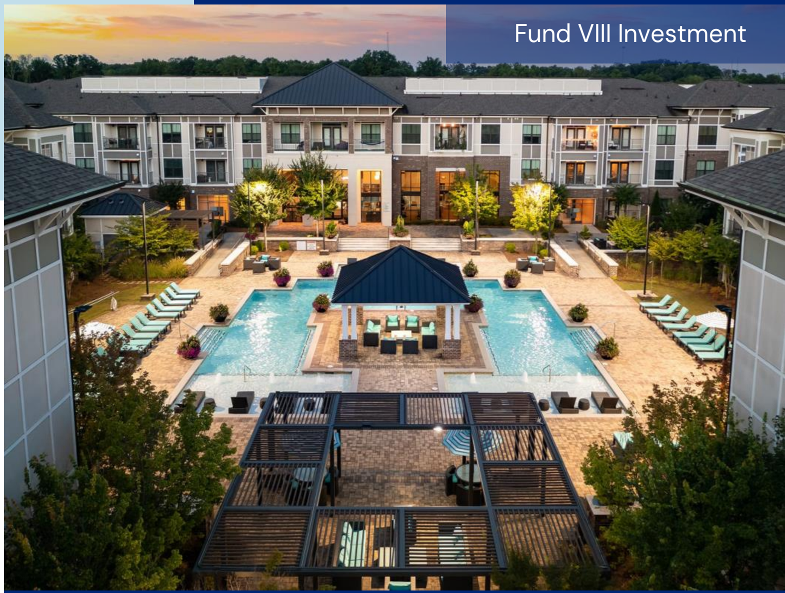
Fund name:	Income & Growth Fund VIII	Distributions to date (incl. Nov. '22 dist.):	$25,162,914
Vintage year:	2020	Current value:	$48,891,867
Date of commitment:	1/29/2019	Net IRR:	21.0%
Commitment amount:	$100,000,000	DPI multiple (incl. Nov. '22 dist.):	0.42
Capital called to date:	$60,067,783	TVPI multiple:	1.20
Outstanding commitment:	$39,932,217	As of:	9/30/2022
Call ratio:	60%		

Juncture Apartments

- Off market acquisition of a 91% **leased apartment project** in north Atlanta, a market which LaSalle identified as an over-weight investment target profile
- LaSalle's **submarket level conviction** around growth in rents and occupancy allowed it to underwrite through both new supply and transaction-size driven liquidity concerns
- **Attractive financing** (60% LTV at L+135)[1] provided durable leveraged income
- 2021 **rent growth of 35% and highly liquid capital markets** for Sunbelt multifamily allowed for earlier realization than projected

	Sourcing
	Direct
✓	**Joint Venture**
	Strategic Exclusivity

	Business Plan
✓	**Market/Sector Conviction**
✓	**Undervalued Basis**
	Asset Repositioning
✓	**Current Cash Flow**
	Risk Mitigated Development
	Portfolio Aggregation



Location	**Alpharetta (Atlanta), GA**
Size	**560 Units**
Purchase price	**$159M ($284k / unit)**
Year built	**2016**
Acquisition date	**Q4 2019**
Sale date	**Q4 2021 (2.25 years)**
Realized Gross IRR / EM	**38.3% / 2.0x**

Past performance does not predict future returns.

Fund VIII refers to the LaSalle Income & Growth Fund Series Fund VIII.
Information provided above is as of September 30, 2022. Gross returns do not reflect advisory fees, carried interest or other fees, which have the effect of reducing returns to investors.
$ refers to United States Dollar. Returns may increase or decrease as a result of exchange rate fluctuations.

Ardmore Apartments

- **Portfolio recapitalization** negotiated off-market directly with a family-owned developer who had never transacted with institutional capital
- Highly structured transaction provided **downside basis protection**
- **Conviction around southeast multifamily** rent growth and rising investor interest in secondary locations within these markets offset unfavorable, soon maturing in-place debt and low barriers to entry
- **Identified and oversaw "institutionalization" of partner's sub-optimal in-place leasing** and operations
- **Four properties sold in 2022**. All equity in the remaining asset has been returned through refinancing. This final asset is under contract for sale and the buyer has made a non-refundable deposit in advance of expected closing in Oct 2022

Sourcing	
	Direct
✓	**Joint Venture**
	Strategic Exclusivity

Business Plan	
✓	**Market/Sector Conviction**
✓	**Undervalued Basis**
✓	**Asset Repositioning**
	Current Cash Flow
	Risk Mitigated Development
	Portfolio Aggregation

Location	**Various NC and GA**
Size	**1,322 Units**
Purchase price	**$184M ($139k / unit)**
Year built	**2015-2020**
Acquisition date	**Q1-Q4 2020**
Sale dates	**Q1-Q4 2022**
Realized Gross IRR / EM	**75.2% / 2.7x**

Past performance does not predict future returns.

Fund VIII refers to the LaSalle Income & Growth Fund Series Fund VIII.
Information provided above is as of September 30, 2022. Gross returns do not reflect advisory fees, carried interest or other fees, which have the effect of reducing returns to investors.
$ refers to United States Dollar. Returns may increase or decrease as a result of exchange rate fluctuations.

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Hong Kong	Munich	Shanghai	

lasalle.com

PGIM REAL ESTATE

U.S. CORE FUND

Ventura County Employees' Retirement Association

January 23, 2023

Table of Contents

PGIM REAL ESTATE REPRESENTATIVES

JOANNA MULFORD

U.S. Core Fund Senior Portfolio Manager

KAYA MURRAY

U.S. Core Fund Assistant Portfolio Manager

STEVE MOEN

Business Development

50 Years of CORE Real Estate

Important Note on U.S. Core Fund SA, U.S. Core Fund LPs, U.S. Core Fund Composite: U.S. Core Fund SA and the U.S. Core Fund LPs are separate investment vehicles with separate terms (including fee structures) that invest in substantially the same assets. U.S. Core Fund LPs means U.S. Core Fund LP and U.S. Core Fund PF LP, collectively, which are investment vehicles formed in 2013 and 2022, respectively, to invest alongside of U.S. Core Fund SA. The performance of each of U.S. Core Fund SA and the U.S. Core Fund LPs, on a separate basis, may differ materially from U.S. Core Fund Composite. For more information about the performance, returns after the deduction of Manager Compensation/Fees, and other data regarding the fund in which they are invested (i.e., U.S. Core Fund SA or the U.S. Core Fund LPs, as applicable), investors should review the **U.S. Core Fund SA, U.S. Core Fund LPs, and Net Returns Addendum** in the Appendix. Investors should also consult the statements and reports provided to them pursuant to their investment agreements, including their individual client statements, financial statements and quarterly reports, in each case, which include data exclusively related to the U.S. Core Fund LPs or U.S. Core Fund SA, as the case may be. Unless otherwise stated, photos of properties throughout this deck reflect U.S. Core Fund's current assets.

PGIM REAL ESTATE PLATFORM

01

PGIM REAL ESTATE

At-A-Glance

50+ Years Real Estate Investment Experience	**$204B** AUM/ AUA[1]
1,100+ Professionals across 35 cities worldwide	**5,900+** Owned and Financed Properties[2]
Net Zero By 2050[3]	**Top 3** Global Real Estate Investment Manager[4]
Top 10 Commercial Real Estate Lender[5]	**#2** Capital Raised for Debt Strategies[6]

Past performance is not a guarantee or a reliable indicator of future results.

Note: Cities listed represent PGIM Real Estate's global presence for debt and equity professionals as of 9/30/22. All other data as of 9/30/22 and refers to PGIM Real Estate globally unless otherwise noted.

1. Gross AUM/AUA; net AUM is $133B and AUA is $47B.
2. Does not include properties where we service a loan only.
3. PGIM Real Estate is committed to the Urban Land Institute's (ULI) Greenprint Center for Building Performance Net Zero Carbon Goal to become Net Zero by 2050 for our global portfolio of managed properties.
4. PGIM Real Estate is the third largest real estate investment manager (out of 77 firms surveyed) in terms of global real estate assets under management based on 'Pensions & Investments' Top Real Estate Managers list published October 2022. This ranking represents global real estate assets under management by PGIM Real Estate as of 6/30/22. Participation in the ranking is voluntary and no compensation is required to participate in the ranking.
5. PGIM Real Estate is the tenth largest commercial real estate lender (out of 126 firms surveyed) in terms of production based on the 2021 Mortgage Bankers Association Annual U.S. Origination Rankings published in February 2022. This ranking represents originations production volume from 1/1/21-12/31/21. Participation in the ranking is voluntary and no compensation is required to participate in the ranking.
6. PGIM Real Estate is ranked second out of 50 firms published in PERE's Real Estate Debt 50 third party capital raised survey published in May 2022. This ranking represents third party capital raised for real estate debt strategies from 1/1/17-12/31/21. Participation in the ranking is voluntary and no compensation is required to participate in the ranking.

U.S. Equity Investment Platform

PGIM REAL ESTATE

Resources and Experience

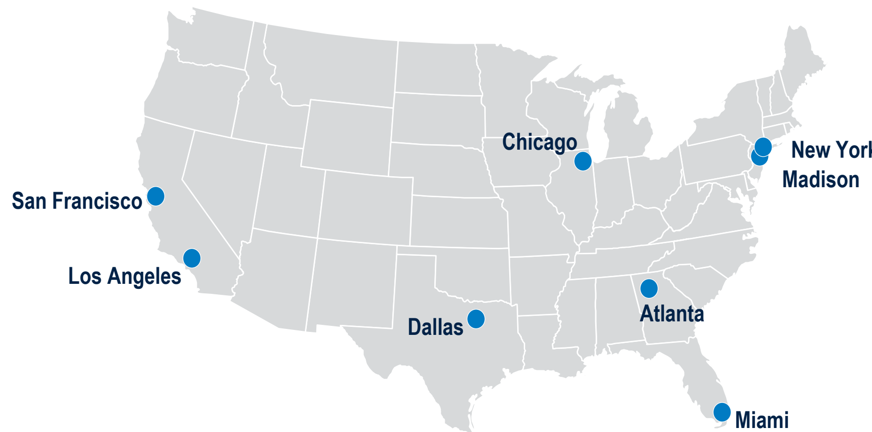
$66B
AUM[1]

8
Cities

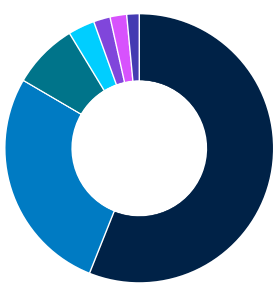
50+
Year History

188
Professionals[2]

Cities

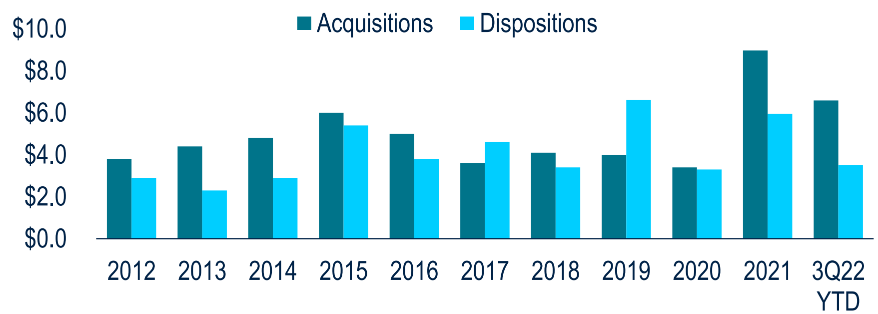


Distribution by Fund (Based on AUM)[1]



56.1%	U.S. Core Fund
27.4%	U.S. Core Fund II
7.9%	U.S. Core Fund III
3.2%	Single Client Accounts
2.0%	Impact & Responsible Investing
2.0%	Senior Housing
1.5%	Other Commingled Funds

U.S. Transaction History ($ Billions)[3]



Past performance is not a guarantee of future results.

Note: As of September 30, 2022, unless otherwise noted. Percentages may not sum to 100% due to rounding. [1] Net U.S. Equity AUM equals $49 billion; note this does not include PGIM Real Estate debt assets and does not include GRES AUM/AUA. [2] As of June 30, 2022. Allocated full-time employees. [3] Includes closed acquisitions and closed dispositions data in the U.S., excluding debt strategies

REF: 006438

MARKET OUTLOOK

02

U.S. Market News and Outlook – Summary

Value Losses on the Horizon, Recession Now Expected

- Economic growth is slowing as monetary policy tightens, compounded by fading fiscal stimulus.
- Aggressive interest rate hikes due to persistent inflation make a Fed-induced recession in 2023 the likeliest outcome, pressuring consumers and weakening labor markets.
- Tenant demand is moderating across several property types due to affordability constraints and delayed business expansions.
- Pressure on NOIs is intensifying and expectations are being revised lower across property types. The additional impact of interest rate hikes on cap rates will induce value declines beginning in the latter months of 2022.

Investors Staying on the Sidelines

- Pace of transaction activity has dropped significantly as investors digest changing environment.
- Debt availability is declining. Spreads have widened and debt service coverage ratios have risen, reducing available proceeds even for stabilized assets.
- Rising interest rates have caused transactions cap rates to rise, particularly for industrial, apartment and other residential sectors.

NOI Growth Expectations Being Revised Lower

- **Apartment:** Vacancies are rising from historic lows, renter demand easing as rent growth outstrips incomes.
- **Industrial:** Demand easing from record pace while supply pipelines have surged. Dense, coastal markets remain best positioned.
- **Office:** Tenant demand subdued and net downsizing likely, pressuring effective rents lower.
- **Retail:** Pace of recovery to slow as consumer spending abates amid economic slowdown.
- **Senior Housing:** Demand and occupancies have firmly turned the corner, driving recovery in rents and NOIs.
- **Storage:** Rent growth moderating but conditions remain healthy.
- **Student Housing:** Occupancies close to historical highs, outlook best near most competitive schools.

Source: PGIM Real Estate. As of October 2022.

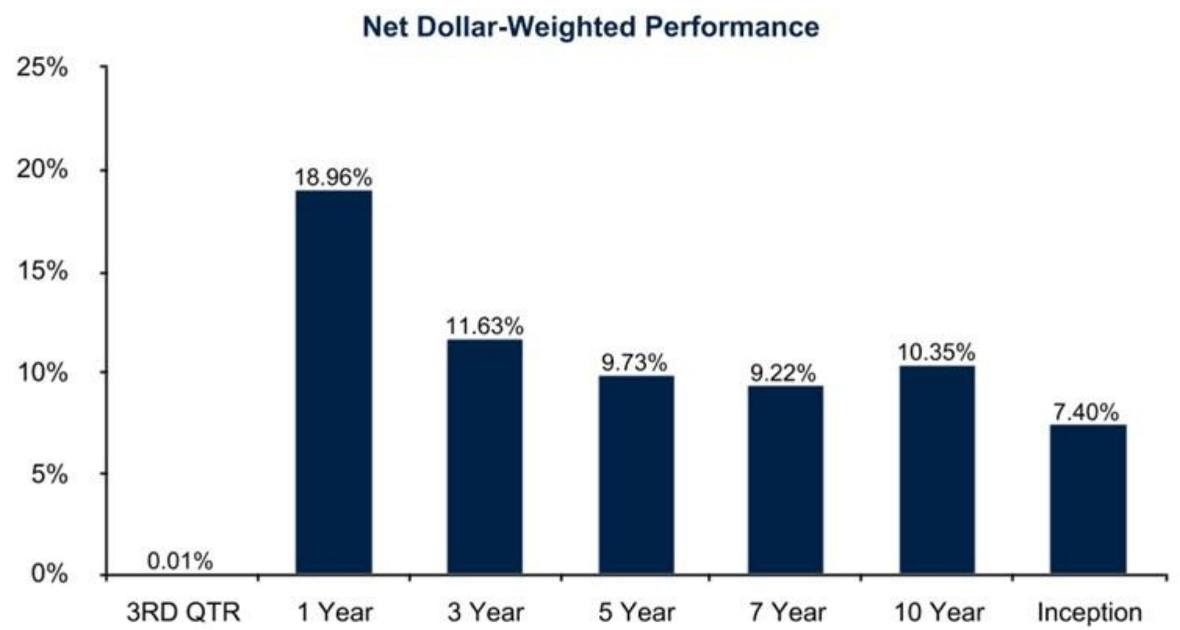
U.S. CORE FUND STRATEGY

03

Ventura County Employees Retirement Association

U.S. Core Fund SA Assets as of September 30, 2022

Investment Details	
Contributions (03/31/2005 Inception Date)	
03/31/2005	$40,000,000
09/30/2005	$20,000,000
TOTAL CONTRIBUTIONS	**$60,000,000**
Investment Earnings	
Investment Income	$93,499,257
Appreciation	$81,217,178
TOTAL INVESTMENT EARNINGS	**$174,716,435**
Disbursements	
Withdrawals	$0
Deducted Fees	($4,746,323)
Cash Flow Distributions	$0
TOTAL DISBURSEMENTS	**($4,746,323)**
Market Value	**$229,970,113**



Operating Cash Flow		Capital Commitments	
Total Distributed	$0	Undrawn Commitments	$0
Total Reinvested	$74,742,604		
Current Election	Reinvesting		
Current Cash Flow	$1,540,896		

Note: Past performance is not a guarantee or reliable indicator of future results. Numbers are rounded to the nearest dollar.

Defining Core Since 1970

Income Focus with Dynamic Core Investment Strategy

First
U.S. Open-End Core Fund in the NFI-ODCE Index[1]

Top 3
ODCE Fund with $37B AUM[2]

Favorable
Sector Allocations

High Occupancy Generating
Stable Income

Long-Term
Outperformance[3]
For 3, 5, 10 and Since Inception Periods

Transparent / Core
Risk Profile

Past performance is not a guarantee of future performance. An investment in the Fund is speculative and involves risk, including but not limited to those related to real estate investments. The Fund's offering memorandum includes a more in-depth discussion of these and other risks and should be reviewed prior to any investment in the Fund. [1] Source: NFI-ODCE Index. [2] As of September 30, 2022. Composite GAV: $36.9B, NAV: $30.0B. U.S. Core Fund is the third largest fund (out of 26 funds) based on gross asset value and net asset value in NCREIF's NFI-ODCE Index as of September 30, 2022. Participation in the ranking is voluntary and no compensation is required to participate in the ranking. [3] NFI-ODCE benchmark. See page 18 for more details on returns.

REF: 006438

U.S. Core Fund's Team and Platform Resources

Complementary and Diverse Team with Scaled Platform

U.S. Core Fund's Portfolio Management Team

JOANNA MULFORD
Managing Director
Senior Portfolio Manager
RE Experience: 25

JAMES GLEN
Managing Director
Portfolio Manager
RE Experience: 22

KAYA MURRAY
Executive Director
Assistant Portfolio Manager
RE Experience: 17

LEXI WOOLF
Vice President
Assistant Portfolio Manager
RE Experience: 12

HERNAN CARREIRA
Executive Director
Portfolio Analytics
RE Experience: 18

INVESTMENT RESOURCES[1]

95	59	13
Asset Management[2]	Transactions[2]	Research

Additional Resources: Portfolio Analytics, Risk & Compliance, Investment Committee, Advisory Councils, Client Services, Fund Operations

[1] Investment Professionals headcount as of September 30, 2022. [2] These figures represent U.S. Real Estate Equity.

Current Positioning / Strategy

PGIM REAL ESTATE

Well Positioned for Uncertain Market and Long-Term Outperformance

Dynamic Core
Remaining Active

Prudent **Risk Positioning** and Liquidity Management

Durable Income: Emphasis on Asset Management and Property Fundamentals

Attractive **Sector Allocations:** Overweight Alternatives / Underweight Office

Selective Investing: Focus on Alternatives, Residential and BTC Industrial

Targeted Market and Location **Diversification**

Note: **There is no guarantee that these objectives will be achieved.**

U.S. Core Fund Composite[1] Snapshot

$36.9B
Gross Asset Value

$30.0B
Net Asset Value

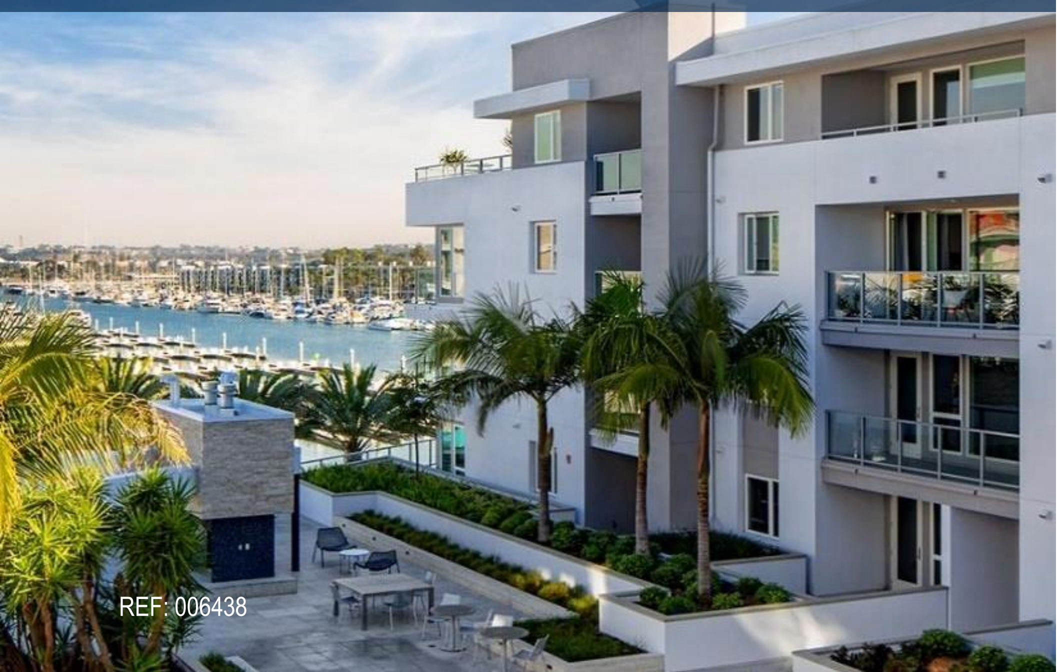
$991M
Cash Balance

93%
Leased Portfolio[2]

291
Investments

5 Star
GRESB Rating 2021

Neptune Marina
Los Angeles



RISK METRICS[3]	3Q22	GUIDELINE
Stabilized Properties	91.3%	≥ 75%
Leverage Ratio	19.5%	≤ 35%

TRANSACTIONS[4]	3Q22	YTD
Acquisitions	$59M	$1,740M
Dispositions	$174M	$528M

CLIENT ACTIVITY[5]	3Q22	YTD
Contributions	$507M	$1,857M
Withdrawals	$257M	$560M
Distributions	$113M	$334M

QUEUES	3Q22
Unfunded Commitments	$229M
Redemption Queue	$1,716M

Data as of September 30, 2022.
[1] "Gross Asset Value," "Net Asset Value" represents the value of the assets held by U.S. Core Fund SA and the U.S. Core Fund LPs without netting out U.S. Core Fund SA's respective interest therein. The U.S. Core Fund LPs' net asset value is $13,404M. [2] Includes all properties that have a certificate of occupancy. [3] Stabilized properties are a percentage of Fund GAV at U.S. Core Fund's effective ownership share. Leverage ratio is based on T-1 leverage. [4] Represents combined activity held by U.S. Core Fund SA and the U.S. Core Fund LPs. Transactions based on Composite's share of gross activity. [5] Dividends reinvested as Contributions totaled $87M for the quarter and $259M YTD. Total available Cash for Distribution totaled $201M for the quarter and $593M YTD.

Risk Positioning

Well Positioned for an Uncertain Market Environment

Strong Balance Sheet

Healthy Risk Metrics

Modest Pipeline

	Pre-Global Financial Crisis	Pre-COVID-19	Current Positioning (Q3-22)	
	1Q-08[1]	4Q-19[1]	U.S. Core Fund	NFI-ODCE
BALANCE SHEET				
GAV / NAV	\$15B / \$12B	\$27B / \$21B	**\$37B / \$30B**	\$356B / \$280B
Cash Position (% NAV)	\$42M (0.3%)	\$1.0B (5.0%)	**\$1.0B (3.3%)**	\$5.9B (2.1%)
Deal Gross Pipeline Funding (% GAV)	\$2.6B (17%)	\$1.0B (4%)	**\$1.1B (3%)**	N/A
Total Leased %	90.8%	91.3%	**93.4%**	93.4%
Non-Stabilized	20%[2]	8%[3]	**5.6%[3]**	8.9%[3]
DEBT PROFILE				
LTV (vs ODCE)	24.7% (+300 bps)	20.3% (-120 bps)	**19.5% (-200 bps)**	21.5%
Line of Credit Size (% drawn)	\$350M (65%)	\$750M (0%)	**\$900M (0%)**	N/A
CLIENT ACTIVITY				
Peak Redemption Requests (as % NAV)[4]	2009 - \$1.4B (19%)	2020 - \$0.6B (3%)	**\$1.7B[5] (6%)**	\$23.5B[6] (9%)
RISK METRICS (5-YR)				
Beta	1.21	0.96	**0.92**	N/A

[1] Starting period for Global Financial Crisis and COVID-19 pandemic. [2] Includes properties with <80% occupancy as of Q1-08 plus unfunded commitments. [3] Source MSCI ACOE Report. Non-Stabilized category includes properties with <75% occupancy for more than 50% of the measured time period. MSCI's calculation is based on current invested capital. [4] During the course of the noted crisis period. [5] 4Q22 Redemption Requests: \$1.9B (6% of NAV). [6] Latest available as of 11/11/22.

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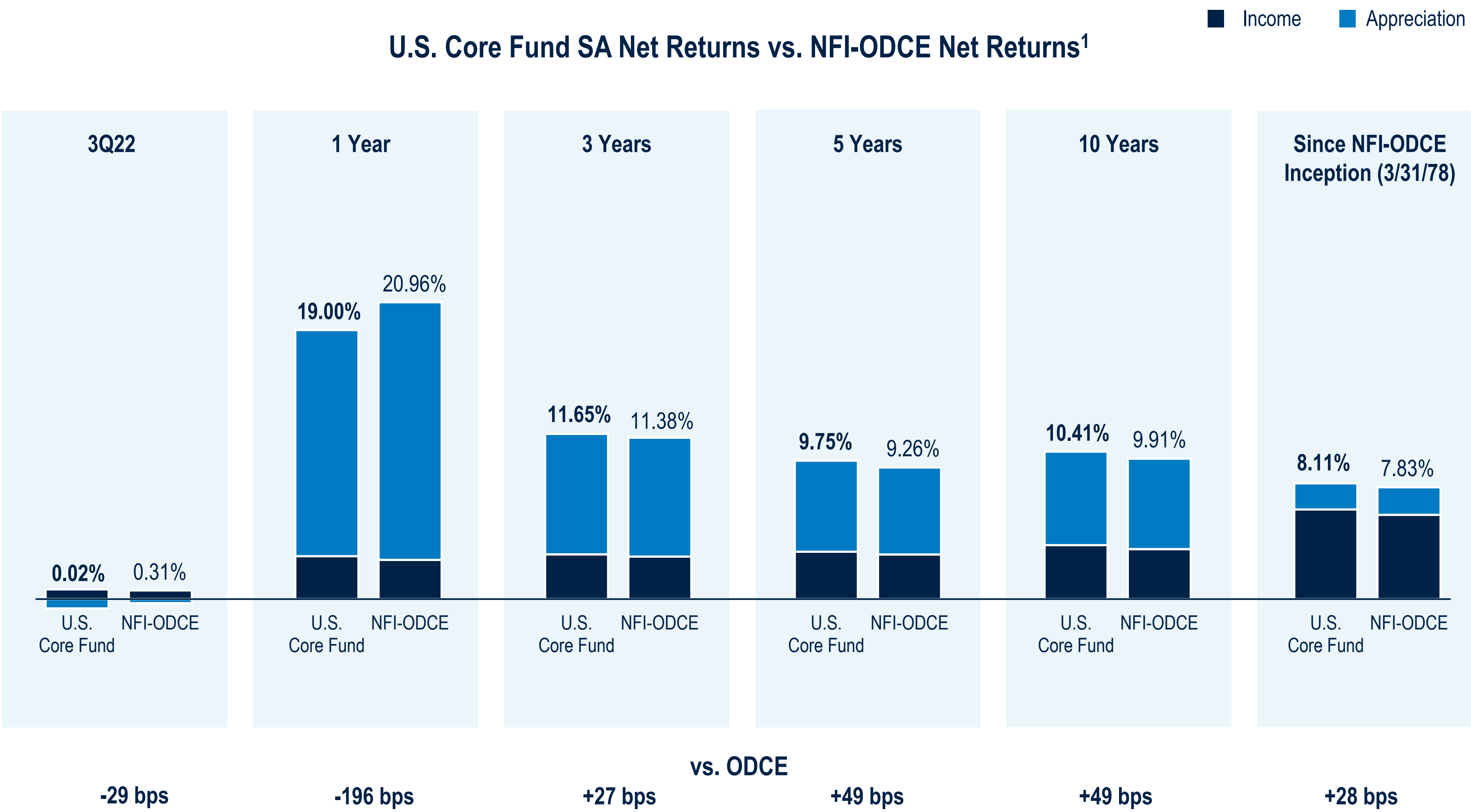
Favorable Long-Term Performance

Lower-Risk Positioning in a Strong Year Impacted Performance



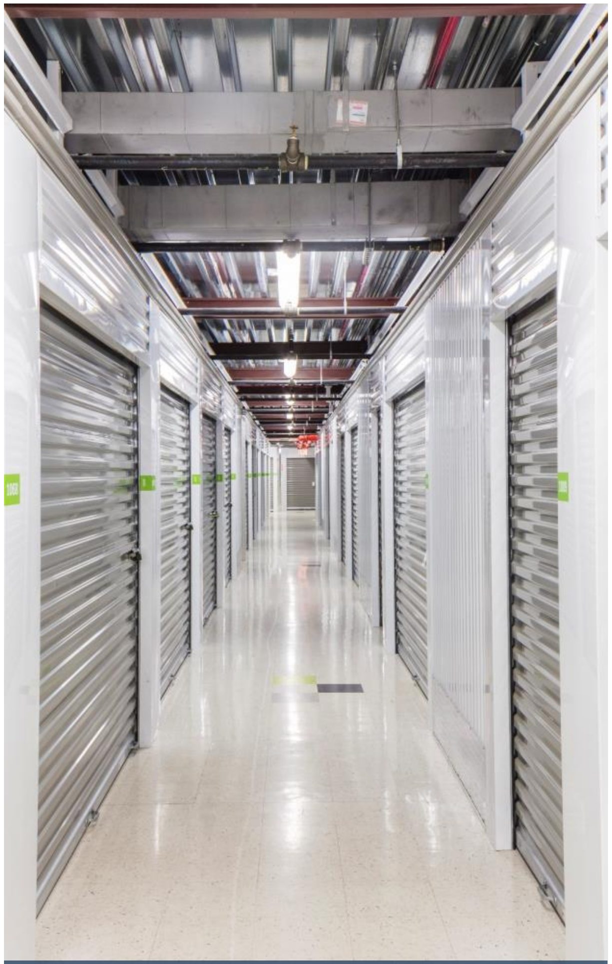
Past performance is not a guarantee or a reliable indicator of future results. Note: Returns for NFI-ODCE are based on the final report published by NCREIF on October 31, 2022. Returns shown are time-weighted rates of return after deduction of Manager Compensation/Fees. As of September 30, 2022. [1] Returns shown prior to January 1, 2013 are based upon U.S. Core Fund SA only.

Drivers of Performance

Office Weakness and Select Industrial Repricing Detracted from Recent Performance

LONGER-TERM TRENDS

- ▲ Alternatives: Storage
- ▲ Industrial: SoCal Overweight
- ▲ Zero Exposure to Regional Malls
- ▼ Major Market CBD Office Lagging
- ▼ Underweight to Low-Rise / Garden Apartments



Extra Space Storage Portfolio
Various

U.S. CORE FUND UNLEVERED Q3-22 RETURN

	Income	Appreciation	Total
ALTERNATIVES[1]	1.1%	2.9%	**4.0%**
MULTIFAMILY	0.8%	0.2%	**1.0%**
RETAIL	1.3%	-0.4%	**0.9%**
OFFICE	1.2%	-2.0%	**-0.8%**
INDUSTRIAL	0.6%	-1.9%	**-1.3%**
TOTAL[2]	**0.9%**	**-0.7%**	**0.2%**

U.S. CORE FUND UNLEVERED 1-YEAR RETURN

	Income	Appreciation	Total
INDUSTRIAL	2.8%	31.9%	**35.4%**
ALTERNATIVES[1]	4.8%	20.0%	**25.5%**
MULTIFAMILY	3.2%	11.1%	**14.6%**
RETAIL	5.5%	1.9%	**7.6%**
OFFICE	4.7%	-4.3%	**0.3%**
TOTAL[2]	**3.8%**	**12.1%**	**16.2%**

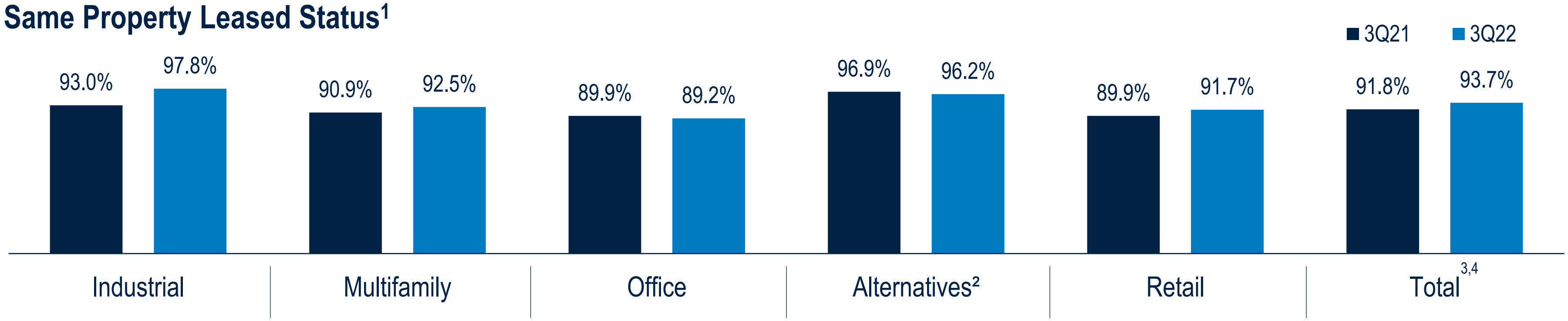
Past performance is not a guarantee or a reliable indicator of future results. Note: As of September 30, 2022. [1] Includes life science / lab space, storage, data centers, senior housing and manufactured housing. Life science / lab space and data centers are currently included in office and industrial respectively for NCREIF reporting. [2] Total includes Harbor Garage, land and tax incentive notes connected to real estate investments.

Occupancy and Income Growth

PGIM REAL ESTATE

Performance

Same Property Leased Status[1]



TTM Same Property Operating NOI Growth[1,5]

Industrial	Multifamily	Office	Alternatives	Retail	
17.9%	25.2%	1.0%	18.5%	10.1%	Operating[1] 11.1% Total[4] 13.3%

Fundamentals are generally strong but growth is decelerating across property types

Note: **Results are not guaranteed. Past performance is not a guarantee or reliable indicator of future results**. As of September 30, 2022. [1] 100% Property level unlevered. To provide a more meaningful basis for comparison, includes all operating and lease-up properties that generally have a CofO that were owned in both comparative time periods. Excludes land and debt investments. [2] Includes Storage, Life Science, and Manufactured Housing. Leased status represents average leased status for the quarter for storage assets. [3] Total portfolio weighted based on property gross market value. [4] Total same property consists of all properties owned in both comparative time periods. [5] Chart displays change in total same property TTM NOI compared to prior year. Baseline: NOI September-2020.

Key Market Exposure

Overweight to Strategic Markets: Approximately 74% of U.S. Core Fund Exposure

PGIM REAL ESTATE

Portfolio Construction

5 Major
Strategic Markets (62%)

7 Next Tier
Strategic Markets (12%)

4 Key
Diversifier Markets (15%)

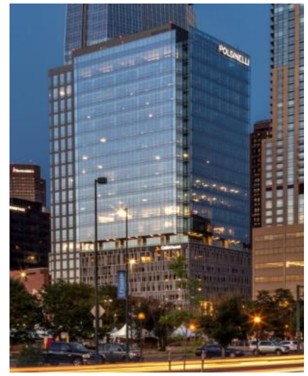
Note: Exposure is calculated using U.S. Core Fund GMV. Markets noted on this page and throughout this presentation refer to the broader CSA. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database. Data as of September 30, 2022.

PGIM REAL ESTATE

Portfolio Construction

Active Property Type Allocation

Within or Very Near Strategic Ranges for All Property Types



	INDUSTRIAL	MULTIFAMILY	OFFICE	ALTERNATIVES[1]	RETAIL
3-Year Change in Exposure[2]	+1,540 bps	+190 bps	-1,180 bps	+60 bps	-550 bps
3Q22 Exposure[3]	30.1%	26.9%	21.6%	10.7%	9.6%
3Q22 ODCE Exposure[4]	30.7%	28.3%	23.5%	~6%[6]	10.0%
Strategic Direction[5]	◀▶ 25-30%	◀▶ 25-30%	▼ 15-20%	▲ 10-20%	◀▶ 10-15%

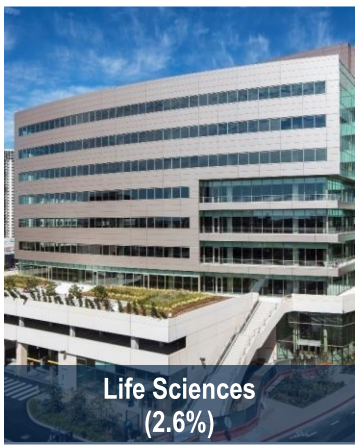
There is no guarantee that these targets will be achieved. [1] Includes Life Science / Lab Space, Storage, Manufactured Housing, and Senior Housing. Life Science / Lab Space may currently be included in Office for NCREIF reporting. [2] Based upon U.S. Core Fund 's share of GMV in properties and debt investments. [3] Other is not shown, which includes Harbor Garage, land, and tax incentive notes connected to real estate investments. Other totaled 1.2% as of September 30, 2022. [4] Based on NFI-ODCE gross market value in the preliminary NCREIF Performance Attribution Report as of 3Q22. Life science / lab space is included in the office allocations for ODCE. [5] Projected movement and target over the 2023-2025 time period. [6] Estimated Weighting. NFI-ODCE currently only reports exposure to Storage. Storage accounted for 3.3% of the benchmark as of September 30, 2022, based upon gross market value in the NCREIF Performance Attribution Report. NFI-ODCE is expected to reclassify property types in 2023, which will provide more clarity on the benchmark's exposure to alternative property types. Data is preliminary and subject to change.

Beyond the Conventional Property Types

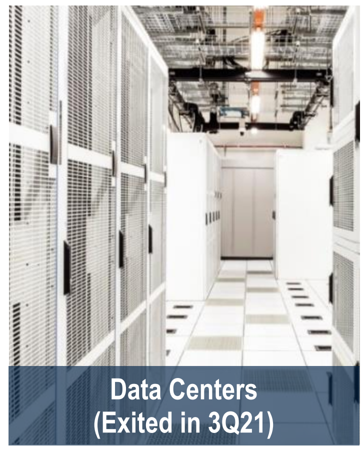
Alternative Property Types Generating Higher Returns for Lower Risk[1]

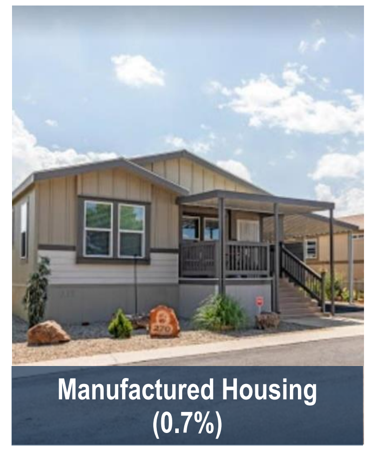
Portfolio Construction

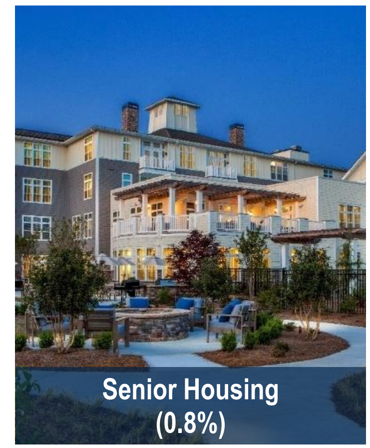
10.7% ALLOCATION


Life Sciences (2.6%)

Storage (6.7%)


Data Centers (Exited in 3Q21)


Manufactured Housing (0.7%)


Senior Housing (0.8%)

2004: INVESTED — **2005: INVESTED** — **2013: INVESTED** — **2021: INVESTED** — **2021: INVESTED**

Strategies Incubated Across the Platform to Build Expertise

Past performance not a guarantee or reliable indicator of future results. Note: Data as of September 30, 2022, unless otherwise noted. [1] Based on historical NCREIF returns. Allocations are subject to change.
No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

PGIM REAL ESTATE

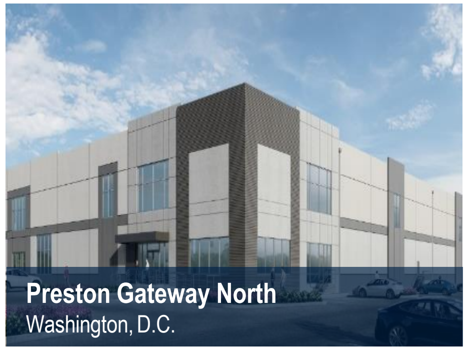
Investment Execution

Pioneer of Build-to-Core Strategies

Acquiring New High-Quality Assets at Cost

HIGH-QUALITY MODERN PROPERTIES

for Long-Term Holds



Preston Gateway North
Washington, D.C.

SUPERIOR ACCESS

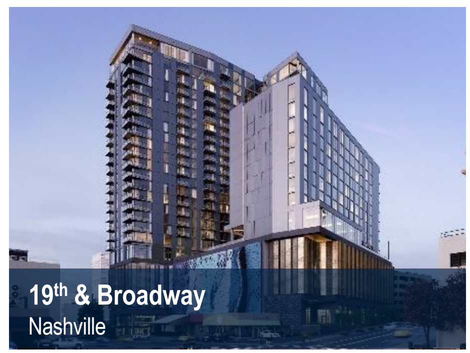
to New Investments

Rialto Fulfillment Center
Los Angeles

Highwater
San Francisco

RETURN PREMIUM

over Core
by Acquiring at Cost



19th & Broadway
Nashville

RISK TRANSFERRED

to Development Partners

3%
Total Assets in Build-to-Core[1]

13 Assets & $2B
Under Construction[2]

~60%
of U.S. Core Fund's Industrial and Apartment Properties Began as Build-to-Core[3]

~30%
Average Development Profit Margin[4]

Past performance is not necessarily indicative of future results. [1] Based on U.S. Core Fund Gross Asset Value (GAV) and includes speculative developments and developments that are build-to-suit or pre-leased above 75%. [2] Based on U.S. Core Fund's share of gross investment amount approved at the time of investment committee approval. [3] Based on count. [4] Includes all developments that began since 2010. Based on values upon stabilization for completed development projects. As of September 30, 2022.

REF: 006438

U.S. Core Fund ESG Snapshot

5 Star
GRESB Rating 2021
★ ★ ★ ★ ★

87
GRESB Score 2021[1]

Annual Score Increases

72%
Green Certified Properties[2]
(Apartment & Office)

164
Efficiency Projects
(Energy, Water, and Waste)[3]

Continually Improving Assets

-9%
Energy Consumption[4]

Lowering Energy Use

-8%
GHG Emissions[4]

Reducing Carbon Footprint

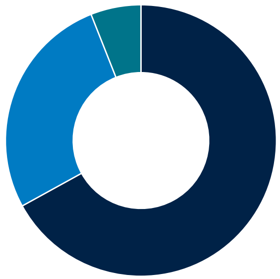
[1] Management & Performance Score from 2021 GRESB Assessment published October 2021. Note: Ranked 12th out of 48 peers with only 5 point spread between #1 and #12 [2] Earning LEED, NGBS, Energy Star, Fitwel, Wired, IREM CSP or BOMA 360 Certification. Based on U.S. Core Fund's share of gross asset value in properties as of September 31, 2021. [3] Reported to GRESB via the 2021 Assessment [4] Reduction in 2020 vs. 2019 based on data reported in the 2021 GRESB Assessment.

Debt Positioning

LTV below benchmark by 200 bps	Minimal 2023 maturities (3% total debt)	Majority fixed rate	Maintain unencumbered assets for flexibility

KEY METRICS[1]	
Leverage Ratio	19.5%
Weighted Average Maturity	4.9 yrs
Total Weighted Average Cost of Debt	3.8%
Unencumbered Assets (by $ / by count)	70% / 74%
Line of Credit Size	$900M ($0 Drawn)
Property / Portfolio Level Debt	58% / 42%

Fixed vs. Floating Rate Debt[1]



- **67%** Fixed
- **27%** Floating
- **6%** Floating w/ Caps

Q3-22 EVENTS

$500M
Private Bond Placement
($200M Designated Green Financing)

$325M
Prepaying 2023 Maturities

[1] Represents portfolio level debt, 100% wholly owned and U.S. Core Fund's share of all joint venture debt. Weighted average maturity calculation based on 100% principal. Leverage ratio is based on T-1 leverage.

The U.S. Core Fund Advantage

We Strive to Achieve Superior Risk-Adjusted Core Returns Through:

Diverse, experienced and complementary **team** with access to scaled global platform

Dynamic core approach to **strategy** and execution

Diversified portfolio of irreplaceable **assets** delivering resilient and growing income

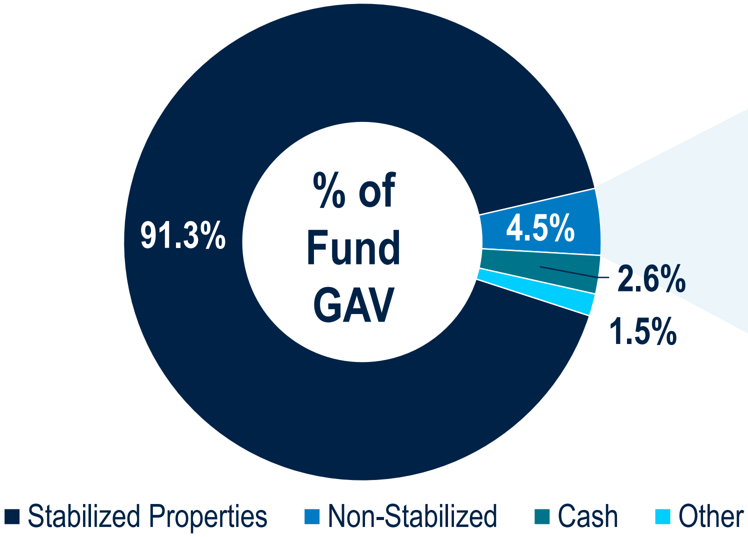
Past performance is not a reliable indicator of future results. Returns are not guaranteed. Diversification does not assure a profit or protect against loss in declining markets.

APPENDIX

Portfolio Composition

PGIM REAL ESTATE

Investment Execution



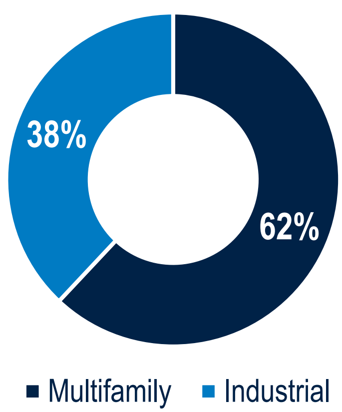
Non-Stabilized Properties[1]

2.2% Development[2]

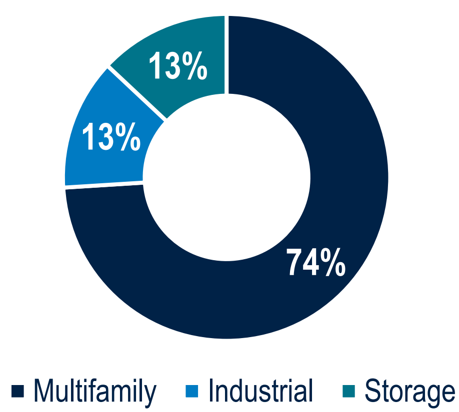
1.4% Initial Leasing[3]

0.9% Under-Leased Core (<75% occupancy)[4]

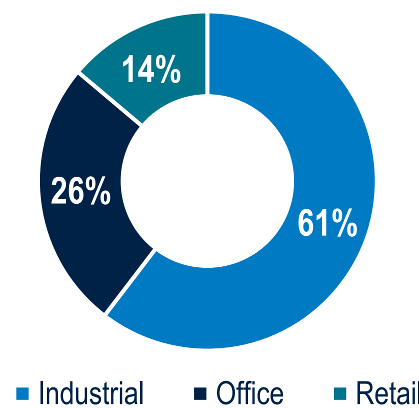
Development



Initial Leasing



Under-Leased Core



Note: As of September 30, 2022. [1] Based on U.S. Core Fund Gross Asset Value (GAV) [2] Includes Land, pre-development and developments underway; excludes assets which have been preleased and are therefore considered stabilized. These assets are considered stabilized. [3] Lease-up properties (originally acquired as non-stabilized) that generally have a CofO. [4] Stabilized properties that are under 75% occupancy on September 30, 2022.

U.S. CORE FUND PORTFOLIO

Industrial Strategy

$10.8B
Gross Assets[1]

30.1%
U.S. Core Fund Weighting[2]

49.8M
Total SF

30.7%
NFI-ODCE Weighting[3]

Strategic Direction[4]

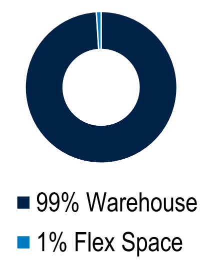
Park 70- Amazon
Denver

STRATEGY

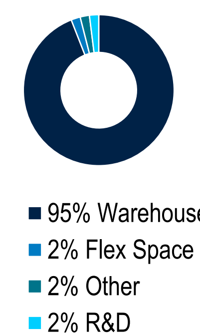
- Functional distribution and infill locations near population centers
  - Approximately half of the portfolio is last mile
- Increase exposure through acquisitions and build-to-core
- Target markets with positive demand trends
- Locations near transportation infrastructure

MARKET EXPOSURE		
MARKET (CSA)	% OF TOTAL	NFI-ODCE[5]
Los Angeles	36%	29%
New York	16%	12%
Washington, D.C.	15%	4%
Seattle	8%	4%
Dallas	4%	6%
Other Markets	21%	45%

U.S. Core Fund[2]



NFI-ODCE[3]



There is no guarantee that these targets will be achieved. Past performance is not a guarantee or reliable indicator of future results. Note: Data as of September 30, 2022 unless otherwise noted. [1] NAV as of September 30, 2022 is $10.7B. [2] Based upon U.S. Core Fund's share of GMV in properties and debt investments. [3] Based on NFI-ODCE gross market value in the NCREIF Performance Attribution Report. Life science / lab space is included in the office allocations for ODCE. Data is preliminary and subject to change. [4] Projected movement over the 2022-2025 time period. [5] NFI-ODCE does not publish detailed market information. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database.

U.S. CORE FUND PORTFOLIO

Multifamily Strategy

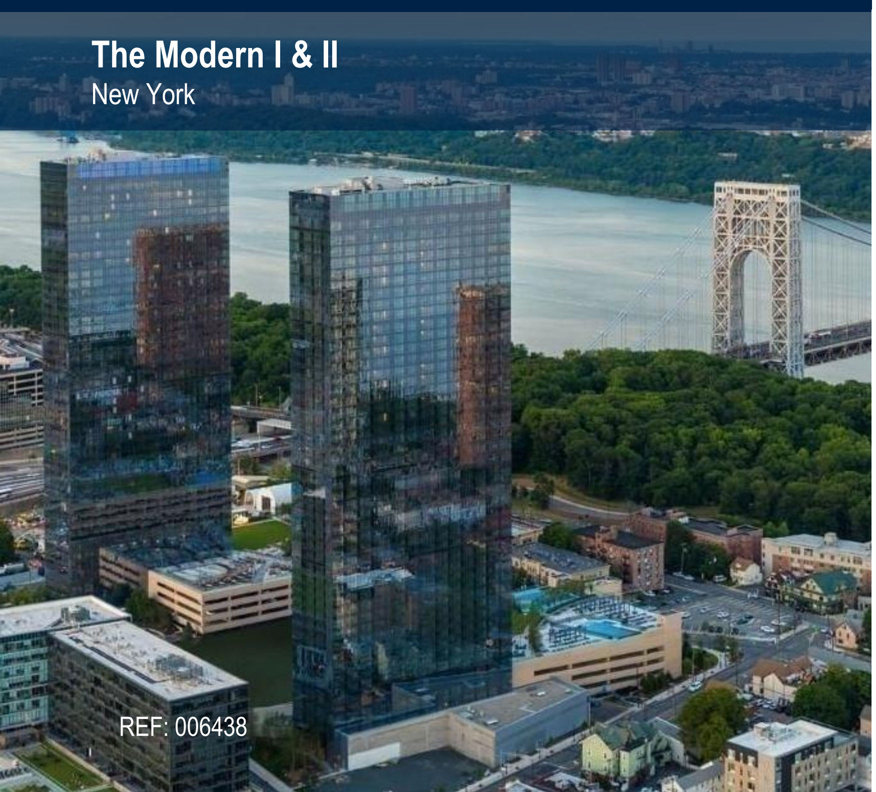
$9.7B
Gross Assets[1]

26.9%
U.S. Core Fund Weighting[2]

19,915
Total Units

28.3%
NFI-ODCE Weighting[3]

◀ ▶ Strategic Direction[4]

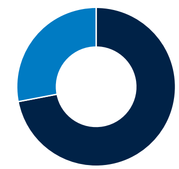


STRATEGY

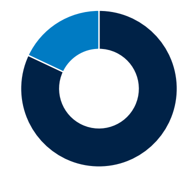
- High quality communities proximate to jobs, amenities and transportation
- Increase through build-to-core and select core assets
- Further diversify into Next-Tier Strategic markets
- Continue to target infill suburban locations
- Selectively diversify our tenant base

MARKET EXPOSURE		
MARKET (CSA)	% OF TOTAL	NFI-ODCE[5]
Los Angeles	23%	12%
San Francisco	11%	8%
New York	9%	8%
Orlando	7%	2%
Miami	7%	6%
Other Markets	43%	64%

U.S. Core Fund[2,6]

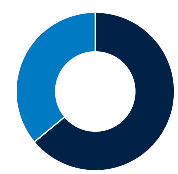


■ 72% Infill Suburban
■ 28% Urban Core



■ 82% High Rise[7]
■ 18% Garden / Low Rise

NFI-ODCE[3]



■ 64% High Rise[7]
■ 36% Garden / Low Rise

There is no guarantee that these targets will be achieved. Past performance is not a guarantee or reliable indicator of future results. Note: Data as of September 30, 2022 unless otherwise noted. [1] NAV as of September 30, 2022 is $7.9B. [2] Based upon U.S. Core Fund's share of GMV in properties and debt investments. [3] Based on NFI-ODCE gross market value in the NCREIF Performance Attribution Report. Life science / lab space is included in the office allocations for ODCE. Data is preliminary and subject to change. [4] Projected movement over the 2022-2025 time period. [5] NFI-ODCE does not publish detailed market information. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database. [6] Suburban infill and urban core are based on PGIM Real Estate classification. [7] Buildings that are four stories or more in height as defined by NCREIF.

U.S. CORE FUND PORTFOLIO

Office Strategy[1]

$7.8B
Gross Assets[2]

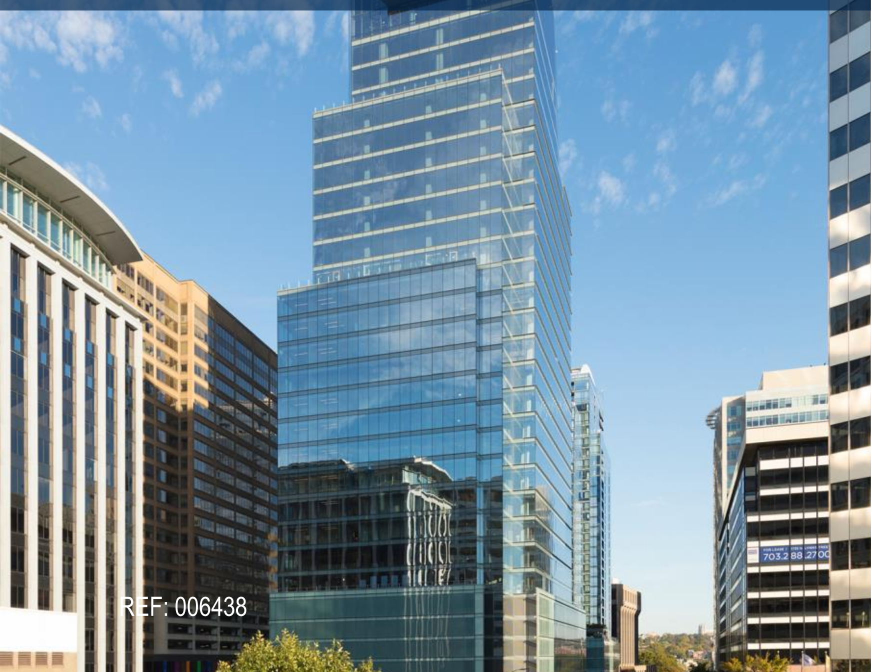
21.6%
U.S. Core Fund Weighting[3]

14.3M
Total SF

23.5%
NFI-ODCE Weighting[4]

▼ Strategic Direction[5]

Central Place
Washington, D.C.

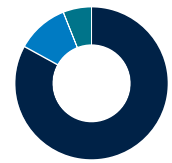


STRATEGY

- High quality properties in markets with high educational attainment
- Concentrated in key job centers and markets with tech growth
- Focus on ensuring asset relevance and functionality
- Reduce exposure over time through dispositions of non-strategic assets
- Consider select acquisitions to upgrade the portfolio

MARKET EXPOSURE		
MARKET (CSA)	% OF TOTAL	NFI-ODCE[6]
New York	31%	18%
Boston	19%	19%
San Francisco	18%	18%
Washington, D.C.	7%	6%
Chicago	7%	6%
Austin	4%	3%
Other Markets	14%	30%

U.S. Core Fund[3,7]



NFI-ODCE[4]

There is no guarantee that these targets will be achieved. Past performance is not a guarantee or reliable indicator of future results. Note: Data as of September 30, 2022 unless otherwise noted. [1] Excludes Life Science / Lab Space, which will be reclassified out of Office by NCREIF in late 2022. U.S. Core Fund's exposure to Life Science / Lab Space is 2.6%. [2] NAV as of September 30, 2022 is $6.1B. [3] Based upon U.S. Core Fund's share of GMV in properties and debt investments. [4] Based on NFI-ODCE gross market value in the NCREIF Performance Attribution Report. Life science / lab space is included in the office allocations for ODCE. Data is preliminary and subject to change. [5] Projected movement over the 2022-2025 time period. [6] NFI-ODCE does not publish detailed market information. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database. [7] Suburban based on NCREIF classification. Urban designation based on PGIM Real Estate classification. Urban Assets are categorized as Suburban by NCREIF but are located in close proximity to the CBD with similar demographics.

U.S. CORE FUND PORTFOLIO

Alternatives Strategy

$3.9B
Gross Assets[1]

10.7%
U.S. Core Fund Weighting[2]

~6%
NFI-ODCE Weighting[3]

▲ Strategic Direction[4]

LIFE SCIENCE
EmeryStation East (San Francisco)

STORAGE
Extra Space Storage (Various)

MANUFACTURED HOUSING
Albuquerque Meadows (Albuquerque)

SENIOR HOUSING
Lakeside at Amelia Island (Jacksonville)

PGIM REAL ESTATE

STORAGE

$2.4B	7.0M	6.7%
Gross Assets	Total SF	U.S. Core Fund Weighting

- National portfolio with top operator in markets with strong demand
- Seeking opportunities to add exposure with best-in-class operators

LIFE SCIENCES

$0.9B	1.1M	2.6%
Gross Assets	Total SF	U.S. Core Fund Weighting

- Bay Area campus benefitting from proximity to research and venture capital
- Target new opportunities in the life science clusters / diversify portfolio

SENIOR HOUSING

$0.3B	573	0.8%
Gross Assets	Total Units	U.S. Core Fund Weighting

- Newly constructed and well-stabilized assets with strong operators
- Increase exposure with best-in-class operators in markets with demographic tailwinds

MANUFACTURED HOUSING

$0.3B	2,524	0.7%
Gross Assets	Total Sites	U.S. Core Fund Weighting

- National exposure with land sites providing affordable housing
- Grow existing program and diversify tenant base in desirable residential markets

There is no guarantee that these targets will be achieved. **Note:** Data as of September 30, 2022 unless otherwise noted. [1] NAV as of September 30, 2022 is $3.6B. [2] Based upon U.S. Core Fund's share of GMV in properties and debt investments. [3] Estimated Weighting. NFI-ODCE currently only reports exposure to Storage. Storage accounted for 3.3% of benchmark based upon gross market value in the 3Q22 NCREIF Performance Attribution Report. NFI-ODCE is expected to reclassify property types in late 2022, which will provide more clarity on the benchmark's exposure to alternative property types. Based on NFI-ODCE gross market value in the NCREIF Performance Attribution Report. [4] Projected movement over 2022-2025 time period.

U.S. CORE FUND PORTFOLIO

Retail Strategy

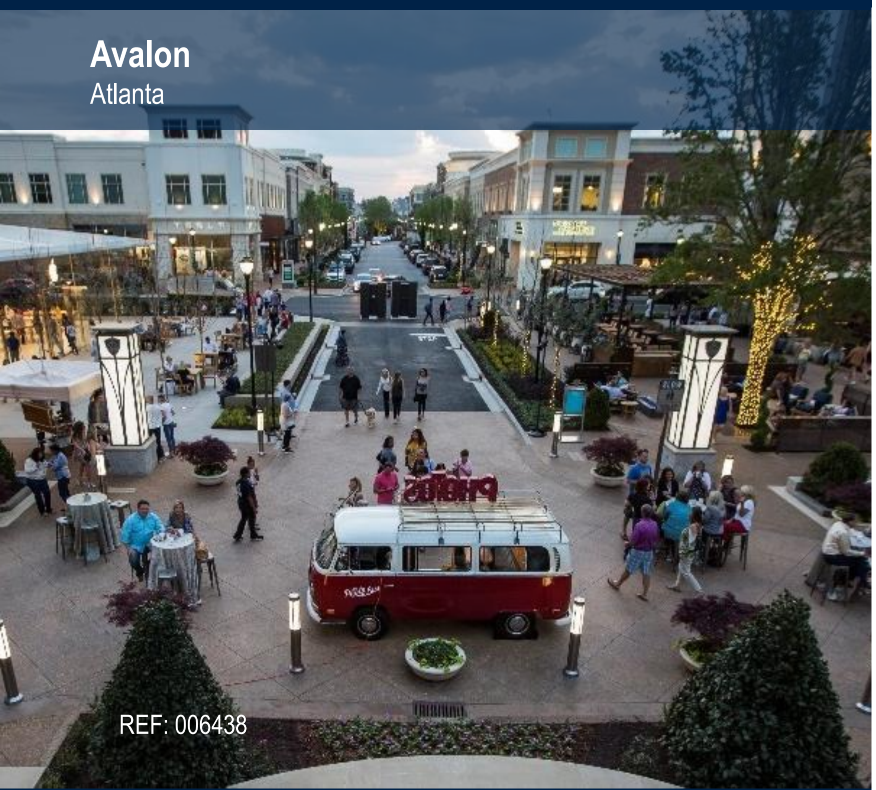
$3.4B
Gross Assets[1]

9.6%
U.S. Core Fund Weighting[2]

11.3M
Total SF

10.0%
NFI-ODCE Weighting[3]

▼ Strategic Direction[4]



PGIM REAL ESTATE

STRATEGY

- Well located necessity and mixed-use experiential centers
- Upgrade tenancy and improve occupancy
- Strategically invest capital to improve experiences/performance
- Seek to tactically upgrade

UNLEVERED INCOME RETURN[5]

	U.S. Core Fund	ODCE
1-Year	5.5%	5.0%

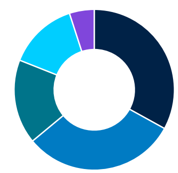
U.S. CORE FUND RETAIL PORTFOLIO

79%	Grocer Present
0%	Malls and Traditional Department Stores

U.S. Core Fund[2]

- 45% Lifestyle / Mixed-Use
- 31% Power
- 24% Neighborhood / Community

NFI-ODCE[3]



- 33% Regional Malls
- 31% Neighborhood / Community
- 17% Lifestyle / Mixed Use
- 14% Power
- 5% Other

There is no guarantee that these targets will be achieved. Past performance is not a guarantee or reliable indicator of future results. Note: Data as of September 30, 2022 unless otherwise noted [1] NAV as of September 30, 2022 is $3.2B. [2] Based upon U.S. Core Fund's share of GMV in properties and debt investments. [3] Based on NFI-ODCE gross market value in the NCREIF Performance Attribution Report. Life science / lab space is included in the office allocations for ODCE. [4] Projected movement over the 2022-2025 time period. [5] Returns for ODCE properties submitted to the NPI @ 100% ownership and shown as of September 30, 2022.

U.S. Core Fund Management Fee Terms

U.S. CORE FUND MANAGEMENT FEE SCHEDULE	
INVESTOR NAV[1]	FEE RATE
First $25 million	**100 bps**
Over $25 million up to $50 million	**95 bps**
Over $50 million up to $100 million	**85 bps**
Over $100 million up to $200 million	**75 bps**
Over $200 million up to $300 million	**70 bps**
Over $300 million up to $750 million	**65 bps**
Over $750M[2]	**60 bps**

EFFECTIVE FEES FOR DIFFERENT SIZED ACCOUNTS	
INVESTOR NAV[1]	FEE RATE
$25M	**100 bps**
$50M	**98 bps**
$100M	**91 bps**
$150M	**86 bps**
$250M	**81 bps**
$500M	**73 bps**
$1B	**68 bps**

[1] Cash balances greater than 5% of the Fund's NAV will not incur a fee.
[2] Effective October 1, 2022. Fee rate only applicable to investors with NAV >$1B.

REF: 006438

U.S. Core Fund SA Key Information

PGIM REAL ESTATE

THE BASICS[1]	
Gross Asset Value	$36.9B
Net Asset Value	$30.0B
Cash Balance	$991.5M

THE DEBT PICTURE	
Fixed/Floating %[2]	67% / 33%
Recourse Leverage Ratio	8.1%
Weighted Average Cost of Debt (Fixed/Floating)	3.8%
Weighted Average Maturity	4.89 Yrs.

STRATEGIC MARKET EXPOSURE

MAJOR MARKETS	EXPOSURE[3]	(UNDER)/OVERWEIGHT TO ODCE[4]
Los Angeles	20.1%	+350 bps
New York	16.2%	+430 bps
San Francisco	10.2%	--40 bps
Washington D.C.	9.0%	+400 bps
Boston	6.1%	--250 bps
TOTAL	**61.6%**	**+880 bps**

RETURNS VS. NFI-ODCE[5]

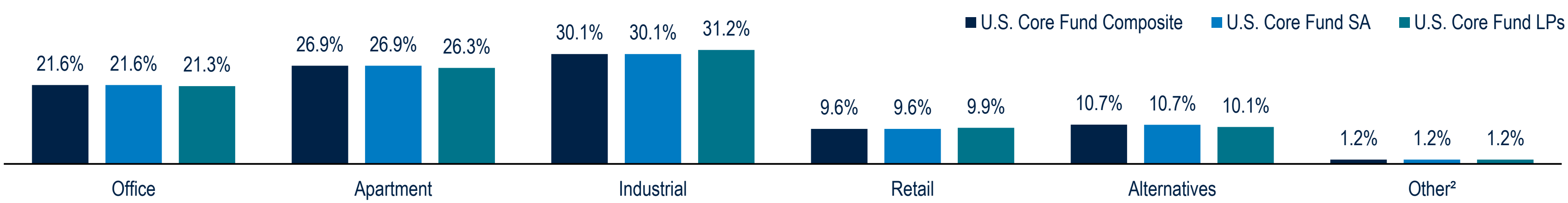
	INCOME		APPRECIATION		TOTAL RETURN	
TIME PERIOD	U.S. Core Fund SA	NFI-ODCE	U.S. Core Fund SA	NFI-ODCE	U.S. Core Fund SA	NFI-ODCE
Current Quarter	0.87%	0.81%	-0.65%	-0.28%	0.22%	0.52%
1-Year	3.80%	3.62%	15.68%	17.98%	19.91%	22.09%
3-Year	3.93%	3.85%	8.36%	8.28%	12.53%	12.37%
5-Year	4.12%	3.99%	6.31%	6.06%	10.63%	10.24%
10-Year	4.55%	4.41%	6.49%	6.29%	11.25%	10.92%
Since NFI-ODCE Inception (3/31/78)	7.24%	6.88%	1.81%	1.90%	9.16%	8.89%
Since U.S. Core Fund Inception (7/1/70)	7.34%	N/A	1.74%	N/A	9.18%	N/A

Past performance is not a guarantee or a reliable indicator of future results. [1] "Gross Asset Value," "Net Asset Value" and "Cash Balance" represent the value of the assets held by U.S. Core Fund SA and the U.S. Core Fund LPs without netting out the U.S. Core Fund LPs' respective interest therein. U.S. Core Fund SA's net asset value is $16.6B as of September 30, 2022. [2] Includes floating rate loans with caps. [3] Based on U.S. Core Fund SA's share of gross market value in properties and debt investments. [4] NFI-ODCE does not publish detailed market information. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database as of September 30, 2022. [5] Returns shown are time-weighted rates of return calculated in conformity with performance reporting standards and are before the deduction of Manager Compensation/Fees. Returns for NFI-ODCE are based on the final report published by NCREIF on October 31, 2022. Please refer to the appendix for further information. Unless otherwise noted, data as of September 30, 2022.

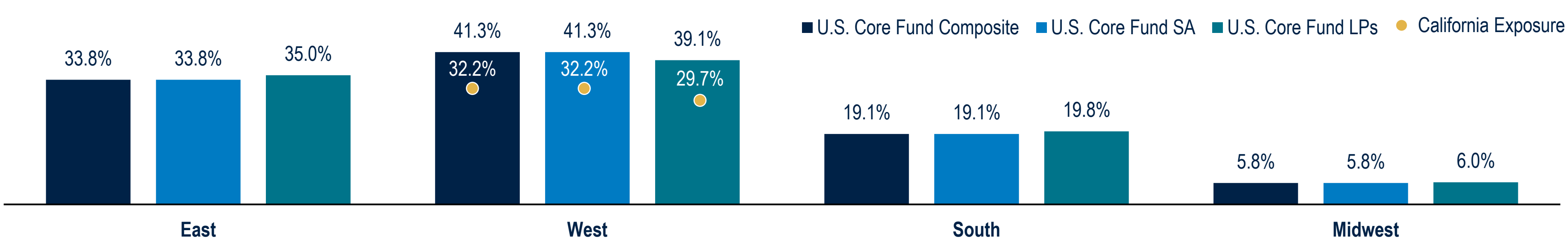
U.S. Core Fund Risk Metrics & Diversification

KEY RISK METRICS	GUIDELINE	U.S. CORE FUND COMPOSITE	U.S. CORE FUND SA	U.S. CORE FUND LPs
Stabilized Properties	> 75%	91.3%	91.3%	91.1%
Major Property Types	> 75%	88.1%	88.1%	88.7%
Leverage Ratio	< 35%	19.5%	19.5%	19.6%

Property Type Diversification[1]



Geographic Diversification[1]



Note: Please see page 2 for important information regarding U.S. Core Fund Composite. As of September 30, 2022. [1] Based on U.S. Core Fund's share of gross market value in properties and debt investments. [2] Other includes Harbor Garage, Land, and tax incentive notes connected to real estate investments.

REF: 006438

JOANNA MULFORD

U.S. Core Fund Senior Portfolio Manager

CONTACT

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Years with PGIM: 32
Real Estate Experience: 25

Joanna Mulford is a managing director at PGIM Real Estate and senior portfolio manager for U.S. Core Fund, PGIM Real Estate's flagship U.S. core equity real estate fund. Based in Madison, New Jersey, Joanna is responsible for managing all aspects of the fund including portfolio strategy, investment decisions and management of the U.S. Core Fund team. Joanna is a member of the U.S. Executive Council and U.S. Equity Investment Committee.

Prior to joining the U.S. Core Fund team in 2008, Joanna was responsible for U.S. real estate investment sales on behalf of PGIM Real Estate's clients.

During her tenure with PGIM Real Estate, Joanna has served as the portfolio manager of several closed-end funds, including a value-add strategy with a private REIT structure. Joanna also helped launch PGIM Real Estate's debt investment platform, raising investor capital for and managing its first mezzanine fund.

Prior to this, she was responsible for the asset management of a portfolio of commercial real estate investments including office, apartment, retail, storage and industrial property types and mezzanine loans.

Before joining PGIM Real Estate in 1997, Joanna was a member of Prudential Financial, Inc.'s Private Equity group, working on behalf of the company's domestic and international subsidiaries investing in private equity transactions. Previously, she was a member of the Comptrollers unit of the Prudential Asset Management Company since joining the firm in January of 1990. Joanna provided support to several of Prudential's money management subsidiaries investing in both public and private equities.

Joanna has a bachelor's degree in finance and management and a master of business administration from Rutgers University.

JAMES GLEN

U.S. Core Fund Portfolio Manager

James Glen is a managing director of PGIM Real Estate and portfolio manager for U.S. Core Fund, PGIM Real Estate's flagship core open-end real estate fund. Based in Madison, New Jersey, James is involved in all aspects of managing the fund, including portfolio strategy, investments and asset management oversight.

Prior to joining PGIM Real Estate, James served in various capacities within BlackRock's real estate group. He was a member of the Portfolio Management team working on both core and opportunistic real estate funds in the United States and internationally. He also served as global head of research and strategy with responsibility for monitoring real estate markets and formulating investment strategy for the platform, and was a member of the investment committee.

James' service with BlackRock and its predecessor, SSR Realty Advisors, dates back to 2004. Prior, James was a senior economist at Moody's Analytics, where he provided regional economic and real estate market analysis. He began his career as an analyst at JPMorgan Chase.

James earned a bachelor's degree in economics from the University of North Carolina at Greensboro and a master's degree in economics from the University of Delaware.

James currently serves on the NCREIF ODCE Index Policy Committee and is a member of the Pension Real Estate Association (PREA). He is a CFA charter holder.

CONTACT

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Years with PGIM: 8
Real Estate Experience: 22

KAYA MURRAY

U.S. Core Fund Assistant Portfolio Manager

Kaya Murray is an executive director and assistant portfolio manager for U.S. Core Fund, PGIM's flagship U.S. core equity real estate fund. Based in San Francisco, Kaya will assist in the day-to-day management of the U.S. Core Fund portfolio with a focus on West Coast investments, as well as client relationship management and engagement with PGIM Real Estate's West Coast Asset Management and Transactions teams.

Most recently, Kaya served as a regional head of Acquisitions and Joint Ventures at MetLife Investment Management where she led a team covering Northern California, the Pacific Northwest and Denver across all sectors. Earlier at MetLife, Kaya was a senior asset manager with oversight of the value-add and development deals for the region.

Previously, Kaya worked for the U.S. value-add fund series at CBRE Global Investors in a range of roles, beginning as a generalist covering acquisitions, asset management and dispositions for the West Coast office and industrial team, and later becoming the senior asset manager responsible for West Coast office repositions and industrial developments. Kaya started her career in investment banking at Credit Suisse and Rothschild.

Kaya has a bachelor's degree in communications and environmental studies from the University of Pennsylvania and a master of business administration from Northwestern University (Kellogg School of Management).

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Years with PGIM: 1
Real Estate Experience: 17

LEXI WOOLF

U.S. Core Fund Assistant Portfolio Manager

CONTACT

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Years with PGIM: 12
Real Estate Experience: 12

Lexi Woolf is a vice president and an assistant portfolio manager for U.S. Core Fund, PGIM's flagship U.S. core equity real estate fund. Based in Madison, New Jersey, Lexi works on all aspects of managing the fund including portfolio strategy, investment selection, financial operations, and portfolio reporting.

Prior to joining U.S. Core Fund, Lexi spent five years in Transactions where she had a lead role in the underwriting, due diligence, and closing of nearly $5 billion of new acquisitions for a variety of commercial product types and investment strategies across the Northeast and Midwest United States. Most recently, Lexi focused primarily on the New York City region.

In addition, Lexi spent two years as a member of the Customized Investment Strategies team, where she split her time between responsibilities in asset management and several of PGIM's new product initiatives.

Lexi graduated from the Wharton School of the University of Pennsylvania with concentrations in finance and real estate.

HERNAN CARREIRA

Executive Director

Hernan Carreira is an executive director at PGIM Real Estate Investors and a member of the portfolio team for U.S. Core Fund, PGIM's flagship U.S. core equity real estate fund. Based in Madison, New Jersey, Hernan is responsible for portfolio analytics and supports all aspects of portfolio strategy, financial operations and portfolio reporting.

Prior to joining PGIM Real Estate, Hernan held various roles in different countries for more than 18 years. Most recently, Hernan was global head of operations for emerging markets, at CarVal Investors (a hedge fund based in Minneapolis), where he was responsible for the asset management operations of the real estate and loan portfolios investing activities in India, Brazil, Argentina, Colombia, Chile and Uruguay. Earlier, he also served as an assistant finance director for South America, based in Sao Paulo.

In addition, Hernan has extensive international travel and completed multi-year international assignments in Argentina, Brazil, and the United States.

Hernan is a certified public accountant (inactive) and he has a bachelor's degree in business administration from the University of Buenos Aires. He is a German and Argentine citizen and is fluent in English, Portuguese and Spanish.

CONTACT

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Years with PGIM: 7
Real Estate Experience: 18

STEVE MOEN

Executive Director

CONTACT

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Years with PGIM: 2
Industry Experience: 22

Steve Moen is an executive director at PGIM Real Estate and a member of the U.S. Business Development group serving institutional investors and consultants primarily in the Western United States and Canada. Based in Denver, Steve is responsible for client relationship management and capital raising for PGIM Real Estate's global products across real estate, agriculture and impact, as well as the coordination of business development activities between PGIM and Montana Capital Partners – a PGIM-owned global private equity secondaries manager.

Before joining PGIM Real Estate, Steve was a senior vice president at Partners Group, responsible for client service and marketing of private market investment strategies across institutional investor channels. Previously, Steve was a vice president with Buchanan Street Partners, where his responsibilities included deploying debt and equity capital for value-added real estate strategies through acquisitions in office, industrial, multifamily and retail assets across the Western United States.

Prior to his career in the investment management business, Steve worked in investment banking at Salomon Brothers / Citigroup, executing capital markets and M&A transactions for clients in the technology, media and energy sectors.

Steve has a bachelor's degree in economics from the University of California, Los Angeles, and a master of business administration from the UCLA Anderson School of Management.

ENDNOTES

- **U.S. Core Fund Separate Account ("U.S. Core Fund SA")** is the original U.S. Core Fund fund structured as an insurance company separate account with an inception date of July 1970.
- **U.S. Core Fund LP** is an investment vehicle that held its initial closing on January 1, 2013, and was formed to invest in substantially all of the existing portfolio of U.S. Core Fund SA assets (as of December 31, 2012) as well as all assets that PICA, on behalf of U.S. Core Fund SA, elects to invest in going forward. **U.S. Core Fund PF LP is an investment vehicle formed as a parallel fund to U.S. Core Fund LP. U.S. Core Fund PF LP held its initial closing on June 30, 2022, and invests alongside U.S. Core Fund LP and U.S. Core Fund SA.**
- **U.S. Core Fund LPs are U.S. Core Fund LP and U.S. Core Fund PF LP, collectively. U.S. Core Fund or U.S. Core Fund Composite** reflects the combined performance of all assets held by U.S. Core Fund SA and the U.S. Core Fund LPs. Although this is not an actual fund in which any client is invested, it is indicative of the overall performance of the U.S. Core Fund investment strategy and, therefore, the U.S. Core Fund Composite returns and portfolio metrics will be provided to NCREIF for inclusion in the NFI-ODCE and other NCREIF Indices. U.S. Core Fund may also refer to the U.S. Core Fund portfolio and asset management teams. U.S. Core Fund Composite information is provided for illustrative purposes and should not be relied upon by investors for any reason.
- **U.S. Core Fund REIT** is the entity through which the U.S. Core Fund LPs will make all of its investments. As of September 30, 2022, the U.S. Core Fund LPs and U.S. Core Fund SA own approximately 46% and 54% of U.S. Core Fund REIT, respectively, respectively. Any reference to U.S. Core Fund LP's dollar exposure throughout this document refers to that of U.S. Core Fund REIT, unless otherwise noted.
- **Important Note on Historical Information:** Economic terms and other portfolio metrics reported for U.S. Core Fund, U.S. Core Fund SA, or the U.S. Core Fund LPs that include periods to the formation of U.S. Core Fund LP reflect information for U.S. Core Fund SA for those periods prior to January 1, 2013. Prior to the formation of U.S. Core Fund LP, U.S. Core Fund and U.S. Core Fund SA were one and the same.

BENCHMARK DEFINITIONS

NCREIF Fund Index-Open End Diversified Core Equity (NFI-ODCE): The NFI-ODCE, short for NCREIF Fund Index — Open End

Diversified Core Equity, is a capitalization-weighted, gross of fee, timeweighted return index with an inception date of December 31, 1977. Other supplemental data such as equal-weight and net of fee returns are also provided by NCREIF for informational proposes and additional analysis. To be eligible for NFI-ODCE membership, each member fund must be marketed as an open-end fund with a diversified core investment strategy primarily investing in private equity real estate. All members funds must adhere to the following index inclusion criteria:

At least 80% of the fund gross asset value must be invested in private direct real estate equity; (2) At least 95% of real estate gross market value assets must be located in U.S. markets; (3) At least 75% of fund gross market value must be invested in office, industrial, apartment and retail property types; (4) At least 75% of the fund gross asset value must be invest in "stabilized" properties (75% leased); (5) Fund loan-to-value ratio (LTV) must be less than 35%; (6) No more than 60% of real estate gross market value in one property type with greater than 5% of gross market value in 3 of the 4 major property types; and (7) No more than 65% of real estate gross market value in one NCREIF defined region.

Each member fund must also comply with the NCREIF PREA Reporting standards. Note: A benchmark Index is not professionally managed. Investors cannot invest directly in an index.

VALUATION POLICY

Properties held by the Fund are accounted for at fair value in accordance with applicable contractual requirements and in compliance with authoritative accounting guidance ("U.S. GAAP"). Property level debt is also accounted for at fair value based on the amount at which the impact of the liability could be measured in a current transaction exclusive of direct transactions costs. The Fund's current valuation procedure is as follows:

PGIM Real Estate's Global Chief Real Estate Appraiser (the "Chief Appraiser"), who has an independent reporting line from the business (reporting to Investment Risk), is responsible for the valuation process of the Fund's investments and approves final gross real estate values. The Chief Appraiser retains an independent Appraisal Management Firm ("AMF") to run the day-to-day operation of the appraisal process. The AMF is responsible to assist with the selection, hiring, oversight, rotation and/or termination of third-party appraisal firms. Third-party appraisers are typically rotated on a three-year cycle and are selected from the Chief Appraiser's Approved Vendor's List through a competitive bid process. To be included in the list, individual experts are interviewed, referenced and a sampling of their work is reviewed to understand capabilities and competencies of the appraiser. In addition to the administrative services, the AMF collects asset manager comments and provides independent reviews of the appraisal reports and opines on the reasonableness of the value conclusions in order to maintain documentation and monitoring of the independence and accuracy of the valuations. The reported fair values are based on the external appraisal conclusions following the completion of the formal internal and external reviews and sign-offs. However, in the rare instance a material fact or error be identified and considered unresolved during the AMF review process, the AMF is responsible to provide the substantiation and compelling evidence to make an adjustment to the appraised value and it would be reported to the Fund investors.

Values as of September 30, 2022 have been determined by our third-party appraisers overseen by the independent AMF. No value adjustments have been required to the external appraisal conclusions as the appraisers have made valuation adjustments based on the specific sectors and competitive position of the properties. The cash flow adjustments continue to be focused on short-term (1 to 3 years) income collections for all assets as well as further adjustments for specific properties that are not stabilized, those that have near-term lease expirations, located in gateway cities, and large retail assets. Further, market rents, yield rates and operating expenses have been adjusted depending on the specific property performance and overall market conditions.

GRESB DEFINITIONS

For 2020, GRESB introduced structural reporting changes with the introduction of the separate Management, Performance and Development Components.

The Management Component measures the entity's strategy and leadership management, policies and processes, risk management and stakeholder engagement approaches, comprising of information collected at the organizational level. Starting in 2020, the Management Component was restructure into five aspects: Leadership, Policies, Reporting, Risk management, Stakeholder engagement

The Performance Component measures the entity's asset portfolio performance, comprising of information collected at the asset and at the portfolio level. It is suitable for any real estate company or fund with operational assets. Starting in 2020, the Performance Component was restructured into 10 aspects:

- Portfolio-level aspects: Risks Assessment, Data Review, Targets, Tenants and Community
- Asset-level aspects: Energy, GHG Emissions, Water, Waste, Efficiency Measures, Building Certifications

The Development Component measures the entity's efforts to address ESG issues during the design, construction, and renovation of buildings. This component is suitable for entities involved in new construction (building design, site selection and/or construction) and/or major renovation projects, with on-going projects or completed projects during the reporting period. Starting in 2020, the Development Component was restructured into seven aspects:

ESG Requirements, Materials, Building Certifications, Energy, Water, Waste, and Stakeholder Engagement Portfolios with both standing investments and development projects (such as U.S. Core Fund) submit:

Management, Performance and Development Components to receive two Benchmark Reports:

Standing Investments Benchmark Report including a GRESB Score and a GRESB Rating (GRESB Score = 30% Management Component Score + 70% Performance Component Score)

Development Benchmark Report including a GRESB Score and a GRESB Rating (GRESB Score = 30% Management Component Score + 70% Development Component Score)

Additional information may be found at: www.gresb.com.

Disclosures

PGIM is the primary asset management business of Prudential Financial, Inc. PGIM Real Estate is PGIM's real estate investment advisory business and operates through PGIM, Inc., a registered investment advisor. Registration as a registered investment adviser does not imply a certain level or skill or training. Prudential, the Prudential logo, PGIM Real Estate and the Rock symbol are service marks of Prudential Financial, Inc. and its related entities, registered in many jurisdictions worldwide.

The information contained herein is provided by PGIM Real Estate. This document may contain confidential information and the recipient hereof agrees to maintain the confidentiality of such information. Distribution of this information to any person other than the person to whom it was originally delivered and to such person's advisers is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of its contents, without the prior consent of PGIM Real Estate, is prohibited. Certain information in this document has been obtained from sources that PGIM Real Estate believes to be reliable as of the date presented; however, PGIM Real Estate cannot guarantee the accuracy of such information, assure its completeness, or warrant such information will not be changed. The information contained herein is current as of the date of issuance (or such earlier date as referenced herein) and is subject to change without notice. PGIM Real Estate has no obligation to update any or all of such information; nor do we make any express or implied warranties or representations as to its completeness or accuracy. Any information presented regarding the affiliates of PGIM Real Estate is presented purely to facilitate an organizational overview and is not a solicitation on behalf of any affiliate. **These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services. These materials do not constitute investment advice and should not be used as the basis for any investment decision.**

These materials do not take into account individual client circumstances, objectives or needs. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. The information contained herein is provided on the basis and subject to the explanations, caveats and warnings set out in this notice and elsewhere herein. Any discussion of risk management is intended to describe PGIM Real Estate efforts to monitor and manage risk but does not imply low risk.

All performance and targets contained herein are subject to revision by PGIM Real Estate and are provided solely as a guide to current expectations. There can be no assurance that any product or strategy described herein will achieve any targets or that there will be any return of capital. Past performance is not a guarantee or a reliable indicator of future results. No representations are made by PGIM Real Estate as to the actual composition or performance of any account.

U.S. Core Fund: The basis for the performance target set forth within this presentation is based on a fund that is a broadly diversified, core portfolio that invests primarily in existing, income-producing properties with strong cash flow that is expected to increase over time and thereby provide the potential for capital appreciation. Target returns are expected to be achieved over a complete market cycle which can be defined as a period of time whereby valuations have bottomed (hit a trough), rose to a peak and then declined to the trough point again. PGIM Real Estate has based this investment objective on certain assumptions that it believes are reasonable. There is no guarantee, however, that any or all of such assumptions will prove to be accurate in the face of actual changes in the market or other material changes in regional or local markets specific to this strategy. Factors necessary to achieve this performance target include a property type and geographic diversification strategy, which is intended to reduce risk and maintain a broadly diversified portfolio. Property selection and performance impact the ability to achieve the target returns, including asset location, asset class, and property type assets, investment strategy and the capitalization of investment. Property and Fund performance are subject to healthy economic conditions in the U.S. market and sub-markets where investments are located. Factors that would mitigate against achieving this performance target would include, but are not limited to, unforeseen sudden and drastic changes in economic and capital markets and/or demographic trends affecting the U.S. or a particular market or sub market that could impact property performance and/or investors' demand for commercial real estate. There can be no guarantee that this target will be achieved.

The financial indices referenced herein as benchmarks are provided for informational purposes only. The holdings and portfolio characteristics may differ from those of the benchmark(s), and such differences may be material. Factors affecting portfolio performance that do not affect benchmark performance may include portfolio rebalancing, the timing of cash flows, credit quality, diversification and differences in volatility. In addition, financial indices do not reflect the impact of fees, applicable taxes or trading costs which reduce returns. Unless otherwise noted, financial indices assume reinvestment of dividends. You cannot make a direct investment in an index. The statistical data regarding such indices has not been independently verified by PGIM Real Estate.

References to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities. The securities referenced may or may not be held in portfolios managed by PGIM Real Estate and, if such securities are held, no representation is being made that such securities will continue to be held.

Net returns shown herein are time-weighted rates of return after deduction of manager compensation. Actual manager compensation schedules and other expenses are described in the individual U.S. Core Fund SA contracts and the governing documents of the U.S. Core Fund LPs and its subsidiaries. Please see Part 2 of the PGIM Inc. Form ADV, for more information concerning manager compensation.

These materials do not purport to provide any legal, tax or accounting advice. These materials are not intended for distribution to or use by any person in any jurisdiction where such distribution would be contrary to local law or regulation.

The information contained herein is provided by the PGIM Real Estate, a business unit of PGIM. PGIM is the investment manager of U.S. Core Fund SA and the U.S. Core Fund LPs.

In addition to this document, PGIM Real Estate or its agent may distribute to you an offering memorandum (the "PPM") and the constitutional documents of the U.S. Core Fund LPs (including a limited partnership agreement and/or other governing fund document and a subscription agreement for the U.S. Core Fund LPs and constitutional documents of U.S. Core Fund LPs together with the PPM, the "Memorandum"). You should review and carefully consider these documents, especially the risk factors explained within them, and should seek advice from your legal, tax, and other relevant advisers before making any decision to subscribe for interests in the Fund. If there is any conflict between this document and the Memorandum and constitutional documents of the Fund, the Memorandum and constitutional documents shall prevail. You must rely solely on the information contained in the Fund's Memorandum and constitutional documents in making any decision to invest.

There can be no assurance that the Fund will meet any performance targets referenced herein. An investor could lose some or all of its investment in the Fund. Investments are not guaranteed by the Fund, PGIM Real Estate, their respective affiliates, or any governmental agency.

Certain securities products and services are distributed by Prudential Investment Management Services LLC, a Prudential Financial company and member of SIPC.

Disclosures (continued)

Risk Factors: Investments in commercial real estate and real estate-related entities are subject to various risks, including adverse changes in domestic or international economic conditions, local market conditions and the financial conditions of tenants; changes in the number of buyers and sellers of properties; increases in the availability of supply of property relative to demand; changes in availability of debt financing; increases in interest rates, exchange rate fluctuations, the incidence of taxation on real estate, energy prices and other operating expenses; changes in environmental laws and regulations, planning laws and other governmental rules and fiscal policies; changes in the relative popularity of properties risks due to the dependence on cash flow; risks and operating problems arising out of the presence of certain construction materials; and acts of God, uninsurable losses and other factors which are beyond the control of the Manager and the Fund. As compared with other asset classes, real estate is a relatively illiquid investment. Therefore, investors' withdrawal requests may not be satisfied for significant periods of time. Other than its general fiduciary duties with respect to investors, PGIM Real Estate has no specific obligation to take any particular action (such as liquidation of investments) to satisfy withdrawal requests. In addition, as recent experience has demonstrated, real estate is subject to long-term cyclical trends that give rise to significant volatility in real estate values.

The Interests have not been and will not be registered under the U.S. Securities Act and are being offered and sold in compliance with Regulation D under the U.S. Securities Act. The Interests are subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under Regulation D under the U.S. Securities Act and the applicable state, foreign and other securities laws, pursuant to registration or exemption therefrom. The transferability of Interests will be further restricted by the terms of the Partnership Agreement of the Fund. Prospective Investors should be aware that they may be required to bear the financial risks of this investment for an indefinite period of time.

These materials are for informational or educational purposes. In providing these materials, PGIM (i) is not acting as your fiduciary and is not giving advice in a fiduciary capacity and (ii) is not undertaking to provide impartial investment advice as PGIM will receive compensation for its investment management services.

PGIM Real Estate is in the process of implementing the applicable requirements as per the EU's Sustainable Finance Disclosures Regulation ("**SFDR**") as specified by the commission delegated regulation, which supplements the SFDR with regard to regulatory technical standards ("**RTS**") specifying the content, methodologies and presentation of information in relation to sustainability indicators and the promotion of environmental or social characteristics and sustainable investment objectives in pre-contractual documents, websites and periodic reports. On 30 September 2022 the European Supervisory Authorities published their Final Report (JC2022 42), containing draft RTS which would amend the RTS made under the SFDR in respect of information to be provided in pre-contractual documents, on websites, and in periodic reports. The SFDR entered into force as at 10 March 2021 and is applicable from that day on.

The RTS set out further rules and guidance regarding the disclosures under the SFDR and the EU Regulation on the establishment of a framework to facilitate sustainable investment (the "**Taxonomy Regulation**"). The RTS are due to apply from 1 January 2023. As a consequence PGIM Real Estate may need to adopt its implementation to meet the requirements as they enter into force by 1 January 2023. PGIM Real Estate is also in the process of implementing the applicable requirements as per Taxonomy Regulation, which entered into force as at 1 January 2023 and is applicable from that day on. Further amendments due to additional guidance from the European Commission regarding the implementation of the SFDR and the Taxonomy are to be expected.

The U.S. Core Fund LPs does not have as its objective sustainable investment and does not promote environmental or social characteristics for the purposes of the SFDR. The Fund is therefore not subject to the additional disclosure requirements for financial products referred to in Article 8 or Article 9 SFDR. For the same reason, the Fund is not subject to the requirements of the Taxonomy Regulation. The investments underlying this financial product do not take into account the EU criteria for environmentally sustainable economic activities.

Coronavirus: Occurrences of epidemics, depending on their scale, may cause different degrees of damage to national and local economies that could affect the value of the Fund and the Fund's underlying investments. Economic conditions may be disrupted by widespread outbreaks of infectious or contagious diseases, and such disruption may adversely affect real estate valuations, the Fund's investments, and the Fund and its potential returns. For example, the continuing spread of COVID-19 (also known as novel coronavirus) may have an adverse effect on the value, operating results and financial condition of some or all of the Fund's investments, as well as the ability of the Fund to source and execute target investments. The progress and outcome of the current COVID-19 outbreak remains uncertain.

January 23, 2023

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: $30 Million Commitment to HarbourView Royalties Fund I

Dear Board Members:

NEPC and I jointly recommend a $30 million investment in the HarbourView Royalties Fund I (HVRF).

Background

The Board's adopted asset allocation of April 2022 increased the target allocation to private credit from 6% to 8% for a globally diversified private credit program over three years. The 2022 Board adopted Private Credit Pacing Plan called for $240 million to be committed to Private Credit strategies in 2022. The Board exceeded its target with $265 million in commitments. To continue vintage year diversification, staff is projecting Board approval of a similar $240 million commitment target in 2023.

HarbourView Royalties Fund I

HVRF will invest in *sound recording* and *music publishing/ composition* assets producing royalties from streaming, digital downloads, physical media, performance, and licensing synchronization. The strategy uses a proprietary, quantitative data-driven approach to achieve a diversified pool of long-tenured, non-correlated investments in musical works, producing income streams through different channels. Since its founding in 2021, HarbourView has accumulated a songs catalog of more than 17,000 songs across master recording and publishing income streams.

As described in greater detail in NEPC's investment recommendation report and in HarbourView's presentation deck, HarbourView is targeting $500 million ($1 billion hard cap) in total commitments for HVRF. The fund has a 3-year investment period in which capital will be recycled, and a 3-year harvesting period, with two potential 1-year fund extensions. HVRF is targeting a 1.7x-2.0x net Total Value of Paid In capital (TVPI) return multiple and a net mid-teen to low 20s net Internal Rate of Return (IRR). Stated management fees are 1.75% on invested capital with 20% carried interest, and an 8% preferred return. An NEPC client aggregated discount may be available upon qualification.

The fund has a European style distribution waterfall, where the first 100% of distributions go to the limited partners (LPs) until aggregate distributions equal aggregate contributions of fees and capital contributions. The second level of distributions are to the LPs until they have received an 8% compounded annual return (preferred return) on their aggregate contributions. Next there is an

80%/20% GP/LP catchup distribution split, until the general partner (GP) receives 20% of the amount of the aggregated LP contributions plus the preferred return. Finally, the split switches to an 80%/20% LP/GP distribution schedule.

This investment strategy is very differentiated, and a highly diversifying strategy to VCERA's private credit portfolio. There is a strong alignment of interest within the firm as every employee of HarbourView will participate in the carried interest of this fund.

NEPC and I believe this is a compelling opportunity, in a non-crowded market, and offers an attractive risk-adjusted return profile.

THEREFORE, IT IS RECOMMENDED THAT THE BOARD:

1. **Approve an allocation of $30 million to the HarbourView Royalties Fund I, and direct staff and counsel to negotiate the necessary legal documents; and,**

2. **Subject to approval of VCERA legal counsel, authorize the Board Chair or the Retirement Administrator, or if both unavailable, the Chief Investment Officer to approve and execute the required documentation.**

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

NEPC, LLC

To: Ventura County Employees' Retirement Association

From: NEPC Consulting Team

Date: January 16, 2023

Subject: HarbourView Equity Partners Royalties Fund I Recommendation

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Recommendation

NEPC and staff recommend that the Board of the Ventura County Employees' Retirement Association ("VCERA" or the "Plan") approve a commitment of $30 million to HarbourView Equity Partners' ("HarbourView" or the "Firm") Equity Partners Royalties Fund I ("HVEP I" "Fund I" or the "Fund"). The Fund has been rated "2" by the NEPC Private Investment Committee, indicating NEPC's strong conviction in this product.

NEPC and VCERA's CIO believe that HarbourView Equity Partners Royalties Fund I fits well in the Plan's Private Credit allocation for the following reasons:

- The Fund offers a differentiated strategy by targeting music/entertainment royalties or intellectual property, or other contractual rights to obtain proceeds derived from the revenue generated via the sale, distribution, licensing, or exploitation of music assets.
- HarbourView Equity Partners offers prospective investors the opportunity to invest in an asset class that is potentially less susceptible to traditional recessionary headwinds.
- HVEP I utilizes a data-driven approach to royalty investing enabled by a patent-protected data system called "HITS".
- The Fund's term is 6-years, which is short relative to the 8- to 10-year terms of most peers in the royalties space.

Overview of Ventura Private Credit Program (PC)

As of 12/31/2022, VCERA has committed $715 million to Private Credit, with approximately $375 Million invested. Through 12/31/2022, the PC allocation has generated a net internal rate of return of 7.5% per annum, with a Total Value to Paid-In Capital ratio of 1.13x. Results have been achieved through a broad mix of Direct Lending, Real Estate, Distressed and Opportunistic lending strategies. Upon approval, this commitment will be VCERA's second 2023 vintage year commitment, and the fund's first commitment to a royalties-based strategy.

Fund I Overview

The Firm is targeting $500 million for HVEP I. The Fund will make 25 to 30 investments in music/entertainment royalties or intellectual property, or other contractual rights to obtain proceeds derived from the revenue generated via the sale, distribution, licensing, or exploitation of music assets. The average deal size is expected to be approximately $40 million. The target returns for Fund I is a mid-teen to low 20% net IRR and a net 1.7x-2.0x multiple-on-invested-capital ("MOIC").

The target hold period for these catalogs is expected to be three to five years and the average weighed life of the catalogs is five to eight years. The Fund will seek to purchase two types of existing cashflow-generating catalogs: 1) music composition (publishing) rights, and 2) sound recording (masters) rights. The two types offer different exposures. The first bucket, composition (publishing) rights, comes from the physical (i.e.: CDs, vinyl records) and digital (i.e.: song tracks distributed by Apple, iTunes, Google Play) sale of compositions, music streaming (i.e.: via Apple Music, Spotify, Pandora, etc.), and synchronization royalties (i.e.: advertisements, television, video games). The second bucket, sound recording (masters) rights, comes from performance royalties (earned when the song is performed publicly via TV, live performances, radio broadcasts), mechanical royalties (earned in exchange for the right to use the song for physical recording or digital downloads) and synchronization royalties (earned for use of music in a timed synchronization with audio-visual media).

This is a first-time fund so there is no previous track record to analyze, however, Sherrese Clarke Soares has executed this strategy at her previous firm with strong performance.

The Fund has a 3-year investment period and an overall fund term of 6 years. The standard fee is a 1.75% management fee based on invested capital, and a carried interest charge of 20% after a preferred return of 8%. An NEPC client aggregated discount may be available upon qualification.

The NEPC Private Investment Committee assigned HarbourView Equity Partners Royalties Fund I a “2” rating, noting the Fund’s potential for outsized private credit returns, the benefit of a differentiated music royalties lending strategy. VCERA should be aware that this is a first-time fund and the key person risk around Sherrese Clarke Soares. However, we maintain a positive view of the Fund, and we are supportive of staff’s recommendation to commit $30 million to HarbourView Equity Partners Royalties Fund I.

Rating	Definition
1	A high conviction investment product. Product has a clear and economically-grounded investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis.
2	NEPC has a positive view of the strategy. Strategy has a compelling and sound investment thesis. The manager is sufficiently resourced and incented to execute on the thesis. Strengths outweigh the weaknesses, but the strategy does not meet all requirements for a 1 rating.
3	A satisfactory investment product. The strategy lacks a compelling investment thesis, however there are no significant concerns around the manager's viability.
4	The strategy may have an unclear or ambiguous investment thesis or the manager may lack the ability to execute on the stated thesis. The strategy likely has strengths and weaknesses and the weaknesses may outweigh the strengths.
5	A strategy that lacks an investment thesis or NEPC has no confidence in the manager's ability to execute on the thesis, and/or the investment firm may not be viable. Serious issues have been identified with an investment manager or product. This rating aligns with a Terminate Due Diligence status for client-owned products.
NR	Due diligence has not been sufficiently completed on the product or manager.

HARBOUR VIEW

Ventura County Employees' Retirement Association

HarbourView Royalties Fund I, LP

Presented by Sherrese Clarke Soares

Sherrese Clarke Soares

Founder & CEO

- *2-time Founder & CEO, Investor, Operator and Board Director with 20 years leading corporate finance, capital markets, investment banking, and private equity*
- *Launched HarbourView Equity Partners with a $1bn partnership with* ***Apollo***
- ***Founded Tempo Music*** *and scaled the platform to 10 professionals, optimized the balance sheet to maximize returns*
- *Oversaw the origination and execution of more than $85BN of loan commitments as Head of North American Relationship Lending at* ***Morgan Stanley****, Served as Deputy Chair of the Capital Commitment Committee*
- *One of three founding senior professionals to develop the Entertainment Practice at* ***CIT Group****, leading the underwriting and portfolio management teams*
- *Graduated from* ***Georgetown University*** *and* ***Harvard Business School***
- *Board Member,* ***Planned Parenthood Federation of America****, Treasurer, Chair of Finance Committee, Member of Executive Committee and Revenue Committee, Former Chair of Investment Subcommittee*
- *Board of Trustees,* ***Carnegie Hall***
- *Board Member,* ***The New Group***
- *Board Member,* ***Evoqua Holdings*** *(NYSE: AQUA)*
- ***WSJ*** *Women to Watch 2022 Honoree,* ***Billboard*** *2022 Power List,* ***Billboard*** *2022 Women in Music Honoree,* ***Variety*** *Women's Impact Report 2022,* ***Buyouts*** *Women in P/E Class of 2022,* ***Billboard*** *2021 Change Agent, and* ***Billboard*** *2020 Women in Music Honoree*

Executive Summary

HARBOUR VIEW	▪ Founded in January 2021, by Sherrese Clarke Soares, HarbourView Equity Partners, LLC ("HarbourView"), is a Newark, NJ based global investment firm focused on niche markets and royalty producing investments ▪ Prior to HarbourView, Clarke Soares (the "CEO" and "Founder") founded Tempo Music, after spending 15+ years at Morgan Stanley in various capacities including overseeing the management of $85bn of credit for Morgan Stanley ▪ Since its launch, HarbourView has accumulated a diversified catalog of ~17,000[1]+ songs across both master recordings and publishing income streams
HarbourView Key Attributes	▪ Industrialized sourcing network with a dedicated calling effort, external marketing, and strategic relationships to power a sourcing flywheel, generating over ~$8.2bn[2] of deal pipeline since launch ▪ Data science & credit driven approach to underwriting and optimizing its investments underpinned by a proprietary data platform, HarbourView Ingestion Tool & Statistics ("HITS™") ▪ Strategic partnership with Apollo Global Management (and its affiliates and related funds, "Apollo") to create a JV (the "Apollo JV") with over $1bn in investible capital to acquire assets and the associated cash flow derived from the exploitation of musical works ▪ Impressive pedigree and talent amongst an experienced HarbourView team with deep expertise
Investment Strategy[3]	▪ Our investment strategy seeks to build a scaled diversified pool of long tenured, non-correlated investments focused on the exploitation of musical works across various income streams ▪ We seek to deliver consistent and attractive returns with a focus on credit like instruments that (a) are driven by long duration revenue streams, (b) have low correlation and resilience to broad economic downturns, and / or (c) represent iconic intellectual property that withstands the test of time ▪ Target investments with $1 – 25MM+ of annual net royalties
HarbourView Royalties Fund I, LP[3]	▪ HarbourView Royalties Fund I, LP seeks to invest in music assets, including royalties, intellectual property, or other contractual rights to receive proceeds derived from the sale, distribution, licensing, or exploitation of entertainment assets ▪ HarbourView Royalties Fund I, LP is seeking commitments totaling $500MM, with a $1BN hard cap ▪ Seeks to acquire a diverse set of assets targeting net levered high-teens returns, ~2x MOIC[4] ▪ Co-investment opportunities for certain LPs may be available

1) Title count may include multiple versions of the same song, such as covers, remixes, remasters and/or minor differences in naming conventions

2) Standardized market multiple of 17x applied to the sum of annual revenue for each catalog in the pipeline since launch

3) Additional information is available upon request. Target returns, forward looking estimates, and risk parameters are shown to illustrate the current risk / return profile of how the fund or the investment is / will be managed. **They do not forecast, predict, or project any fund, investment or investor return.** No assurance can be given that any investment will achieve its target return, forward looking estimate, risk parameters, or investment objectives. No assurance can be given that the fund will achieve its objectives or avoid losses.

4) Net of management and incentive fees

II. Team

The HarbourView Team

Senior leadership team has decades of relevant experience

Michael Chen
Managing Director, Investments

MAGNETAR CAPITAL
Goldman Sachs
NOMURA
Cornell University

Brandon Shaheen
Managing Director, Chief Strategy Officer

FTI Consulting
pwc
Ucla

Bari Wiley
Managing Director, Business Development

TAG ASSOCIATES
Cantor Fitzgerald
LEHIGH UNIVERSITY
UBS
NYU STERN

Christine Mason
Managing Director, Chief Compliance Officer & Operations

Morgan Stanley
FIU Business Florida International University
FDIC

Michael Agyilirah
Managing Director, Chief Financial Officer

The Blackstone Group
pwc
West Virginia University
Select Equity
Seton Hall University 1856

George Marc-Aurele
Chief People Officer

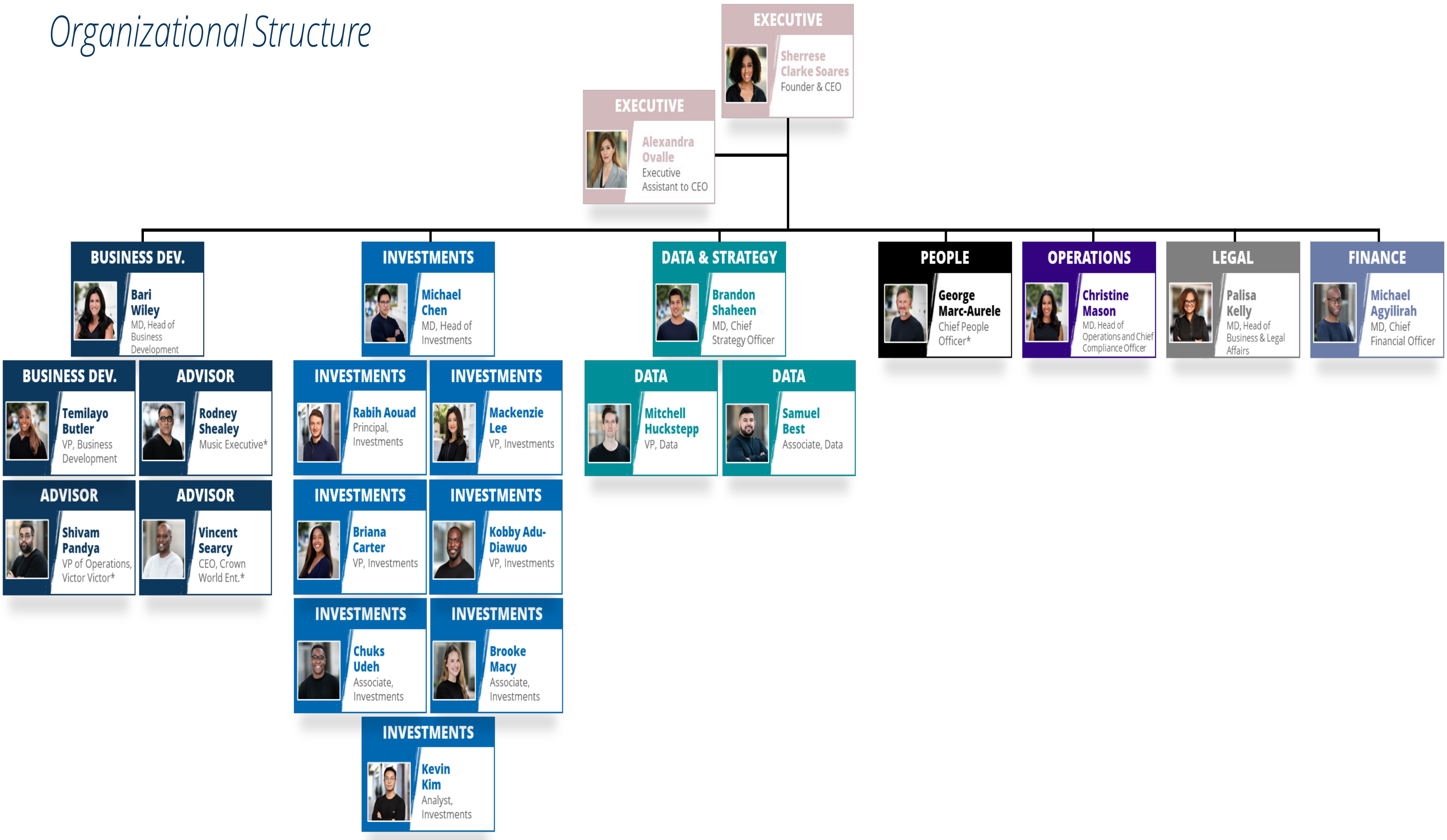
Digital Remedy
Rutgers
Columbia University
TEKsystems

Palisa Kelley
Managing Director, Head of Business & Legal Affairs

Sony Music Publishing
Sony Music
FWRV Attorneys
Paul Weiss
Veritas

The HarbourView Team

Organizational Structure



*Independent Consultant

Investment Strategy

Our Investment Strategy[1]

HarbourView Vision

HarbourView's management team has developed a playbook that is proven and repeatable

Differentiated Scale

1 *Royalty Fund I seeks to capture illiquidity premiums associated with royalties from intellectual property. Royalties are credit like instruments that are* ***non-correlated to the broader credit and equity markets.*** *Our portfolio construction is designed to focus on loss mitigation, principal protection, and achieving an attractive risk adjusted return*

2 *We have a strong pipeline continuously driven by our* **decades of music industry relationships**, **proprietary strategic relationships** *and* **industrialized sourcing platform**

3 *We make strategic investments underpinned by* **deep industry expertise**, *credit oriented* **statistical**, *and* **data-driven analysis** *and* **underwriting discipline**

4 *We leverage our relationships across the industry to* **augment the value of our portfolio** *while maintaining an* **efficient organization**

5 *Founder, Sherrese Clarke Soares, has designed this* **playbook** *and built a* **portfolio** *featuring global artists such as Bruno Mars, Alicia Keys, Jonas Brothers, Florida Georgia Line, P!nk, and Thomas Rhett in the founding of Tempo Music*

6 *Scalable infrastructure which allows for* **asset deployment** *without sacrificing underwriting discipline at* **risk adjusted returns**

7 **Track record** *and pipeline of* **actionable opportunities**

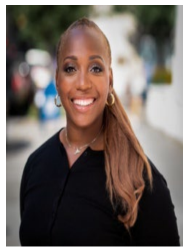
1) Additional information is available upon request. Target returns, forward looking estimates, and risk parameters are shown to illustrate the current risk / return profile of how the fund or the investment is / will be managed. **They do not forecast, predict, or project any fund, investment or investor return.** No assurance can be given that any investment will achieve its target return, forward looking estimate, risk parameters, or investment objectives. No assurance can be given that the fund will achieve its objectives or avoid losses.

Industrialized + Systematized Sourcing Effort

Organized around three pillars: Internal Business Development Team, Exclusive Global Advisory Network, Strategic Partnerships

Internal Business Development

Bari Wiley
Los Angeles, CA
Head of Business Development



Temilayo Butler
New York, NY
Business Development Associate

- Maintain targeted network of talent managers, artists, wealth managers, business managers, lawyers, and sell side advisors
- Engage in consistent outreach and communication with Business Development relationships to increase deal flow, including PR and Marketing

Global Advisory Network

Rodney Shealey*
New York, NY
Music Executive

Shivam Pandya*
New York, NY
VP of Operations at Victor Victor Worldwide

Vincent Searcy*
Atlanta, GA
CEO of Crown World Entertainment

- Industry veterans with experience in artist management, artist relations, film, television, music, and publishing
- Provide strategic advice and recommendations regarding acquisitions of or any other investment in music copyrights, royalties and other income streams and related rights

Strategic Partnerships

- HV's open architecture allows partnerships with various global music operators to support our sourcing flywheel and long-term portfolio management strategy

*Independent Consultant

HarbourView's Target Investments

Royalty Fund I targets premium content, that is sufficiently aged, with an attractive long-term outlook and the ability to generate stable long term cash flows

Core Financial Due Diligence Criteria

~3 years historical cash flow

Annual Royalty Income: **$1MM - 25MM+**

Limited income concentration across songs

High residual value potential correlated to staying power

Maintain a weighted average age of catalog between **5 - 8** years

Commercial Criteria

Best-in-Category Artists / Premium Intellectual Property

Long, Enduring, & Growing Genres with strong historical trends

Commercially viable titles highly likely to be streamed and globally sampled

Emerging & Iconic Brands that can be leveraged to create adjacent content opportunities

Structural Considerations

Masters

Publishing

Artist royalties

High Quality Administration/ Distribution partners

Percent of ownership

HarbourView Ingestion Tool & Statistics ("HITS™")

HITS™: Our Proprietary Data Analytics Platform for Deal Evaluation, Cash Flow Optimization, and Portfolio Management

DATA PROCESSING

- **Data Ingestion -** All music royalty statements are ingested through a cloud-based proprietary data transformation platform that parses and analyzes tens of millions of rows of raw data in minutes.
- **Song Database -** Raw title names are matched to the HarbourView song database through a series of search algorithms to populate release dates, genres, artists, songwriters, producers, and other key metadata.
- **Speed & Quality** - New catalog opportunities can be fully analyzed and modelled in just a few hours, creating an unparalleled deal evaluation process, both in efficiency and depth.

REAL-TIME ANALYTICS

- **Market Data** – HITS automatically tracks dozens of relevant market data points, including real-time streaming consumption metrics, radio spins, and social media trends.
- **Playlisting** – Changes to playlisting activity is monitored on a real-time basis for matches against prospective deal opportunities and acquired catalogs. Everything from new viral hits on TikTok to new additions on Spotify's top playlists can be instantly tracked and flagged.
- **Benchmarking** – Key performance metrics, such as streaming trends and playlisting behaviors, are benchmarked against cohorts of comparably aged songs to identify the best and worst performers.

OPTIMIZATION

- **Bespoke Forecasting –** Rather than applying generic forecast curves, we develop bespoke curves through analysis of millions of historical data points, adjusted for real-time market trends and benchmarking analytics.
- **Portfolio Optimization –** We endeavor to build a portfolio of music catalogs that maximizes returns and minimizes risk, optimally diversified across a series of risk factors, including age, royalty composition, concentration, genre, and artist/songwriter career history.

MONITORING

- **Collection Tracking –** Reporting statements for acquired catalogs are analyzed to ensure our partners are fully collecting royalties on our behalf, including through music platforms, international performance rights organizations, and licensing agreements.
- **Detailed Reporting –** We provide our investors with detailed reporting workbooks, with stratification of recent royalty collections across royalty sub-types, age cohorts, payors, genres, titles, artists, regions, and DSPs.

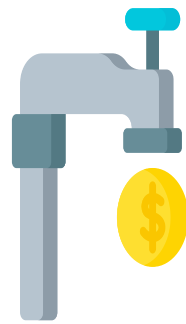
Leverage HITS™ to Design Optimal Portfolio Construction

HVEP is focused on mitigating risk by building a highly diversified portfolio of blue-chip assets administered by high-quality music administrators

Concentration risk is mitigated by increasing diversity within the catalog across artist / songwriter, song, genre, vintage, and royalty channels

Counterparty and operational risk is mitigated by having a third-party administration / distribution partners

Increasing the amount of song and artist diversification within the catalog reduces the impact of idiosyncratic events and volatility in the cash flows



Proprietary data platform allows HVEP to back test curves by genres and predict future cash flows with greater degree of certainty by utilizing millions of rows of data. Our data driven approach leads to scalability, flexibility, and the ability to purchase premium content at value

As HarbourView's catalog scales, the cash flows become more statistically significant which translates to more precision in expected performance (i.e., a more predictable cash-flow)

HarbourView Royalties Fund seeks to acquire a diverse set of assets targeting net levered 18% - 22% returns

HarbourView Current Portfolio Highlights[1]

89%
of Royalty Income generated by Streaming Income

Significant exposure to master streaming income and high growth genres like Latin

~17,000
Titles[2]

7.6
Weighted Average Age in Years

1) Deals closed and in exclusivity as of December 31, 2022
2) Title count may include multiple versions of the same song, such as covers, remixes, remasters and/or minor differences in naming conventions

The Opportunity

Music IP

A unique intersection between resilience and growth

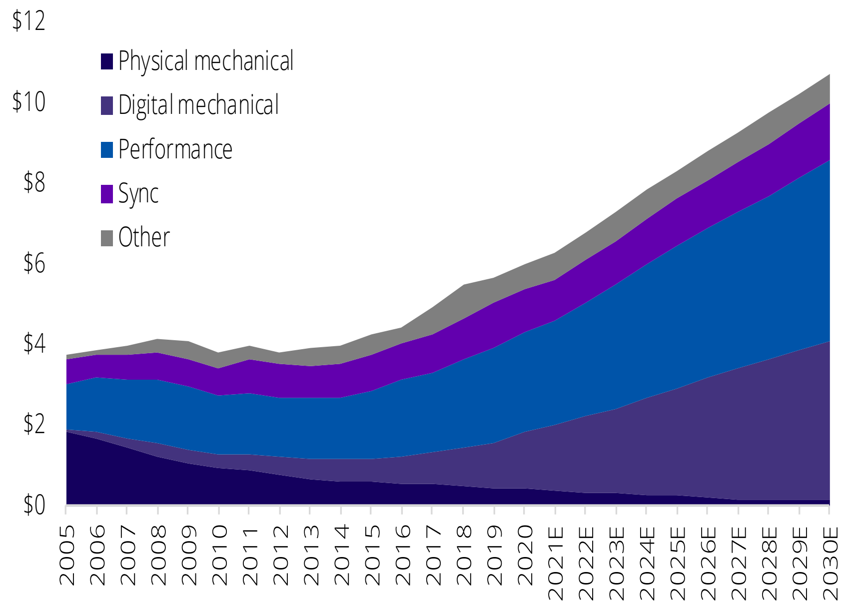
Music publishing has historically produced fixed income asset cash flows:

- The global music publishing industry is a ~$6B market as of 2020 (net) and is expected to grow at ~6% through 2030E to ~$11B[(1)]
- The royalty generating ability of a copyright is uncorrelated with broader financial markets
- Seasoned premium songs typically provide for a stable and predictable source of income
- Copyrights generally benefit from a long statutory life generating significant residual value

Tech-enabled consumption has re-invigorated growth from the mid-2010s

- The proliferation of music streaming has been and will continue to be a main driver in the overall growth of the global music industry, as streaming revenues are expected to reach ~$40 billion by 2030[(2)]
- Industry tailwinds remain, as the total addressable market expands and market penetration increases

Global Music Publishing Revenue ($Bn)[(1)]



Streaming Revenue Growth ($Bn)[(2)]

1) Music & Copyright, OMDIA, Goldman Sachs Global Investment Research; Reflect net revenues (gross revenues net of distributor share, record label share and other miscellaneous expenses)
2) (2010-2020) IFPI Global Music Industry Report; (2021E-2030E) Goldman Sachs music industry forecast.

Music Investment Process

Our investment strategy seeks to build a scaled diversified pool of long tenured, non-correlated investments focused on the exploitation of musical works across various income streams

Purchase of music royalties and copyrights → Transfer of Intellectual Property Rights → Active Management of assets to maximize royalty revenue and return on investment → Royalty revenues

Differentiated Investment Strategy

Differentiated Sourcing → Data Ingestion + Quick View → Active Evaluation → Investment Committee → Exclusivity + Closing → Portfolio Management + Optimization

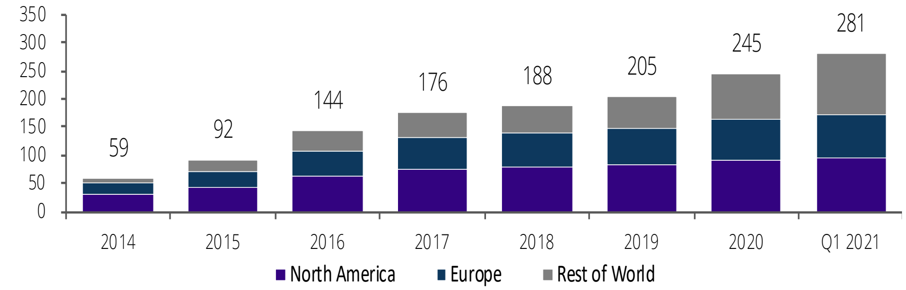
Differentiating Factors of the HarbourView Investment Process

- Proprietary Global Sourcing Network
- Senior Leadership with direct experience in the asset class
- Quantitative & Data Driven Approach

New Consumption Formats

New formats for music consumption present new opportunities to monetize publishing rights (i.e. licensing music to social media platforms and e-fitness companies)

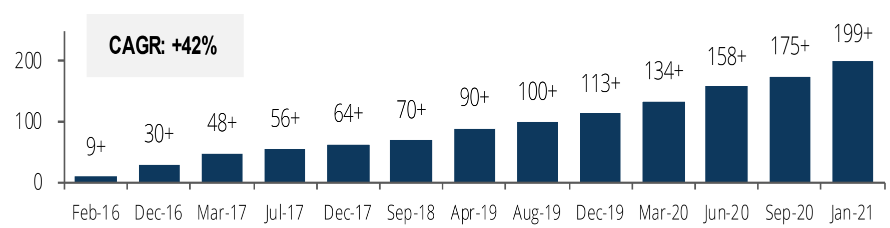
Snapchat Average Daily Active Users[1] (millions)



Short-form music and music-based video content have grown quickly, driven by the growth of global social media apps

- New media platforms increase fan engagement and expand a title's reach, perpetuating its popularity
- TikTok has announced licensing deals with all three major record companies, Sony Music (Nov 2020), Warner Music Group (Dec 2020) and Universal Music group (Feb 2021), allowing the short-form video app to offer songs from all three labels
- As of August 3, 2020, Snap Inc. confirmed licensing deals with several major music companies, allowing its ~281M Snapchat users to incorporate music into posts. The new feature was tested in Australia and New Zealand, and reached global users in Fall 2020

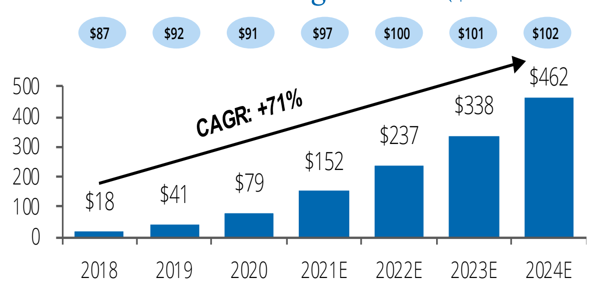
Roblox Global Total Monthly Active Users[2] (millions)



Social media platforms and interactive entertainment games (e.g., Roblox and Fortnite) are increasingly popular avenues for young people to consume music

- Rapper Travis Scott's April 2020 live in-game (Fortnite) concert had 27.7M+ unique players participated 45.8M times across 5 events, with streams of his music to spiking +26% over following 2 days

Peloton – Music Licensing COGS[3] ($ in millions)



Peloton - Music Related COGS / Subscriber

Peloton's 2M+ connected fitness subscribers and 5.4M+ members are able to listen to classes on-demand, allowing the company's instructors to use a broad diversity of music in distributed recordings

- Evercore estimates Peloton will generate nearly $500M of music royalty payments by 2024E, up over 1000% from $41M generated in 2019

1) Snap Inc. Company Filings. Represents average of quarterly daily active users.
2) RTrack (2021), Roblox, Tech Crunch (2020).
3) Evercore ISI Research.

Targeted Fund Terms[1]

HarbourView Royalties Fund I, LP	
The Fund	HarbourView Royalties Fund I, L.P., a Delaware limited partnership
Investment Strategy	The Fund will invest primarily in music assets, including royalties, interests in royalties or intellectual property or other contractual rights to receive proceeds derived from or measured by revenue generated from the sale, distribution, licensing or exploitation in any manner, in any media or entertainment assets and other opportunistic strategies outside of music royalties, in each case related primarily to music assets (the "Investments")
Target LP Commitments	$500 million
Hard Cap	$1 billion
Final Close	2H 2023
Minimum Investment	$5 million
Fund Term	6 years from final closing (subject to two one-year extensions)
Investment Period	*3 years from final closing*
Harvest Period	*3 years*
Management Fee	***Standard Class[2]*** 1.75% per annum on invested capital
Carry	***Standard Class[2]*** 20.0%
Preferred Hurdle	8% and an 80% / 20% catch-up thereafter
Waterfall	European

1) All terms and conditions contained herein are subject to and will be superseded by the final documentation
2) NEPC client aggregated discount is available upon qualification


HARBOUR VIEW
CONTENT IS QUEEN™
www.harbourviewequity.com
(973)-329-0290
110 Edison Place, Second Floor
Newark, NJ 07102

Thank You

Appendix

Music Primer

Types of Sound Recording/Master Royalties

Type	Description
Streaming	Streaming royalties are generated primarily through subscription or ad-supported interactive streaming activity on digital service platforms such as Spotify, Apple Music, or YouTube or through the grant of streaming music licenses to platforms such as TikTok.
Download	Download royalties are generated from the sale of music in a digital download format, such as through iTunes or Amazon.
Physical	Physical royalties are generated from the sale of music on physical media, notably CDs and vinyl records.
Performance	Performance royalties are generated for the sound recording whenever the recordings are broadcast over digital or satellite radio services. Unlike songwriters, recording artists in the U.S. do not collect performance royalties when their music is broadcast over traditional radio stations (i.e. using terrestrial-based radio transmitters), or in public venues. They only collect performance royalties for digital/Internet radio and satellite radio.
Licensing/Synchronization	Synchronization royalties are generated when a track has been licensed for use in a TV show, film, advertisement, video game, or other form of audiovisual media. It is a one-time, upfront payment for the right to use the track, and the price is negotiated between the rightsholder and the company licensing the music.

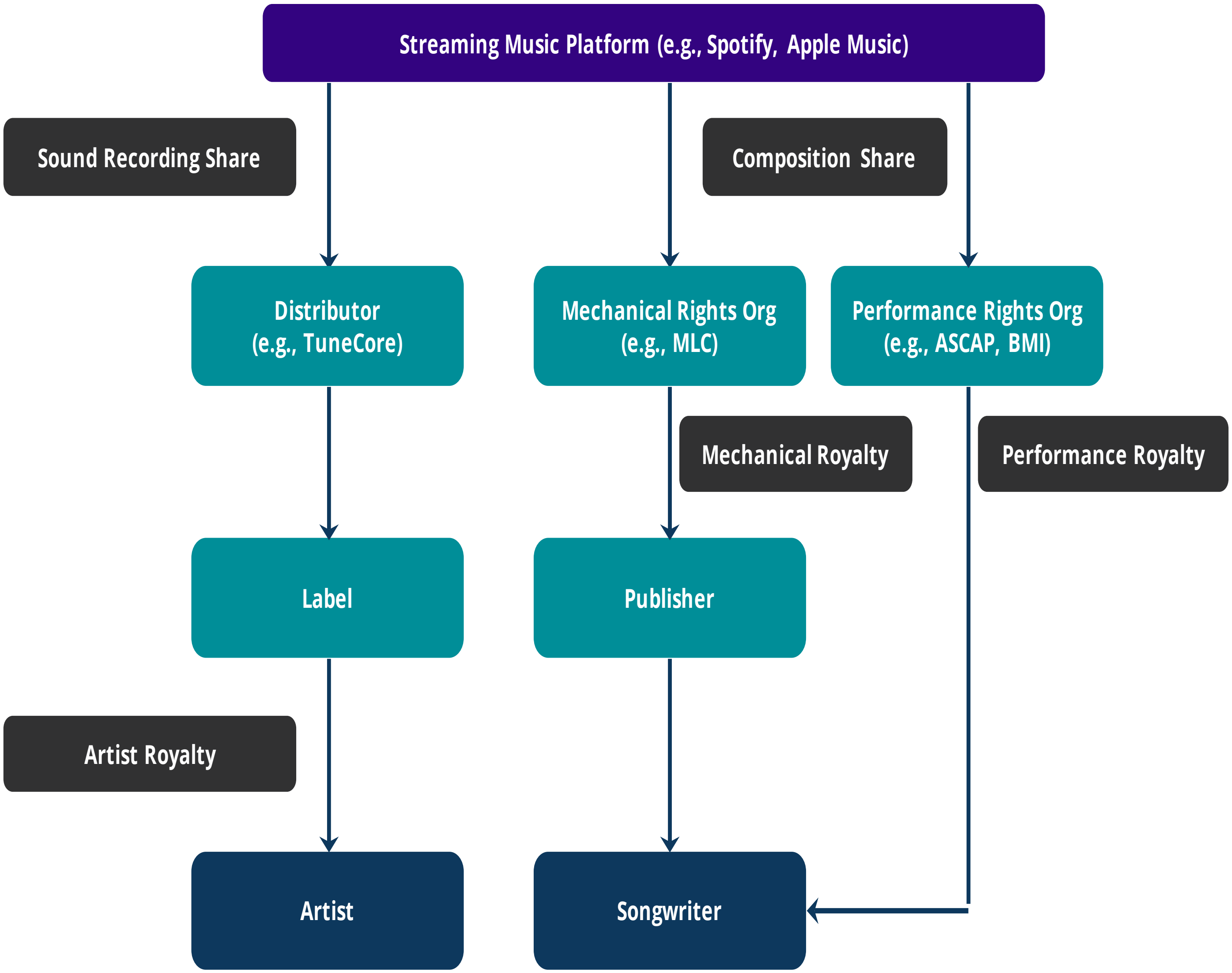
Sources: HarbourView analysis, RoyaltyExchange Music Royalties Guide

Types of Music Publishing/Composition Royalties

Type	Description
Mechanical	Mechanical royalties are generated from the reproduction and commercial distribution of music on physical and digital formats. Digital formats include audio-only music streaming through digital service platforms such as Spotify. In the U.S., standard mechanical rates are set by a panel of federal judges called the Copyright Royalty Board ("CRB"). These judges set royalty rates and re-evaluate them every five years. Mechanical royalty rates differ based on the format. Under the most recent CRB ruling, the U.S. mechanical royalty for physical album sales is 12 cents per unit sold and the mechanical royalty for interactive stream will have a headline rate of approximately 15% of net revenues (subject to certain calculations).
Performance	Performance royalties are generated from the public performance of music, including radio, film & TV, and public venues (e.g., restaurants, clubs). Audio-only music streaming through Spotify, Apple, and other platforms also generates a performance royalty. In the U.S., performance rights organizations such as ASCAP, BMI, SESAC, and GMR negotiate performance license and collect performance royalties on behalf of publishers and songwriters.
Synchronization	Synchronization royalties are generated when a song has been licensed for use in a TV show, film, advertisement, video game, or other form of audiovisual media. It is a one-time, upfront payment for the right to use the song, and the price is negotiated between the rightsholder and the company licensing the music. The licensing of music for audiovisual streaming (e.g., YouTube, Facebook) may also generate a synchronization royalty.

Sources: HarbourView analysis, RoyaltyExchange Music Royalties Guide

Interactive Streaming Waterfall



HarbourView generally acquires catalogs from artists and songwriters, but may also acquire catalog interests from labels and publishers.

For example, if HarbourView were to acquire an artist catalog, we would step into the position of the 'Artist' shown in the waterfall, and collect royalties directly from one or more distributors or labels.

If HarbourView were to acquire a songwriter catalog, we would step into the position of the 'Songwriter' and collect royalties directly from one or more publishers and rights organizations.

To the extent HarbourView identifies any issues with the collection of royalties, we will work with distributors, publishers, rights organizations, and other 'upstream' intermediaries to ensure we are collecting all royalties due to us.

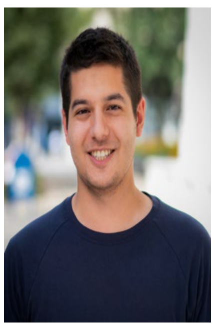
Sources: HarbourView analysis

Team Bios

Team

Bari Wiley
Managing Director, Head of Business Development

- 15+ years experience in sales, business development, and marketing within various financial institutions
- 5+ years in Institutional Equities with a focus on Client Relationship Management; focus on Asset Managers and Hedge Funds
- 5+ years experience in Sales and Trading at UBS within various fixed income and equity trading desks
- B.S. in Finance from Lehigh University, M.B.A. from New York University Stern School of Business



Brandon Shaheen
Managing Director, Chief Strategy Officer

- 10+ years of experience in the entertainment & media industry, with a specialization in music
- 7+ years at FTI Consulting providing forecasting & valuation, data analytics, transaction advisory, commercial due diligence, and strategic advisory services
- 5+ years of finance and accounting experience between FTI Consulting and PricewaterhouseCoopers
- B.A. in Business-Economics from UCLA

Christine Mason
Managing Director, Head of Operations and Chief Compliance Officer

- 13+ years of compliance experience in regulatory and financial firms
- 6+ years experience at Morgan Stanley working in the Legal and Compliance division in two leadership positions. Most recently served as Global Head of Oversight for Quality Assurance and Strategy and prior to that was Co-Head of Bank Compliance Testing
- 2+ years experience working at the FDIC as a Compliance Examiner.
- Board Member, Zimele USA
- B.A. and MBA in Finance from Florida International University

Team (cont'd)

George Marc-Aurele
Chief People Officer

- 25+ years of HR Operations and Talent Leadership
- 8+ years as a Chief People Officer
- 18 company culture awards received as a Chief People Officer
- Founder/CEO of various corporate culture and human resource consulting and advisory firms
- Board Member, Talenting.io, acquired by Job.com 2021, and CPXi Asia – JV of Digital Remedy, divested 2020
- Rutgers University, Quantic School of Business and Technology, executive education at Columbia Business School

Michael Agyilirah
Managing Director, Chief Financial Officer

- 10+ years of experience in Private Equity Fund Accounting
- 3+ years of experience as Head of Finance, Compliance and Operations at Radianx Capital
- 5+ years of experience at The Blackstone Group within the Corporate Treasury, Total Alternatives Solutions, and Liquidity Solutions Fund teams
- 3+ years of fund accounting experience at PricewaterhouseCoopers and Select Equity
- B.S. in Mechanical Engineering from West Virginia University, M.B.A. from Seton Hall University

Michael Chen
Managing Director, Head of Investments

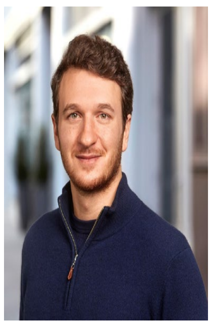
- 10+ years of experience in structured finance, capital markets, and investing in esoteric asset classes
- 5+ years in Magnetar Capital's Alternative Credit and Fixed Income group focused on private investments in media & entertainment, intellectual property, and aviation
- 4+ years of investment banking between Goldman, Sachs & Co. and Nomura Securities
- B.A. in Economics from Cornell University

Team (cont'd)

Palisa Kelley

Managing Director, Head of Business and Legal Affairs

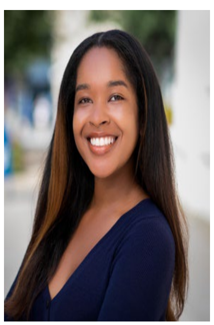
- 25+ years experience as an entertainment lawyer representing clients in the music, media and entertainment industries, including 4 years at Sony Music and 8 years at Sony Music Publishing
- Extensive experience structuring and negotiating complex music transactions in music publishing and recorded music
- Entertainment Associate at Franklin Weinrib Rudell & Vassallo; Litigation Associate at Paul, Weiss, Rifkind, Wharton & Garrison
- AB from Harvard College; JD from the University of Pennsylvania (Articles Editor, University of Pennsylvania Law Review)



Rabih Aouad

Principal, Investments

- Growth and private equity investment experience in media, communications, technology, and software in North America and Europe (Providence Equity Partners & PSG)
- Background in technology, media, and telecommunications investment banking (Bank of America Merrill Lynch)
- B.Sc. in Financial Engineering and minor in economics from Columbia University (Summa Cum Laude, Tau Beta Pi)

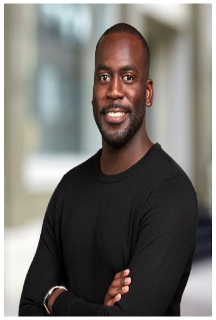


Briana Carter

Vice President, Investments

- 3+ years of experience in Investment Banking and Private Equity
- 1 year at AEA Investors' Small Business Fund focused on buyout investments in industrials, consumer / retail, services and healthcare
- 2+ years in Citigroup's Financial Sponsors Investment Banking group
- B.B.A. in Finance from Howard University

Team (cont'd)

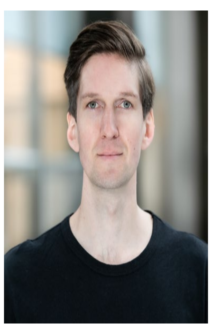


Kobby Adu-Diawuo
Vice President, Investments

- 3 years of experience at Ares Management as a Private Equity Associate
- Deal experience across the media sector including digital media, streaming, and advertising
- Prior to Ares, 2 years as an Investment Banking Analyst at Citigroup in the Consumer Products group
- B.A. in Economics and Government from Georgetown University

Mackenzie Lee
Vice President, Investments

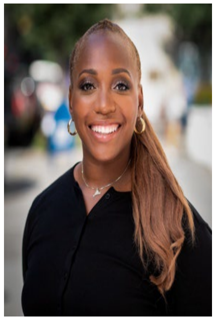
- 5 years of experience at Citigroup working on M&A advisory assignments across sectors
- Chair of Development Board of Education Through Music
- A.B. in Economics and Music from Harvard College



Mitchell Huckstepp
Vice President, Music Data

- 9+ years of entertainment industry knowledge across major and indie publishers, record labels and the intersection of music and film, TV and advertising
- 6+ years of experience in music publishing at Future Classic
- 2+ years in Writer Services and Creative Licensing at Universal Music Publishing Group
- Bachelor of Music (Composition) from University of Sydney, Australia

Team (cont'd)



Temilayo Butler
Vice President, Business Development and Strategy

- 4+ years of experience at Goldman Sachs working in Investment Banking and Global Markets divisions
- 3+ years of experience within Global Markets Management & Strategy group working on performance/competitor analytics and business strategy
- 1 year in Goldman Sachs Corporate Board Engagement Investment Banking group focused on board diversity
- Junior Board Member, Osborne Association, Chair
- B.B.A. in International Business from Howard University, M.P.S. Candidate in Arts and Cultural Management at Pratt Institute

Brooke Macy
Associate, Investments

- 1+ year experience at Guggenheim Securities working as an Investment Banking analyst within the Technology, Media, and Telecommunications group
- B.A. in Business Administration from University of Michigan, Stephen M. Ross School of Business

Ifechukwude Onyejebose "Chuks" Udeh
Associate, Investments

- 1+ years of experience at Barclays as an Investment Banking analyst in the Communications & Media group
- Deal experience across the media sector including digital media, streaming, and advertising
- B.A. in Financial Economics from Columbia University

Team (cont'd)

Samuel Best
Associate, Royalty Manager

- 4 Years of experience at Sony Music Entertainment in Royalty Analytics
- 2+ Years of experience within Sony working on process enhancements and onboarding new revenue streams
- B.A. in Economics from Montclair State University

Kevin Kim
Analyst, Investments

- 1+ years of experience at Lazard as an Investment Banking analyst in the Financial Institutions Group
- Deal experience across the financial services sector including asset management, FinTech, banking, and insurance
- B.B.A. from Emory University, Goizueta Scholarship

Alexandra Ovalle
Executive Assistant

- 20 years of experience partnering up with C-level executives in finance, real estate, technology, and global beauty industries
- B.F.A in Interior, Design, Miami International University of Art & Design

Advisors*

Rodney Shealey
Advisor

- Former EVP of Def Jam Recordings overseeing all aspects of the label: social and digital marketing, commerce, promotion, branding, and creative and cultural marketing
- Instrumental in developing the careers of some of the iconic artists of this generation, including but not limited to Michael Jackson, Rihanna, Mariah Carey, Jay Z, Kanye, Justin Bieber, Beyoncé, Jennifer Lopez, Sade, Frank Ocean, Jhene Aiko, Janet Jackson, Big Sean, 2Chainz, Toni Braxton and many more

Shivam Pandya
Advisor

- Music industry veteran and highly respected entertainment executive
- General Manager at Victor Victor Worldwide, a hybrid multimedia company founded by Steven Victor
- 10+ years of experience in roles including Vice President of Operations, and Director of Artist Management and Relations for a notable record label

Vincent Searcy
Advisor

- Entrepreneur and executive with extensive experience in music, tv & film, and catalog acquisition
- CEO of Crown World Entertainment (CWE) and responsible for the massive careers of songwriter and producer Rico Love, actor and R&B sensation Jacob Latimore, singer K. Michelle and many others
- Brokered publishing deals for writers and producers

*Independent Consultant

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HARBOUR VIEW

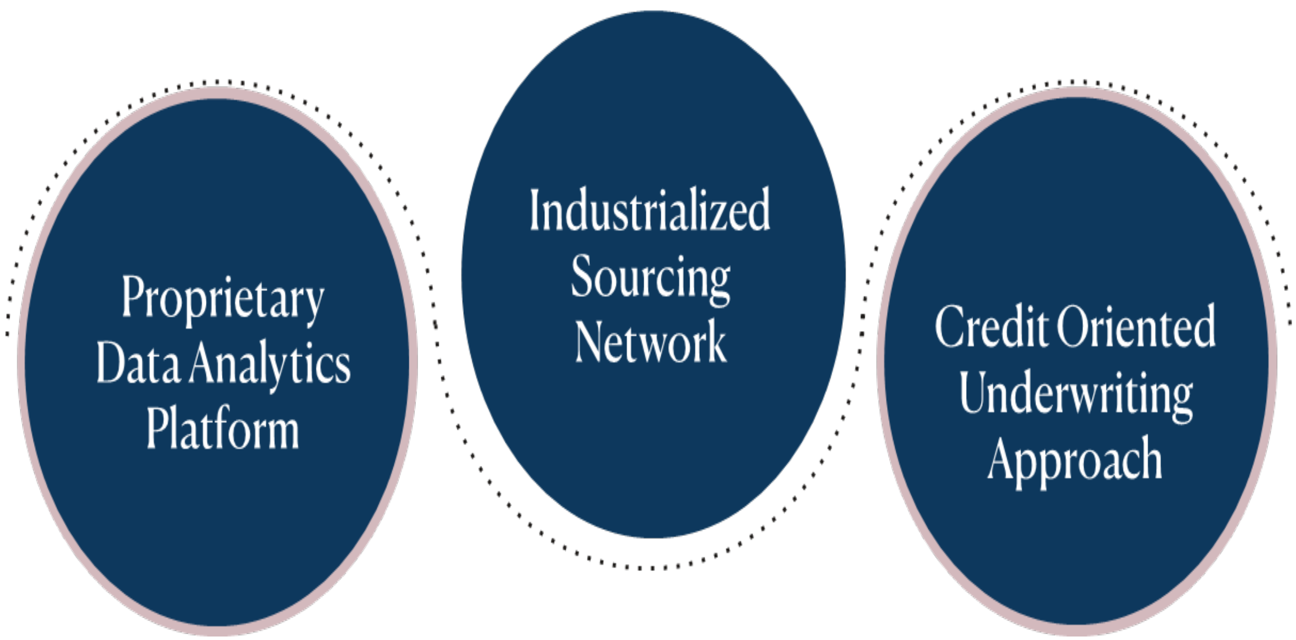
Music Industry Primer

Executive Summary

Founded in January 2021, by Sherrese Clarke Soares, HarbourView Equity Partners, LLC ("HarbourView"), is a Newark, NJ based global investment firm focused on content with an industrial platform built to protect, optimize, and enhance the legacy of premium intellectual property

- Prior to HarbourView, Sherrese Clarke Soares founded Tempo Music, after spending 15+ years at Morgan Stanley in various capacities including overseeing the management of $85bn of credit for Morgan Stanley
- Since its launch, HarbourView has accumulated a diversified catalog of ~17,000[1]+ songs across both master recordings and publishing income streams
- The investment strategy seeks to build a scaled diversified pool of long tenured, non-correlated investments focused on the exploitation of musical works across various income streams
- HarbourView uses a credit oriented and data centric approach to investing and is focused on analyzing underlying earnings data through our proprietary in-house data platform, HITS™ (HarbourView Ingestion Tool & Statistics)
- Music is both art and science. We believe that one cannot quantify the impact a song has on any individual listener, yet this impact is exactly what drives the data.
- We believe that art informs the science. As science driven investors, HarbourView is focused on data and harmonizing it so we may better understand each opportunity's value

The HarbourView Advantage



1) Title count may include multiple versions of the same song, such as covers, remixes, remasters and/or minor differences in naming conventions

Types of Music Copyrights

Music royalties are derived from the exploitation of copyrighted music. A song has two forms of copyrights:

SOUND RECORDING

A sound recording or "master" is the specific performance of a song. Masters are generally produced, promoted, and exploited with the assistance of a record label. Record labels typically own the master recording copyright, with the performing artist receiving a share of royalties.

Master recording royalties are generated primarily from music streaming, digital downloads, physical media sales, international radio broadcasts, and licensing activity.

MUSIC COMPOSITION

A music composition reflects the lyrics and melody of a song. Music publishers are primarily responsible for the administration and exploitation of music compositions. Ownership of a music composition copyright is generally split between publishers and songwriters.

Music publishing royalties are generated primarily from music streaming, digital downloads, physical media sales, radio broadcasts, live performances, film & TV broadcasts, and audiovisual synchronization.

EXAMPLE USAGE

The song *Killing Me Softly with His Song* was originally written and recorded by The Fugees in 1972, but Roberta Flack performed and released a popular cover version of the song a year later.

If a Spotify user were to stream Roberta Flack's version of *Killing Me Softly with His Song,* a sound recording royalty would be payable to Roberta Flack as the performing artist and a music publishing royalty would be payable to The Fugees as the original songwriters.

Source: HarbourView analysis

Types of Sound Recording/Master Royalties

Type	Description
Streaming	Streaming royalties are generated primarily through subscription or ad-supported interactive streaming activity on digital service platforms such as Spotify, Apple Music, or YouTube or through the grant of streaming music licenses to platforms such as TikTok.
Download	Download royalties are generated from the sale of music in a digital download format, such as through iTunes or Amazon.
Physical	Physical royalties are generated from the sale of music on physical media, notably CDs and vinyl records.
Performance	Performance royalties are generated for the sound recording whenever the recordings are broadcast over digital or satellite radio services. Unlike songwriters, recording artists in the U.S. do not collect performance royalties when their music is broadcast over traditional radio stations (i.e. using terrestrial-based radio transmitters), or in public venues. They only collect performance royalties for digital/Internet radio and satellite radio.
Licensing/Synchronization	Synchronization royalties are generated when a track has been licensed for use in a TV show, film, advertisement, video game, or other form of audiovisual media. It is a one-time, upfront payment for the right to use the track, and the price is negotiated between the rightsholder and the company licensing the music.

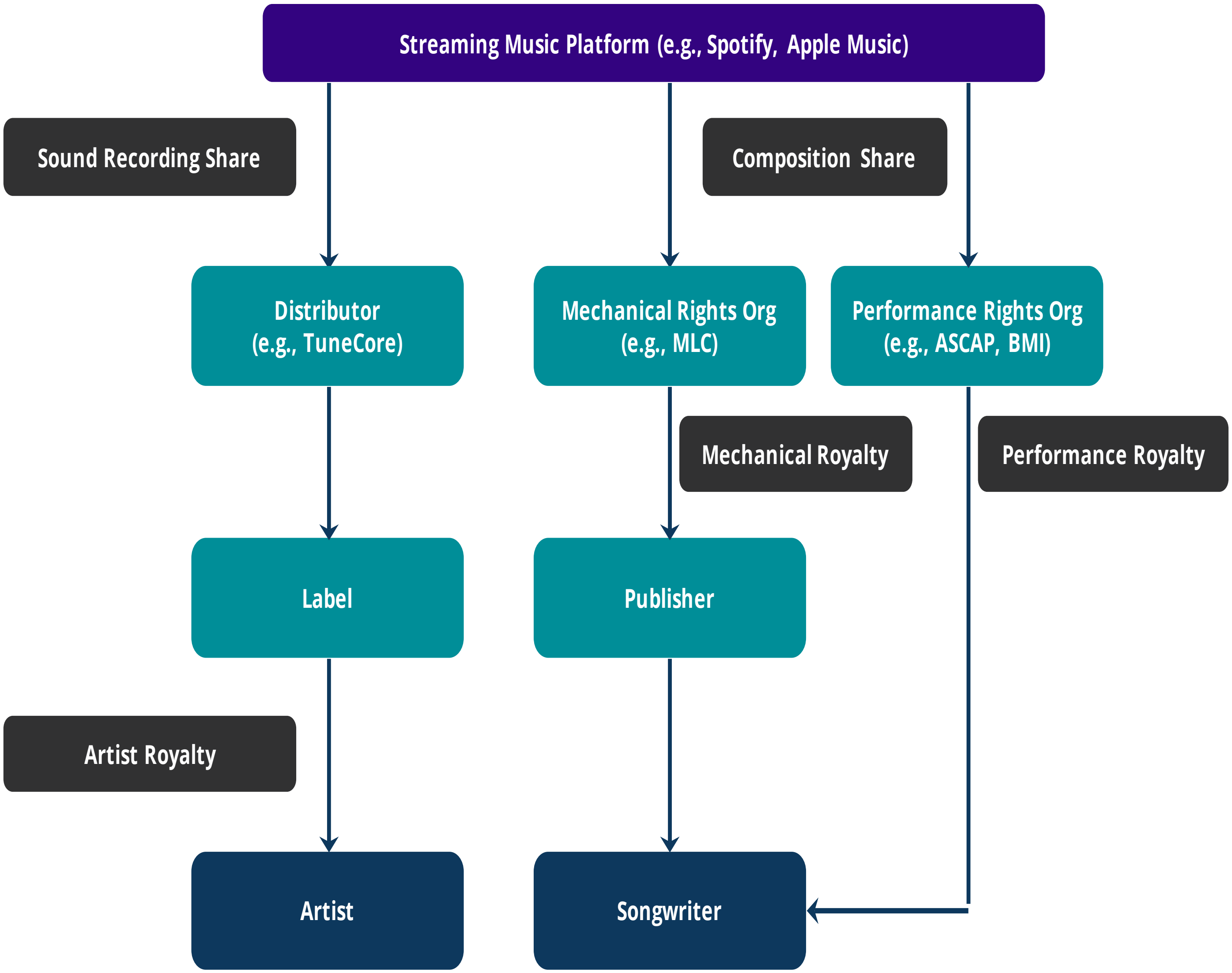
Sources: HarbourView analysis, RoyaltyExchange Music Royalties Guide

Types of Music Publishing/Composition Royalties

Type	Description
Mechanical	Mechanical royalties are generated from the reproduction and commercial distribution of music on physical and digital formats. Digital formats include audio-only music streaming through digital service platforms such as Spotify. In the U.S., standard mechanical rates are set by a panel of federal judges called the Copyright Royalty Board ("CRB"). These judges set royalty rates and re-evaluate them every five years. Mechanical royalty rates differ based on the format. Under the most recent CRB ruling, the U.S. mechanical royalty for physical album sales is 12 cents per unit sold and the mechanical royalty for interactive stream will have a headline rate of approximately 15% of net revenues (subject to certain calculations).
Performance	Performance royalties are generated from the public performance of music, including radio, film & TV, and public venues (e.g., restaurants, clubs). Audio-only music streaming through Spotify, Apple, and other platforms also generates a performance royalty. In the U.S., performance rights organizations such as ASCAP, BMI, SESAC, and GMR negotiate performance license and collect performance royalties on behalf of publishers and songwriters.
Synchronization	Synchronization royalties are generated when a song has been licensed for use in a TV show, film, advertisement, video game, or other form of audiovisual media. It is a one-time, upfront payment for the right to use the song, and the price is negotiated between the rightsholder and the company licensing the music. The licensing of music for audiovisual streaming (e.g., YouTube, Facebook) may also generate a synchronization royalty.

Sources: HarbourView analysis, RoyaltyExchange Music Royalties Guide

Interactive Streaming Waterfall



HarbourView generally acquires catalogs from artists and songwriters, but may also acquire catalog interests from labels and publishers.

For example, if HarbourView were to acquire an artist catalog, we would step into the position of the 'Artist' shown in the waterfall, and collect royalties directly from one or more distributors or labels.

If HarbourView were to acquire a songwriter catalog, we would step into the position of the 'Songwriter' and collect royalties directly from one or more publishers and rights organizations.

To the extent HarbourView identifies any issues with the collection of royalties, we will work with distributors, publishers, rights organizations, and other 'upstream' intermediaries to ensure we are collecting all royalties due to us.

Source: HarbourView analysis

Music Catalogs Overview

ADDRESSABLE MARKET

FRAGMENTATION OF SONG OWNERSHIP

In recent years, more producers, songwriters, and other creative talent have been involved in the production of new music releases, particularly top pop and hip-hop songs, resulting in increased fragmentation of royalty shares and copyright ownership.

Top hits may have a dozen or more economic participants that collect royalties from a song beyond the primary artist. Each of these individuals has the opportunity to sell their share of royalties independent of the other participants. This provides HarbourView with many opportunities to acquire a partial ownership share of a top song, such as by purchasing the catalog of a single songwriter.

INCREASED VOLUME OF NEW MUSIC

Driven in part by ease of access to music distribution services, the volume of new music created on a daily basis has increased substantially in recent years, particularly from independent artists. Further, the major labels (Universal, Sony, Warner) continue to release new music on a weekly basis, all of which replenishes the supply of music catalogs available for acquisition.

DEAL EVALUATION AND ANALYSIS

ROYALTY STATEMENTS

Evaluation of a music catalog opportunity will require analysis of underlying music royalty statements. These statements are prepared on a periodic basis (typically semi-annually, quarterly, or monthly) by distributors, labels, publishers, rights organizations, and other parties responsible for the collection and reporting of royalties.

Similar to the depth of reporting for other structured products, these royalty statements contain granular detail regarding the consumption of music, such as the royalty source, royalty type, and territory of exploitation. Thorough evaluation of a large music catalog will typically require analysis of millions of rows of data across years of royalty statements prepared by many different counterparties.

ROYALTY DECAY CURVES

Royalty amounts generally mirror the consumption pattern of new music releases, with a peak shortly following initial release followed by steep decay, which gradually flattens as a song ages. Different consumption formats (e.g., streaming, physical sales) have different royalty curve shapes, and these curves continue to evolve over time as formats shift and consumption patterns change.

COMPETITIVE LANDSCAPE

LIFECYCLE OF A DEAL

A competitive catalog sales process will generally involve a seller's representative(s) (e.g., business manager, lawyer, broker) reaching out to prospective music catalog buyers. Buyers will typically conduct a detailed review of royalty statements and other supporting documentation provided by the seller prior to submitting a bid on the catalog.

Following receipt of bids and negotiation of key deal points, a seller will usually enter into an exclusivity period with a selected buyer, during which emphasis is placed on legal diligence, transferability of titles, and execution of an asset purchase agreement with the assistance of outside counsel. Following consummation of the deal, royalties are redirected from the seller to the new buyer.

UNIVERSE OF BUYERS

There exists a broad spectrum of potential acquirers of music catalogs, each with its own strategic considerations. Major labels, music publishers, and other operators may look to purchase catalogs to increase market share, control rights, and improve profit margins. Large asset managers and thematic investors, such as HarbourView, may focus more carefully on passive opportunities with high-quality royalty profiles and strong returns.

Source: HarbourView analysis

Stakeholders/Payors

Monetization / Royalty Revenue[1]		Income Source	Medium	Description	Select Payor(s)
Music Publishing	Recorded Music				
✓	✓	Mechanical	Physical	▪ Sales of physical units such as CDs and vinyl's	amazon, BEST BUY
✓	✓	Mechanical	Digital Download	▪ Digital sale of music on platforms like iTunes	amazon
✓	✓	Mechanical	Interactive Streaming	▪ Licensing of music for exhibition via on-demand streaming platforms	music, MUSIC, YouTube Music, SOUNDCLOUD
✓	✓	Performance	Non-Int. Streaming	▪ Licensing of music for exhibition via online radio	pandora
✓	✗	Performance	AM / FM	▪ Licensing of music for exhibition via terrestrial radio	iHeart RADIO, CUMULUS MEDIA, Entercom
✓	✓	Performance	Satellite Radio	▪ Licensing of music for exhibition via satellite radio	SiriusXM
✓	✓	Performance	Public Performance	▪ Licensing of music for performance in a public setting	Bars, Gyms, Nightclubs, Restaurants, etc.
✓	✗	Performance	Live Performance	▪ Sale of tickets to live musical events	Primary Ticket: ticketmaster, eventbrite
✓	✓	Sync	Ads	▪ Licensing of music to include in ads	Advertising Agencies
✓	✓	Sync	Film, TV, etc.	▪ Licensing of music to include in other entertainment	NETFLIX, Disney, Activision Blizzard

1) Citigroup Research

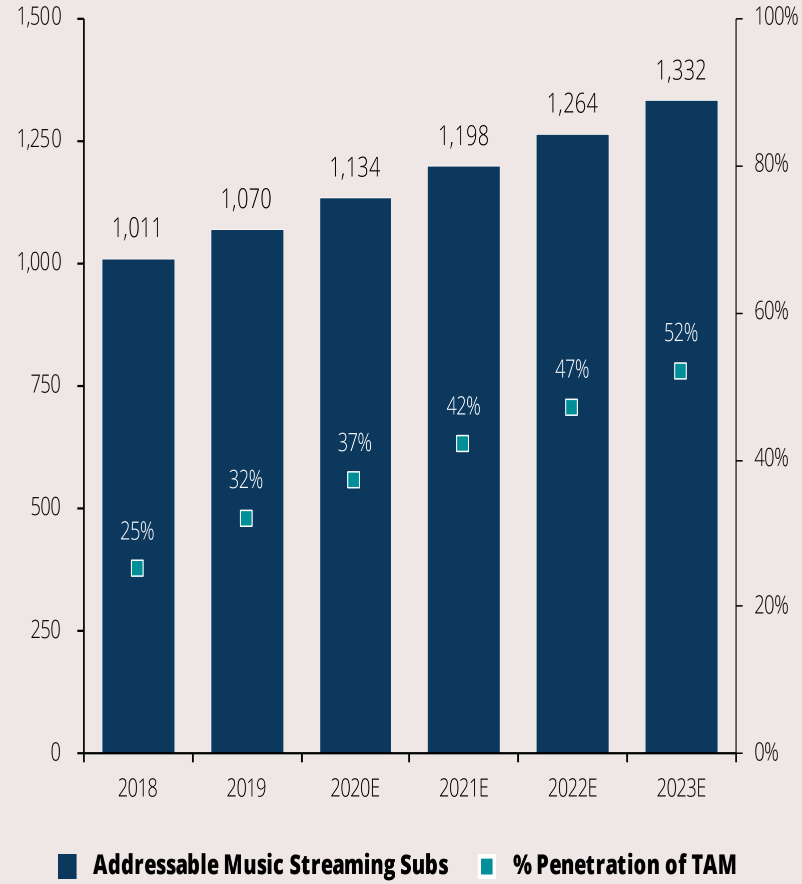
Proliferation of Streaming

Streaming is one of the main drivers of industry growth, which is tied to growth in overall music consumption. Streaming is enabling more people to listen to more music.

The affordability, unlimited consumption and ubiquitous distribution of streaming through both free (ad-supported) and subscription services has presented consumers an offering with a more compelling value proposition than anything that has existed historically

The combination of a growing Total Addressable Market ("TAM") of streamers and current low penetration rates support sell-side research estimates (supporting double-digit growth through 2020) and suggest there is room for significant upside

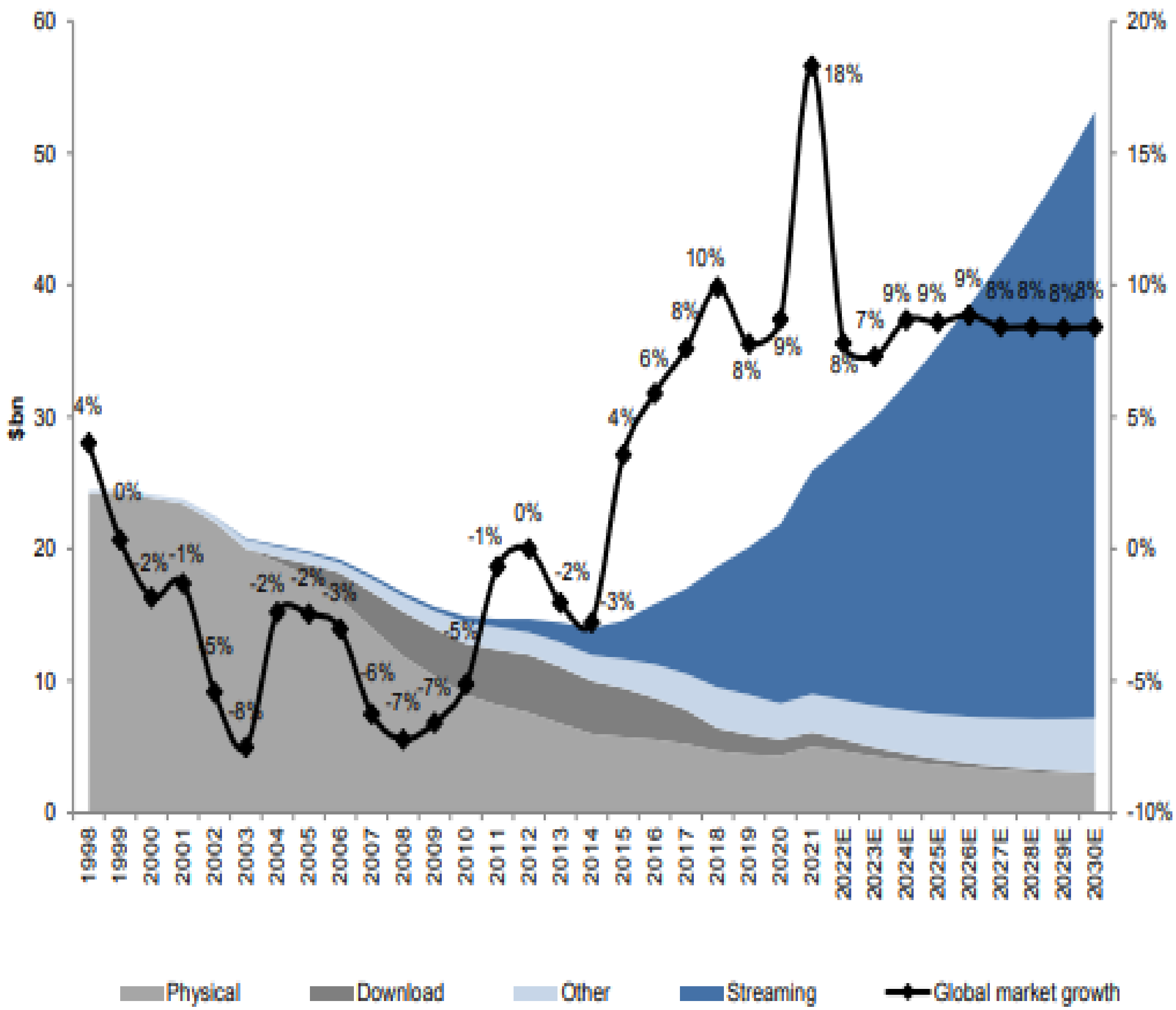
Global Streaming TAM and Subscriber Estimates[1] (millions)



(1) Evercore ISI music streaming research (2020); Addressable Music Streaming Subs calculated as % global adult population (15 – 64) with smartphones and ability to afford paid music streaming. Penetration rates calculated as Global subs divided by total addressable market.

Industry Forecasts – Music in the Air (Recorded Music)

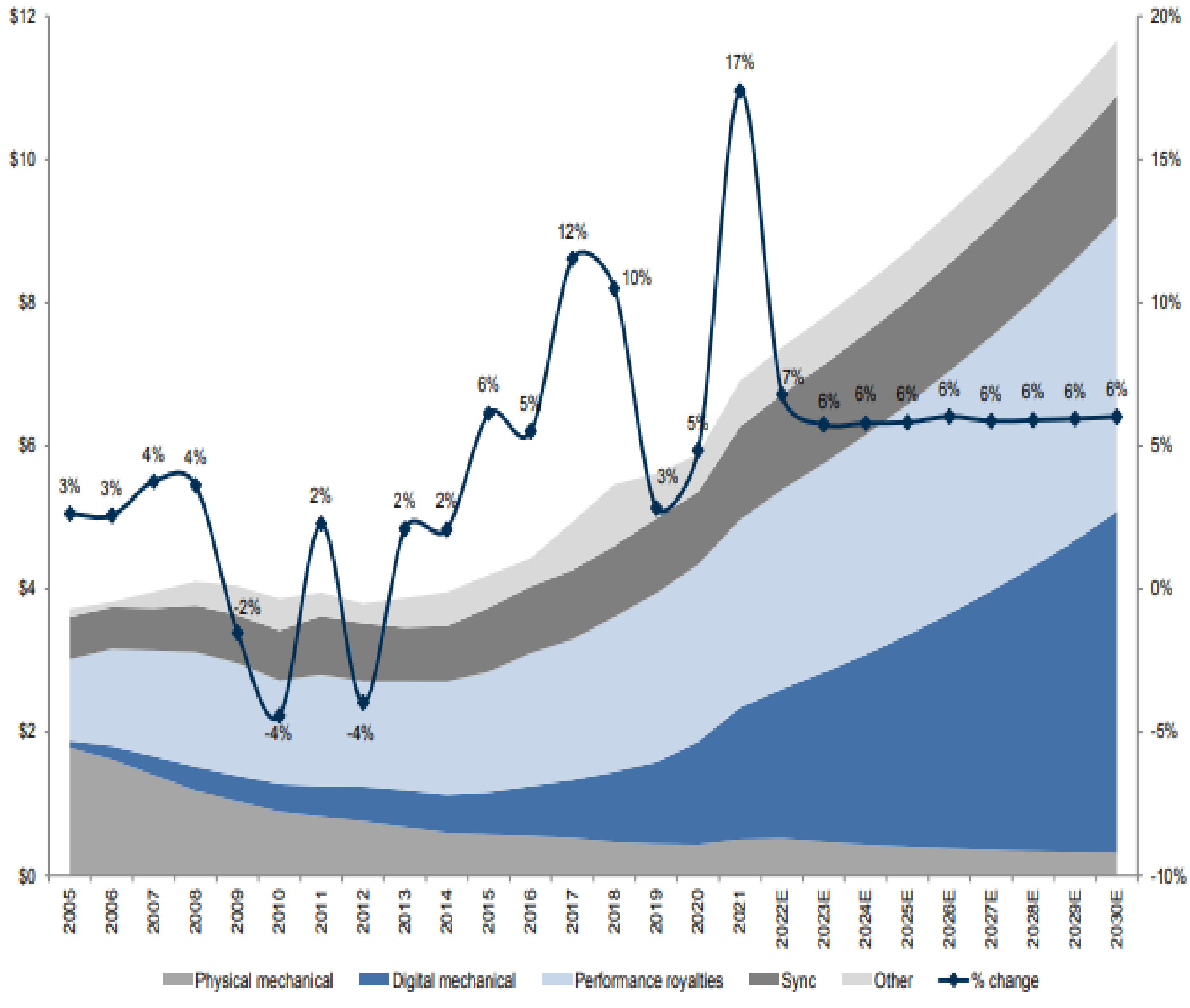
Excerpt of historical and forecasted global recorded music revenues from Goldman Sachs' Music in the Air (2022). Driven by the growth of streaming, Goldman Sachs projects the global recorded music market will grow from $26B in 2021 to $53B in 2030.



Source: Goldman Sachs

Industry Forecasts – Music in the Air (Music Publishing)

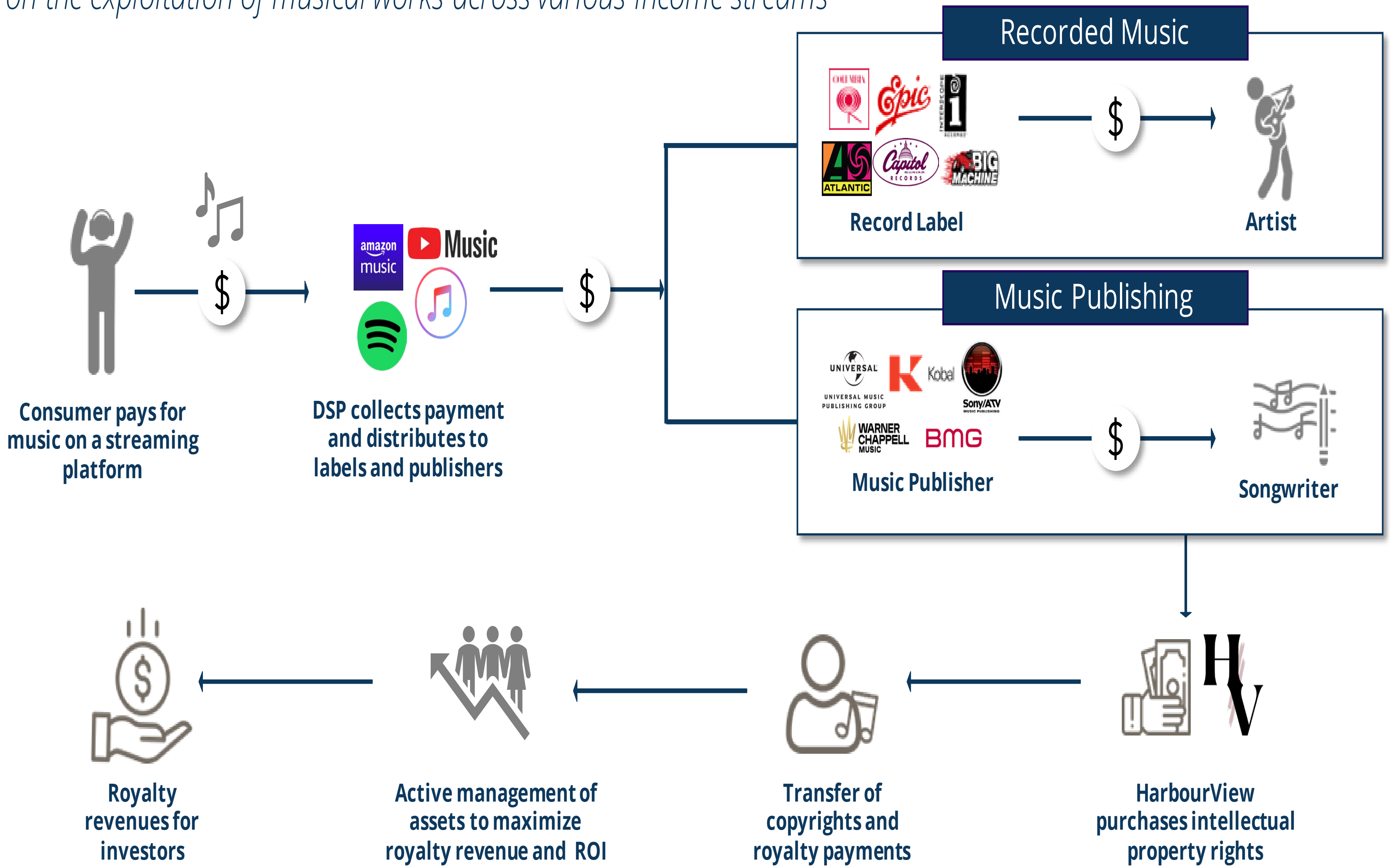
Excerpt of historical and forecasted global music publishing revenues from Goldman Sachs' Music in the Air (2022). Similarly, Goldman Sachs projects the global music publishing market will grow from $7B in 2021 to $12B in 2030.



Source: Goldman Sachs

Music Investment Process

Our investment strategy seeks to build a scaled diversified pool of long tenured, non-correlated investments focused on the exploitation of musical works across various income streams



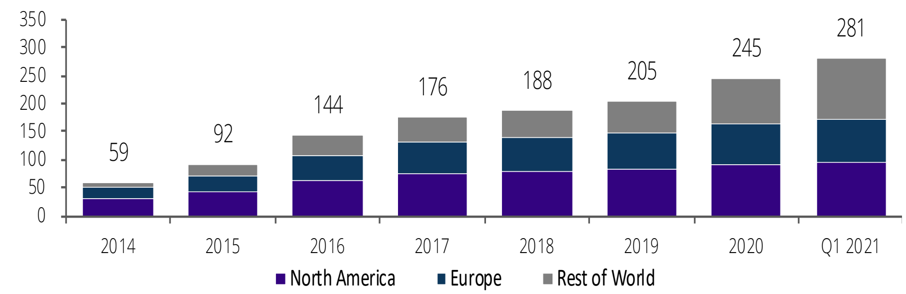
The Opportunity


XXIV

New Consumption Formats

New formats for music consumption present new opportunities to monetize publishing rights (i.e. licensing music to social media platforms and e-fitness companies)

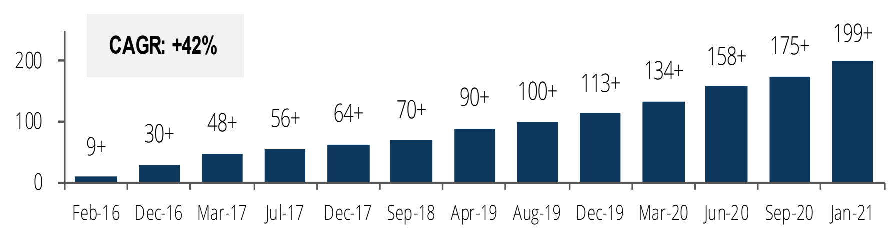
Snapchat Average Daily Active Users[1] (millions)



Short-form music and music-based video content have grown quickly, driven by the growth of global social media apps

- New media platforms increase fan engagement and expand a title's reach, perpetuating its popularity
- TikTok has announced licensing deals with all three major record companies, Sony Music (Nov 2020), Warner Music Group (Dec 2020) and Universal Music group (Feb 2021), allowing the short-form video app to offer songs from all three labels
- As of August 3, 2020, Snap Inc. confirmed licensing deals with several major music companies, allowing its ~281M Snapchat users to incorporate music into posts. The new feature was tested in Australia and New Zealand, and reached global users in Fall 2020

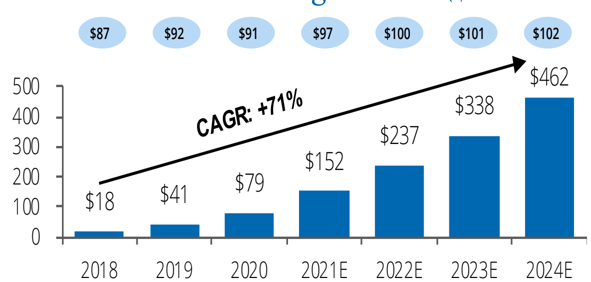
Roblox Global Total Monthly Active Users[2] (millions)



Social media platforms and interactive entertainment games (e.g., Roblox and Fortnite) are increasingly popular avenues for young people to consume music

- Rapper Travis Scott's April 2020 live in-game (Fortnite) concert had 27.7M+ unique players participated 45.8M times across 5 events, with streams of his music to spiking +26% over following 2 days

Peloton – Music Licensing COGS[3] ($ in millions)



Peloton – Music Related COGS / Subscriber

Peloton's 2M+ connected fitness subscribers and 5.4M+ members are able to listen to classes on-demand, allowing the company's instructors to use a broad diversity of music in distributed recordings

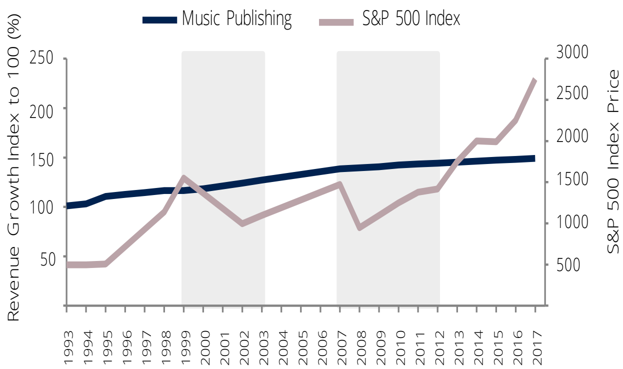
- Evercore estimates Peloton will generate nearly $500M of music royalty payments by 2024E, up over 1000% from $41M generated in 2019

(1) Snap Inc. Company Filings. Represents average of quarterly daily active users.
(2) RTrack (2021), Roblox, Tech Crunch (2020).
(3) Evercore ISI Research.

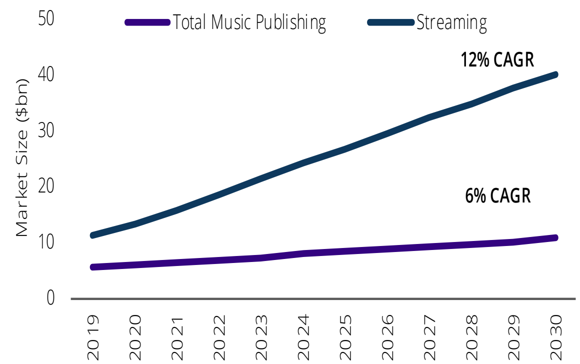
Pandemic has given further evidence to the resilience and non-correlation of Music

Despite the negative impact on public performance, the overall music market has grown for several consecutive years due to the increased reliance on digital streaming and willingness to pay for premium content by the consumer

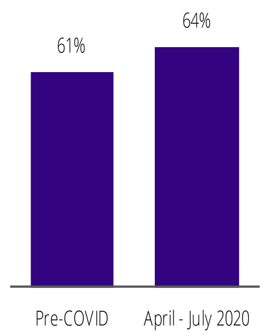
1 Music catalogs' performance is uncorrelated to that of financial markets



2 The impact of COVID on the music catalog market has been limited and long-term growth prospects remain unchanged



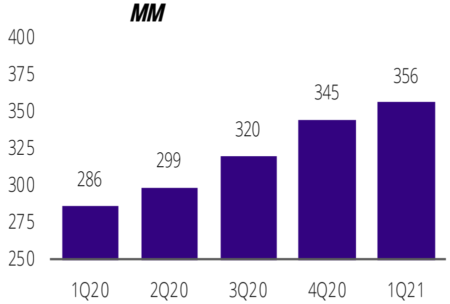
3 Back catalog share of the music consumption has increased as front-line releases have slowed



Front-line catalog releases have dramatically slowed, as a result of limited / no live touring and promotion opportunities

4 Demand and consumption for music streaming services has continued to grow despite the pandemic

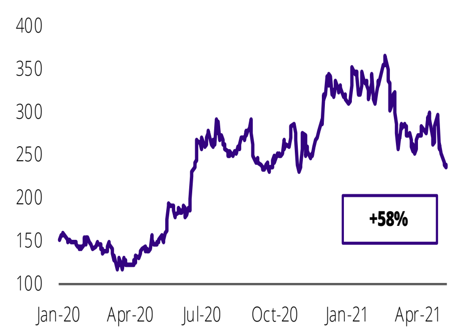
Spotify Monthly Active Users (MAU) in MM



- ***Spotify's 1Q2021 subscribers grew to ~356MM MAUs (+24% YoY)***
- ***On demand audio streams increased 17% in 2020 vs 2019***

5 Significant momentum in public markets for music assets

Spotify Share Price Performance[1]



- ***Successful IPO of Warner Music Group***
- ***Upcoming IPO of Universal Music***
- ***Hipgnosis trading above NAV***

Source: Goldman Sachs, IFPI, Nielsen Music, Company Filings, Enders Analysis on Music Publishing 2019, Preqin
(1) January 1, 2020—May 7, 2021

Market driven artist monetization of future cash flows has created an opportunity for investors

The New York Times

A $1 Billion Competitor for Music Rights Says 'Content Is Queen'

Sherrese Clarke Soares, the founder of HarbourView Equity Partners, is a Black woman approaching the high-stakes world of catalog sales from a different perspective.

CNN entertainment

As Song-Catalog Sales Boom, BMI Hires Outside Advisors to Help 'Further Grow the Value' of Its Music and Business

billboard

Luis Fonsi Sells Song Catalog to HarbourView

This marks the first major Latin publishing acquisition in the current wave of catalog investments.

VARIETY

Why Bob Dylan, Bruce Springsteen, Stevie Nicks and more artists have sold their music catalogs

MUSIC BUSINESS WORLDWIDE

MUSIC'S FIRST $500M ARTIST CATALOG DEAL FINALLY ARRIVES AS BRUCE SPRINGSTEEN SELLS RIGHTS TO SONY

Los Angeles Times

Think Hollywood spending is wild? Get a load of the music catalog gold rush

Bloomberg

Kobalt Music Lines Up $550 Million in Debt to Buy Song Rights

FINANCIAL TIMES

"Apollo-led group buys songbook of 'Despacito' singer Luis Fonsi"

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January 23, 2023

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: $30 Million Commitment to Kennedy Lewis Capital Partners Master Fund III

Dear Board Members:

Attached is joint recommendation from NEPC and I for a $30 million commitment to Kennedy Lewis Capital Partners Master Fund III (KL III).

Background

At its meeting of April 18, 2022, the Board increased its target allocation to private credit from 6% to 8% for a globally diversified private credit program over three to five years. To move towards the target allocation, the Board approved a Private Credit Pacing Plan calling for $240 million to be committed to private credit strategies during 2022. To ensure vintage year diversification, staff is projecting the Board will approve a similar commitment target of approximately $240 million in 2023.

In calendar year 2022 the Board approved $265 million in private credit funds commitments. Of this amount, $25 million was committed to Crescent Cove Opportunity Fund; $40 million to Torchlight Debt Fund VIII; $50 million to VHW Master Fund III; $50 million to Pantheon's Credit Opportunities (PCO) Fund II, and $100 million to PIMCO's Credit Opportunities Fund (COF) IV.

In continuing to build out and diversify the private credit portfolio in 2023, NEPC and I are jointly recommending a $30 million commitment to KL III. As is described in greater detail in NEPC's recommendation memo and in Kennedy Lewis's presentation deck, KL III is targeting an attractive risk-adjusted return of 12-14% net, and a net Total Value of Paid-In capital (TVPI) multiple of 1.5x to 2.0x.

KL III is differentiated from VCERA's other private credit strategies, in part, as it is designed to invest opportunistically across market environments in the U.S. and Europe; first lien asset-based loans often with equity upside kickers; and may invest across the capital structure in both public and private markets. A hallmark of their strategy is a focus on risk mitigating strong collateral and covenant packages.

The fund's targeted size is $3 billion, with a three-year investment period, a three-year harvest period, and two 1-year extension options.

Stated management fees are available on either an invested capital or a committed capital basis.

The management *fee on committed capital* is *1% during the investment period*; and thereafter switches to 1% on invested capital.

Alternatively, for investors electing the *fees on invested capital option*, the management *fee is 1.85%* on invested capital. (See side by side options comparison in the table below)

Fees on Committed Capital	Fees on Invested Capital
1% on committed capital during the 3-year investment period; thereafter 1% on invested capital	1.85% on invested capital
20% carried interest with a 7% preferred return	20% carried interest with a 7% preferred return

NEPC and I believe that the Fees on Committed Capital option is preferable as the funds are expected to be rapidly drawn down and invested. See attached modelled fee options comparisons based on Fund III fees applied to what a private credit fund might do. Note that it is not possible to accurately know future investment activity based on unknown future market conditions or investment opportunities.

Note also that an NEPC client aggregated discount may be available upon qualification.

THEREFORE, IT IS RECOMMENDED THAT THE BOARD:

1. **Approve a commitment of $30 million to the Kennedy Lewis Capital Partners Master Fund III, opting for Fees on Committed Capital, and direct staff and counsel to negotiate the necessary legal documents; and**

2. **Authorize the Board Chair or the Retirement Administrator, or if both unavailable, the Chief Investment Officer to approve and execute the required documentation.**

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

Kennedy Lewis Funds Fund III

Mgt Fees: What-If Comparison

Committed Capital vs Actively Invested Capital

Investor Commitment: $1,000,000	Cumulative fees $	Cumulative fees as % of Commitments
Simulation 1: mangement fees- 2017 vintage year		
Management Fee - **Committed Capital**	40,826	4.08%
Management Fee - Actively **Invested Capital**	41,847	4.18%
Simulation 2: management fees- 2020 vintage year		
Management Fee - **Committed Capital**	38,733	3.87%
Management Fee - Actively **Invested Capital**	45,752	4.58%

Note: Projected Fees are Modelled Using Fund III Alternative Fee Options Using Simulated Data Representative of Investor Commitments and Simulated Cumulative Actively Invested Capital from typical 2017 and 2020 vintage year private credit funds

Kennedy Lewis Fund III
Comparision of Mgt Fees: Committed vs Invested Capital

Simulation 1					
	Amount Committed	Amount Actively Invested	Mgt Fees based on Committed Capital	Mgt Fees based on **Invested Capital**	
Q4 2017	**1,000,000**	20,000	951	35	
Q1 2018	**1,000,000**	20,000	2,500	93	
Q2 2018	**1,000,000**	50,000	2,500	231	
Q3 2018	**1,000,000**	140,000	2,500	648	
Q4 2018	**1,000,000**	150,000	2,500	694	
Q1 2019	**1,000,000**	320,000	2,500	1480	
Q2 2019	**1,000,000**	460,000	2,500	2128	
Q3 2019	**1,000,000**	550,000	2,500	2544	
Q4 2019	**1,000,000**	600,000	2,500	2775	
Q1 2020	**1,000,000**	650,000	2,500	3006	
Q2 2020	**1,000,000**	740,000	2,500	3423	
Q3 2020	**1,000,000**	740,000	2,500	3423	
Q4 2020	**1,000,000**	890,000	2,500	4116	
Q1 2021	**1,000,000**	890,000	2,500	4116	
Q2 2021	**1,000,000**	890,000	2,500	4116	
Q3 2021	**1,000,000**	770,000	1,925	3561	
Q4 2021	**1,000,000**	530,000	1,325	2451	
Q1 2022	**1,000,000**	200,000	500	925	
Q2 2022	**1,000,000**	170,000	425	786	
Q3 2022	**1,000,000**	140,000	350	648	
Q4 2022	**1,000,000**	140,000	350	648	
			40,826	41,847	
			4.08%	4.18%	
Fund III Rates applied to the Commitments and Simulated Actively Invested Capital of a typical 2017 vintage private credit fund and the Resultant Management Fees					

Kennedy Lewis Fund III
Comparision of Mgt Fees: Committed vs Invested Capital

Simulation 2						
	Amount Committed	Amount Actively Invested	Mgt Fees based on Committed Capital	Mgt Fees based on **Invested Capital**	Assumptions:	
Q2 2020	**1,000,000**	60,000	1,758	195	Investment Period Ends	1/15/2024
Q3 2020	**1,000,000**	90,000	2,500	416	Harvest Period Ends	1/15/2027
Q4 2020	**1,000,000**	250,000	2,500	1,156		
Q1 2021	**1,000,000**	330,000	2,500	1,526	10% Cap Call	Q2-23
Q2 2021	**1,000,000**	460,000	2,500	2,128	33 % Distribution	Once Harvest Period Begins
Q3 2021	**1,000,000**	590,000	2,500	2,729		
Q4 2021	**1,000,000**	720,000	2,500	3,330		
Q1 2022	**1,000,000**	790,000	2,500	3,654		
Q2 2022	**1,000,000**	790,000	2,500	3,654		
Q3 2022	**1,000,000**	790,000	2,500	3,654		
Q4 2022	**1,000,000**	790,000	2,500	3,654		
Q1 2023	**1,000,000**	790,000	2,500	3,654		
Q2 2023	**1,000,000**	890,000	2,500	4,116	Assumed 10% Cap Call	
Q3 2023	**1,000,000**	890,000	2,500	4,116		
Q4 2023	**1,000,000**	890,000	2,500	4,116		
Q1 2024	**1,000,000**	560,000	1,400	2,590	Assumed 33% distribution	
Q2 2024	**1,000,000**	230,000	575	1,064	Assumed 33% distribution	
Q3 2024	**1,000,000**	-	-	-	Assumed 33% distribution	
			38,733	45,752		
			3.87%	4.58%		

Fund III Rates applied to the Commitments and Simulated Actively Invested Capital of a typical vintage 2020 private credit fund with a 3-year investment period 3-year harvesting period, and Estimate of the Resultant Management Fees

NEPC, LLC

To: Ventura County Employees' Retirement Association

From: NEPC Consulting Team

Date: January 16, 2023

Subject: Kennedy Lewis Capital Partners III Recommendation

Recommendation

NEPC and staff recommend that the Board of the Ventura County Employees' Retirement Association ("VCERA" or the "Plan") approve a commitment of $30 million to Kennedy Lewis Capital Partners ("Kennedy Lewis" or the "Firm") Fund III ("KLCP III" "Fund III" or the "Fund"). The Fund has been rated "1" by the NEPC Private Investment Committee, indicating NEPC's strong conviction in this product.

NEPC and VCERA's CIO believe that the KLCP III commitment fits well in the Plan's Private Credit allocation for the following reasons:

- The Fund offers a differentiated strategy by maintaining a dynamic, flexible mandate designed to take advantages of dislocations in credit markets. The strategy is meant to drive absolute returns in all market environments. The strategy invests across the capital structure, primarily in first lien positions. Fund III has the flexibility to invest in public, private, performing, and distressed investment opportunities in the US and Europe.
- The Firm's investment team is robust for its size with partners who have extensive experience, investing across various cycles, sectors, and geographies at well-established credit firms.
- The current market environment should play into Kennedy Lewis' strengths. Not only does Fund III have the ability to take advantage of dislocations in the market, but it also targets areas generally overlooked or passed over by larger opportunistic credit/distressed funds.
- Given a higher risk profile, the Fund's objective is an unlevered net IRR of 12-14%. Given the volatility in the market, Fund III has the potential to generate higher returns than its target.

Overview of Ventura Private Credit Program (PC)

As of 12/31/2022, VCERA has committed $715 million to Private Credit, with approximately $375 Million invested. Through 12/31/2022, the PC allocation has generated a net internal rate of return of 7.5% per annum, with a Total Value to Paid-In Capital ratio of 1.13x. Results have been achieved through a broad mix of Direct Lending, Real Estate, Distressed and Opportunistic lending strategies. Upon approval, this commitment will be VCERA's first 2023 vintage year commitment.

Fund III Overview

The Firm is seeking to raise $3 billion ($3.5 billion hard cap) for Kennedy Lewis Capital Partners III, a global opportunistic credit fund. The Fund's primary focus is providing bespoke financing solutions to companies with enterprise values between $300 million and $3 billion. Fund III has the flexibility to invest in both public and private, distressed and performing credit. The broader mandate is meant to allow the team to be dynamic and nimble with its capital deployment. The Fund will originate as well as participate in secondary market transactions in loans and equity of companies in which it makes debt investments. The portfolio is meant to consist of high-conviction names in approximately 15-25 core positions and structured so that in a worst-case scenario the Fund would not expect to lose more than 2% of portfolio commitments. Typical size ranges will be between $50 million and $200 million which are larger than Fund II. Fund III is targeting an unlevered net IRR and a net MOIC of 12-14% and 1.5x, respectively. The Fund will not use fund-level leverage.

Kennedy Lewis' strategy seeks to build scalable investment verticals around sectors and exploit disruptive themes in areas going through a transition. The Firm is not limited to one specific market or segment; however, the Firm has historically skewed towards power, specialty finance (more specifically non-traditional education finance), life sciences and intellectual property. The Firm focuses on opportunities overlooked and misunderstood by most corporate credit funds. These investments include highly structured growth capital, supporting companies that have developed unique products, technologies, or services. In other situations, Kennedy Lewis will invest through a stressed and distressed focus in companies overrun by sector disruption. These investments will typically be associated with companies that have unsustainable capital structures, lack access to traditional sources of capital and present restructuring opportunities. Moreover, the strategy is meant to take advantage of those situations that are simply too small for larger credit firms to efficiently invest. Fund III is meant to avoid overall market beta in the market environment but pivot into higher beta opportunities when the market does eventually sell off.

As of September 30, 2022, Fund I is currently generating a 15.5% net unlevered IRR. Fund II, which benefited from the ability to invest during the pandemic, is off to a strong start generating a 13.2% net IRR with 93% of the portfolio in performing situations. Fund I has a 1% loss rate and Fund II currently has zero losses. Fund III, which has invested approximately $550 million, is still early, but has generated an 11.6% unlevered, net IRR.

The Fund has a 3-year investment period from the final close and a fund term of 3 additional years. Investors have the option of two different types of management fees, in addition to a carried interest charge of 20% after a 7% preferred return has been achieved:

- Fees on committed capital option: 1% on committed capital during investment period; thereafter fees switch to 1% on actively invested capital
- Fees on invested capital option: 1.85% on actively invested capital

Given the expectation of a relatively rapid funding period, NEPC recommends the fee based on committed capital.

*Note: An NEPC client aggregated discount may be available upon qualification.

The NEPC Private Investment Committee assigned the Kennedy Lewis Capital Partners III a "1" rating, noting the Fund's potential for outsized private credit returns, the benefit of a differentiated opportunistic credit strategy, senior team, and a strong track record. VCERA should be aware of the large fund size increase from Kennedy Lewis' prior Fund II and the relatively new firm. However, we maintain a positive view of the Fund, and we are supportive of staff's recommendation to commit $30 million to Kennedy Lewis Capital Partners III.

Rating	Definition
1	A high conviction investment product. Product has a clear and economically-grounded investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis.
2	NEPC has a positive view of the strategy. Strategy has a compelling and sound investment thesis. The manager is sufficiently resourced and incented to execute on the thesis. Strengths outweigh the weaknesses, but the strategy does not meet all requirements for a 1 rating.
3	A satisfactory investment product. The strategy lacks a compelling investment thesis, however there are no significant concerns around the manager's viability.
4	The strategy may have an unclear or ambiguous investment thesis or the manager may lack the ability to execute on the stated thesis. The strategy likely has strengths and weaknesses and the weaknesses may outweigh the strengths.
5	A strategy that lacks an investment thesis or NEPC has no confidence in the manager's ability to execute on the thesis, and/or the investment firm may not be viable. Serious issues have been identified with an investment manager or product. This rating aligns with a Terminate Due Diligence status for client-owned products.
NR	Due diligence has not been sufficiently completed on the product or manager.

KENNEDY LEWIS
INVESTMENT MANAGEMENT

Kennedy Lewis Capital Partners Master Fund III LP ("Fund III")

Ventura County Employees' Retirement Association

January 2023

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PRESENTERS

DAVID KENNEDY CHENE

Co-Founder, Co-Portfolio Manager & Co-Managing Partner

David Chene co-founded Kennedy Lewis with Darren Richman in 2017. Mr. Chene is a Co-Portfolio Manager and a Co-Managing Partner of Kennedy Lewis, and he Co-Chairs the Firm's Investment Committee and Executive Committee. Mr. Chene was formerly a Managing Director with CarVal Investors, responsible for managing the US Corporate Securities business based in Minneapolis, from 2012 to 2016. Prior to his role in the US, he was Co-Head of CarVal's European Corporate Securities business based in London. In both roles, he focused on special situations and distressed investments, including the firm's global liquidations exposures and European financial investments. Before joining CarVal, Mr. Chene worked at Credit Suisse in London, running the firm's European Distressed business, and was responsible for risk management across the firm's European Leveraged Finance trading activities, from 2010 to 2012. Prior to Credit Suisse, Mr. Chene was a Senior Distressed Trader for Morgan Stanley in London, from 2009 to 2010. Prior to Morgan Stanley, Mr. Chene was a Research Analyst at DiMaio Ahmad Capital from 2003 to 2009, first in New York and then later as Head of the Firm's Asian Platform, based in Singapore. Mr. Chene began his career at CIBC World Markets as a Research Analyst in its Leveraged Finance Investment Banking Division in New York, from 2001 to 2003. Mr. Chene actively supports charitable causes such as Ironman Foundation, Seeds of Peace, TreeHouse, Urban Ventures, WATCH, and Women for Women International. He is an Eagle Scout and an 8-time full distance Ironman finisher, including 2-times at the Ironman World Championships in Kona, Hawaii. He received a BA in Business Economics and Accounting from the University of California at Los Angeles in 2001.

DARREN LEWIS RICHMAN

Co-Founder, Co-Portfolio Manager & Co-Managing Partner

Darren Richman co-founded Kennedy Lewis with David Chene in 2017. Mr. Richman is a Co-Portfolio Manager and a Co-Managing Partner of Kennedy Lewis, and he Co-Chairs the Firm's Investment Committee and Executive Committee. Mr. Richman was formerly a Senior Managing Director with Blackstone from 2006 to 2016. He focused on special situations and distressed investments, and he sat on the Investment Committee for many of GSO's special situation-oriented funds. Before joining GSO Capital Partners, Mr. Richman worked at DiMaio Ahmad Capital, where he was a Founding Member and the Co-Head of its Investment Research Team, from 2003 to 2006. Prior to joining DiMaio Ahmad, Mr. Richman was a Vice President and Senior Special Situations Analyst at Goldman Sachs, from 1999 to 2003. Mr. Richman began his career with Deloitte & Touche, ultimately serving as a Manager in the Firm's Mergers & Acquisitions Services Group, from 1994 to 1999. Mr. Richman is on the Boards of Eastman Kodak and Outward Bound USA, and the Executive Board of New York University's Stern School of Business. He previously sat on the Board of Sorenson Communications, F45, Seneca Mortgage and Warrior Coal. He is a member of the Economic Club of New York and formerly served on its strategic planning committee. Mr. Richman received a BS/BA degrees in Accounting from the University of Hartford in 1993, and an MBA from NYU's Stern School of Business in 2000. He was formerly a Certified Public Accountant and a Member of the American Institute of Certified Public Accountants.

BEN SCHRYBER

Partner, Head of Business Development

Ben Schryber joined Kennedy Lewis in 2018 and is a Partner and the Head of Business Development with responsibility for the Firm's investor relations activities. Mr. Schryber was formerly a Managing Director at the Carlyle Group where he led its credit sales activities globally. Prior to Carlyle, Mr. Schryber was the Global Head of Credit at First Avenue Partners, a leading credit placement agent, where he oversaw for the origination, distribution, and ongoing management of credit funds. Prior to First Avenue, Mr. Schryber worked for Albourne Partners where he led the Firm's due diligence on private credit funds. Prior to that, he worked for Blue Ridge Partners as a management consultant focused on company-level due diligence on behalf of private equity funds. Mr. Schryber earned a B.A. with Highest Honors from the University of Florida and was a Visiting Scholar at the University of Cambridge.

EXECUTIVE SUMMARY

Firm	▪ Kennedy Lewis Investment Management ("Kennedy Lewis") is an opportunistic credit manager of private funds & CLOs with ~$10.5bn of AUM[1] ▪ 23-person opportunistic credit fund investment team with credit investment experience across economic cycles, asset classes, industries & geographies ▪ Positioned to take advantage of dislocation across the credit markets
Senior Management	▪ **David K. Chene (Co-Founder, Co-Portfolio Manager & Co-Managing Partner)** – former Managing Director with CarVal Investors ▪ **Darren L. Richman (Co-Founder, Co-Portfolio Manager & Co-Managing Partner)** – former Senior Managing Director with Blackstone ▪ **Doug Logigian (Co-Managing Partner & President)** – former Senior Managing Director with Blackstone
Fund III	▪ **$3bn target** for Kennedy Lewis Capital Partners Master Fund III LP ("Fund III"), an opportunistic credit fund ▪ **Fund return targets**: 1.5–2x Net MOIC and a 12–14% Net IRR[2]
Track Record	▪ Fund I (2017 vintage, $516.5mm of capital commitments) has generated a 13.84% net unlevered IRR ITD based on the highest fee rate offered to Fund I LPs / 15.53% net unlevered IRR ITD based on the actual "blended" fee rate of all Fund I LPs[3,4] ▪ Fund II (2020 vintage, $2.1bn of capital commitments) has generated a 11.22% net unlevered IRR ITD based on the highest fee rate offered to Fund II LPs / 13.21% net unlevered IRR ITD based on the actual "blended" fee rate of all Fund II LPs[3,4] ▪ Fund III (2021 vintage) is currently fundraising and has generated a 10.15% net unlevered IRR ITD based on the highest fee rate offered to Fund III LPs / 11.61% net unlevered IRR ITD based on the actual "blended" fee rate of all Fund III LPs[3,4]
Strategy	▪ **All-weather strategy** focused on opportunities in the US and Europe that we believe exhibit **uncorrelated or countercyclical characteristics** to the broader credit markets with the potential to deliver attractive absolute returns ▪ Focus primarily on providing **first lien loans that are secured by the assets of the business**. Often negotiate **equity upside** (e.g., equity interest, convert feature, warrants, profit share, etc.) ▪ **Proprietary sourcing** through scalable **verticals** (*Life Sciences, Power, TMT, Tactical Opportunities, Homebuilder Finance, Opportunistic Cyclicals*) has allowed Kennedy Lewis to repeatedly exploit identified themes in sectors that are experiencing disruption or going through transition – Sourcing capabilities driven by the team's network of established relationships – Target good companies in sectors that are causing (or experiencing) disruption – Focus on finding companies with unsustainable capital structures that require creative, highly structured capital solutions – Target opportunities that can either be too complex for managers with strict rules-based capital or which are outside the mandate of managers who are limited to one specific market or segment; therefore, these opportunities tend to fall "below the radar" of other managers ▪ **Flexibility** to invest across the capital structure in the private and public markets ▪ Target a portfolio of 15 – 25 core positions; focus primarily on middle-market opportunities ($300mm - $3bn TEV) ▪ A focus on **capital structure seniority** (primarily first lien) with strong collateral and covenant packages ▪ **Partnership approach**: Seek to work closely with management teams to provide structural accommodations that fit the needs of businesses while allowing Kennedy Lewis to earn its target return and protect its principal

1. AUM as of January 1, 2023. Kennedy Lewis Investment Management LLC's AUM comprises AUM of Generate Advisors and Kennedy Lewis Management LP. AUM includes one CLO for which Generate Advisors, a CLO platform and Kennedy Lewis controlled entity, provides certain collateral services but does not manage. CLO AUM represents target par less amortizations on post-reinvestment CLOs. AUM for private funds based on commitments except for Fund I which is based on NAV as of 2Q 2022 as it is in the harvest period.
2. There can be no assurance that targets will be achieved. Investors may lose all or part of their invested capital. Past performance is not a guarantee of future results. Target is net of estimated fund level expenses, management fees and carried interest. Performance may vary as a result of i) variations in timing of investment cash flows, ii) the pace of capital deployment and distributions, iii) higher fund level expenses, iv) general market considerations and deal dynamics. Targets are based on a combination of predecessor fund performance and the historic deal level returns at underwriting (i.e., contractual yield, fees, OID, call protection, equity kickers, etc.).
3. As of September 30, 2022. Past performance is not a guarantee of future results. The "Highest Fee Rate Offered" ITD Net annualized IRR is calculated by Kennedy Lewis Management LP based on the highest fee rate offered for each fund: (i) Fund I's highest fee rate is a management fee of 1.5% on committed capital during the investment period; thereafter, 1.5% on actively invested capital. Carried interest of 20% over a 6% preferred return. (ii) Fund II's highest fee rate is a management fee of 1% on committed capital plus 1% on actively invested capital during the investment period; thereafter, 2% on actively invested capital. Carried interest of 20% over a 7% preferred return. (iii) Fund III's highest fee rate is a management fee of 1% on committed capital during the investment period; thereafter, 1% on actively invested capital. Carried interest of 20% over a 7% preferred return. Net IRR is the internal rate of return including deductions for fund level expenses, management fees, and accrued carry. Returns to each investor will be impacted by when they closed into the fund, taxes, and specific feeder fund expenses. All performance figures are calculated by Kennedy Lewis and are subject to change. TRS or Repo may be utilized for tax or capital use efficiency.
4. As of September 30, 2022. Past performance is not a guarantee of future results. The "Actual 'Blended' Fee Rate" ITD Net annualized IRR is calculated by Kennedy Lewis Management LP at the master fund level and includes all capital, including non-fee-paying capital. Net IRR is the internal rate of return including deductions for fund level expenses, management fees, and accrued carry. While returns are calculated at the master fund level, different investors may have different returns as feeder funds may vary in returns due to timing, taxes, fees and specific feeder fund expenses. All performance figures are calculated by Kennedy Lewis and are subject to change. TRS or Repo may be utilized for tax or capital use efficiency.

FUND III SUMMARY OF TERMS

Fund Name	Kennedy Lewis Capital Partners Master Fund III LP ("Fund III")	
Fund Type	Private Placement (closed-end fund structure)	
Target Fund Size	$3 billion	
First Close	October 1, 2021	
Term	3-year investment period, with a 3-year harvest period and 2 1-year extension options	
Fee Structure[1,2]	**Fees on Committed Capital**	**Fees on Invested Capital**
	▪ *Management Fee*: 1% on committed capital during the Investment Period; thereafter, 1% on Actively Invested Capital ▪ *Carried Interest*: 20%	▪ *Management Fee*: 1.85% on Actively Invested Capital ▪ *Carried Interest*: 20%
Preferred Return	7% per annum (100% GP catch-up)	
Waterfall	European	
Reinvestment	Capital is available for reinvestment / recycling during the investment period	
Client Communication	Capital account statements, quarterly fund reports, quarterly letters, annual investor meetings, annual audited financial statements	

1. Excludes the Tranche A and Tranche C fee structures which were only available to first close investors, per Fund III's LPA.
2. NEPC discount may be available upon qualification.

ORGANIZATIONAL STRUCTURE

DAVID K. CHENE*[1,2]
Co-Founder, Co-Portfolio Manager & Co-Managing Partner
CarVal

DARREN L. RICHMAN*[1,2]
Co-Founder, Co-Portfolio Manager & Co-Managing Partner
Blackstone

DOUG LOGIGIAN*[1,2]
Co-Managing Partner & President
Blackstone

Investment Management

J. RICHARD BLEWITT*[1]
Partner
Tactical Opportunities
Blackstone

MARK CRAWFORD*[1]
Partner
Power
CarVal

BRIAN DUBIN*[1]
Partner
TMT, Industrials, Fitness
Blackstone & Mariner

RICH GUMER*
Partner
Life Sciences
Perella Weinberg

PIERRE AHLSELL DE TOULZA*
Managing Director
Pictet Investment Office

DAVID KHO*
Managing Director
Life Sciences
Perella Weinberg

BRIEANNE NIKRANDT*
Managing Director
Homebuilder Finance
DW Partners & Blackstone

DAVID VALIAVEEDAN*
Managing Director
Homebuilder Finance
DW Partners & Hovnanian

DOUG GEROWSKI*
Director
Trader
Fir Tree

ADAM GOLDBERG
Director
Tactical Opportunities
Seneca Mortgage Invest.

DAVID MAGID
Director
Industrials
York Capital Mgmt.

ROB NITKIN
Director
Real Estate, Homebld., Cons.
GPS

LUDWIG SCHRITTENLOHER*
Director
Pictet Investment Office

REED KERN
Vice President
TMT
J.P. Morgan

MATT PALKA
Vice President
Power, Life Sciences
Houlihan Lokey

HUGO VUACHET*
Vice President
Pictet Investment Office

KEVIN WESTENBURG
Vice President
Industrials, Fitness, TMT
Grant Thornton

ODELYA YODICE
Vice President
Cons., Fitness, Bus. Serv.
Guggenheim Partners

ARINA BRUTYAN*
Associate
Pictet Investment Office

JUSTIN LIPSTEIN
Associate
Homebuilder Finance
M-I SWACO / Schlumberger

Business Management & Business Development

ANTHONY PASQUA*[2]
Partner, COO/CFO
Ellis Lake

BEN SCHRYBER*
Partner, Head of Business Development
Carlyle

BEN BERNSTEIN*
Managing Director
Business Development
Actis & Fortress

RICHARD MONJE*
Managing Director
Head of Legal Affairs & Strategy
Dake, Braun & Monje

KC O'BRIEN*
Managing Director
Director of Operations
Calypso Capital

SYLVIA OWENS
Managing Director
Business Development
Aksia

JOSH SMITH*
Managing Director
Chief Risk Officer
Blackstone

ADIL PASHA
Director
Schonfeld Strategic Advisors

RACHEL PRESA
Director
CCO & Fund Counsel
Akin Gump

SARAH TIN
Director
Finance & Operations
Anchorage

RENATA GREEN
Vice President
Fund Accounting & Ops.
KPMG

JESSICA HEDGES
Vice President
Business Development
Insight Wealth Strategies

RACHEL LANGER
Vice President
Business Development
Apollo

KELLY PAN*
Vice President
Office Operations
Fir Tree

JENNIFER SWALLEY*
Vice President
Executive Assistant
Jadian Capital & Fir Tree

REMY COSTA
Associate
Operations
FCI Advisors

SAM O'SULLIVAN
Associate
Operations & Risk

1. Indicates member of the Investment Committee.
2. Indicates member of the Executive Committee.

- Designates previous experience working together. Darren Richman and David Chene: *DiMaio Ahmad*. David Chene and Mark Crawford: *CarVal*. David Chene and Richard Monje. Brieanne Nikrandt and David Valiaveedan: *DW Partners*. Darren Richman, Doug Logigian, Dik Blewitt, Brian Dubin, Josh Smith, and Brieanne Nikrandt: *Blackstone*. Rich Gumer and David Kho: *Perella Weinberg*. Pierre Ahlsell de Toulza, Ludwig Schrittenloher, Hugo Vuachet, and Arina Brutyan: *Pictet Investment Office*. Ben Schryber and Ben Bernstein: *Albourne Partners*. Anthony Pasqua and KC O'Brien: *Morgan Stanley*. Doug Gerowski, Kelly Pan, and Jennifer Swalley: *Fir Tree*.

ADVANTAGES OF STRUCTURE AND FLEXIBILITY

- Many managers are forced to follow inflexible rules-based investment mandates and do not maintain the flexibility to take advantage of opportunities that do not fall neatly into their investment parameters. These rules have encouraged the proliferation of more narrowly defined credit fund structures; therefore, these funds must stay in their respective "lanes"
- Kennedy Lewis focuses on sourcing on a proprietary basis idiosyncratic and structurally complex opportunities that fall outside or cut across lanes. We believe less capital is active in these corners of the market and an increased opportunity exists to deliver attractive risk-adjusted returns in excess of the market

Kennedy Lewis Focuses on Deals that Cut Across Lanes or Do Not Fit in Lanes

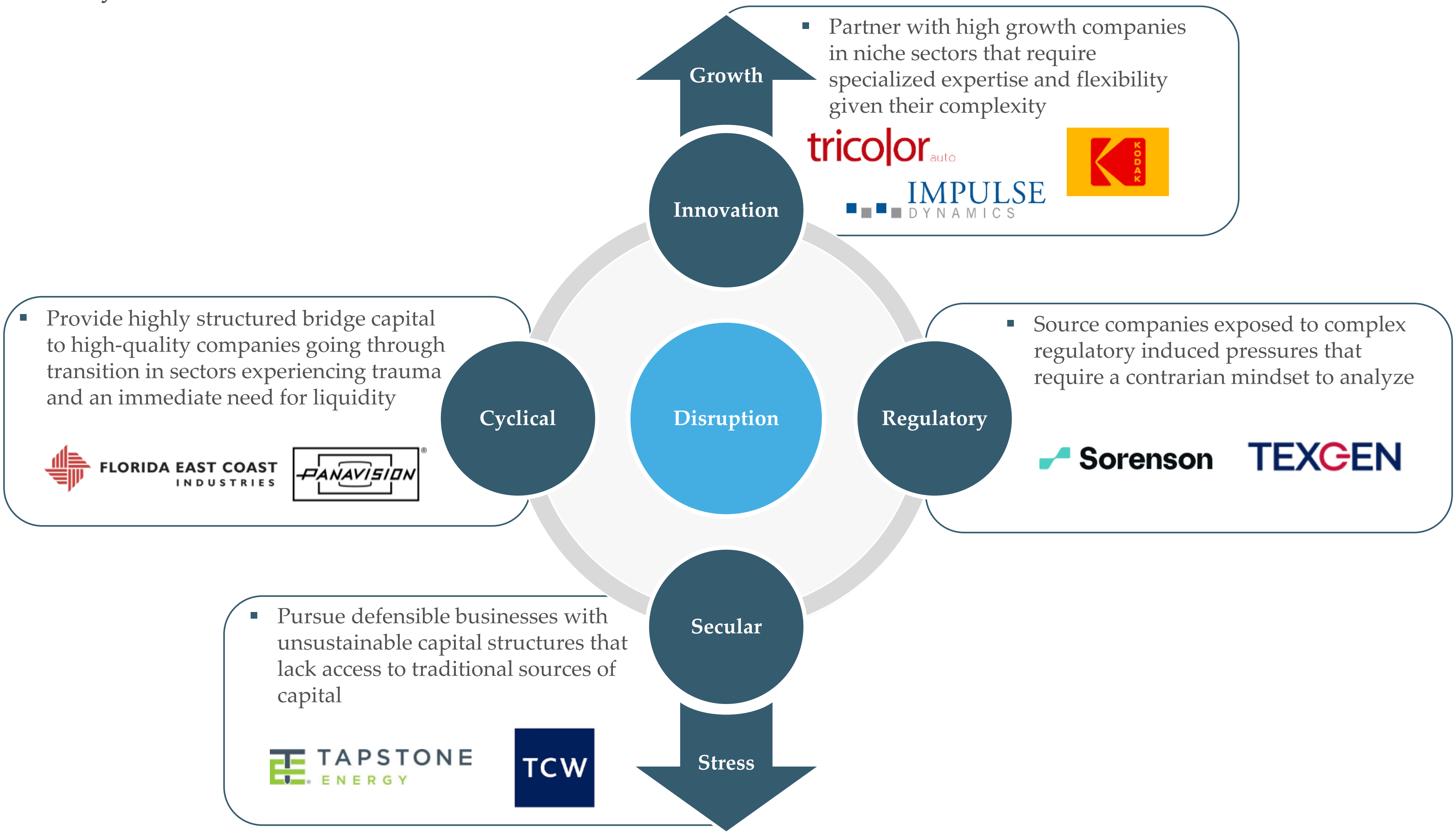
Credit Lanes and Conditions that Confine Other Managers:

	Long-Only	Direct Lending	Mezzanine	Insurance Co.	BDC	CLO	Distressed	Venture Debt	Real Assets Lending
Rating	✓			✓		✓			
Liquidity Requirement	✓					✓			
Covenant Package						✓		✓	✓
Yield		✓	✓		✓				✓
Geographic	✓				✓				✓
Issuance Discount							✓		
Size Threshold	✓				✓				
Equity Kicker			✓					✓	

Note: Table presented for illustrative purposes.

FLEXIBLE INVESTMENT STRATEGY ADAPTABLE TO MARKET DISRUPTION[1]

- Kennedy Lewis identifies sectors facing disruption, and then determines the conditions that sparked the disruption (i.e., innovation, regulatory, secular or cyclical forces) and how our capital is best suited to attack the opportunity
- The forces of disruption are not mutually exclusive; often multiple catalysts for disruption are associated with Kennedy Lewis' investments



1. References to specific companies are for illustrative purposes only and do not represent all portfolio companies in the opportunistic credit funds managed by Kennedy Lewis. A full summary of Kennedy Lewis' track record is available upon request. It should not be assumed that investments made in the future will be profitable or will equal the performance of any prior investments. Please see the "Track Record of Outperformance" slide for Fund level performance.

Kennedy Lewis Pursues an All-Weather Credit Strategy Which Allows for a Full Cycle Approach to Sourcing, Credit Selection and Portfolio Construction

- The team seeks to source and gain access to deal flow through its scalable verticals which we believe allows Kennedy Lewis to repeatedly exploit identified themes in sectors that are experiencing disruption or going through transition
- In more benign credit environments when dislocation and volatility are limited and spreads are tight, Kennedy Lewis will focus on making highly structured and / or catalyst-oriented investments in niche sectors that exhibit uncorrelated and/or countercyclical characteristics to the broader credit markets
- When economic activity slows and markets are depressed (e.g., in the wake of COVID-19), Kennedy Lewis will adapt to opportunistically invest in companies and sectors going through a cyclical downturn; in these opportunistic situations our capital can serve as a valuable bridge to less structured, underbanked segments of the market that are under pressure but overlooked or misunderstood by others (the proverbial good company bad balance sheet or good company in an out of favor sector). In these cyclical segments, which will shift rapidly as the environment evolves, we can provide capital opportunistically on a secured basis to companies with a reason to exist and underwrite to a recovery
  - During periods of acute volatility, the opportunistic credit funds may pursue public investments opportunistically, including select investment grade, high-quality high yield bonds and leveraged loans, which is a powerful tool to enhance full-cycle performance

Life Sciences

- Provide non-dilutive, highly structured growth capital to commercial-stage Life Sciences companies sourced on a proprietary basis

  i. Financing tailored to the business model

  ii. Senior secured against all assets

  iii. Delayed draw features to mitigate risk

  iv. Equity upside, OID, Pre-Payment Penalty, Strong Covenant Packages

Power

- Identify key sector themes and target opportunities to invest in securities that are downside protected based on the intrinsic value of the business
- Primarily target efficient and low/zero emitting North American power assets, energy infrastructure, and businesses that are critical to the transition to clean energy and a net zero emissions world

TMT

- Provide liquidity solutions to TMT companies experiencing technological disruption and whose business models are going through transition

Tactical Opportunities

- Opportunistically provide highly catered structured capital solutions across a range of industries, structures, and levels of stress
- Focus on asset-backed credit and specialty finance sectors
- Solutions-based, relative value approach to deploying capital opportunistically

Homebuilder Finance

- Provide highly structured off-balance sheet financing for US homebuilders and secured debt financing for land developers for upfront land acquisition and the "horizontal" stage of development
- Target locations in the US with proven near-term housing demand
- Focus on downside protection

Opportunistic Cyclicals

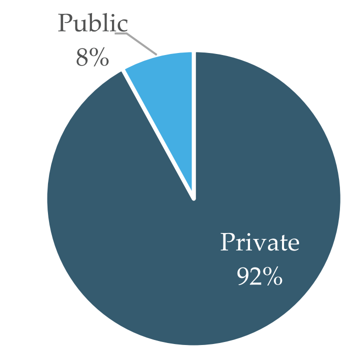
- Opportunistic investments in situations where an exogenous shock causes a company to experience its own cycle, resulting in the need for a tailor-made capital solution
- In all market environments there are sectors going through disruption
- *Examples*: Aerospace, Autos, Consumer, F&B, Fitness, Industrials, Travel & Leisure

PORTFOLIO CONSTRUCTION CENTERED ON BEST IDEAS

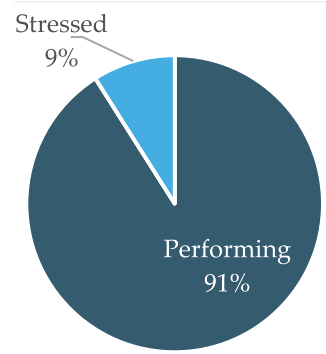
- Since inception, Kennedy Lewis has primarily focused on **private, first lien, senior secured, performing credit** sourced away from private equity sponsors

Fund I's Portfolio Construction[1]

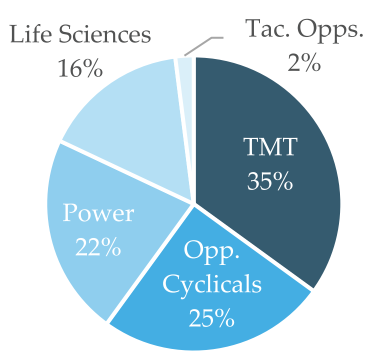
Public / Private



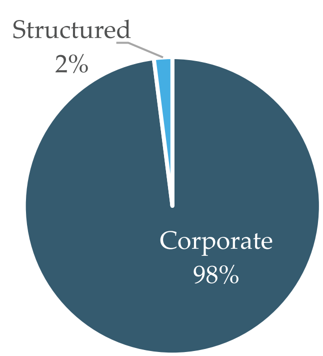
Performing / Stressed



Verticals

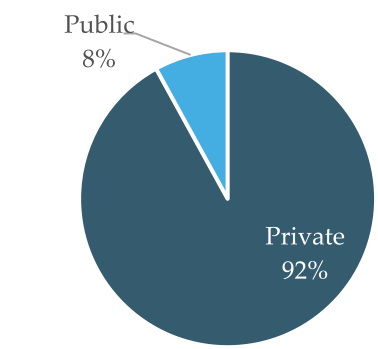


Corporate / Structured

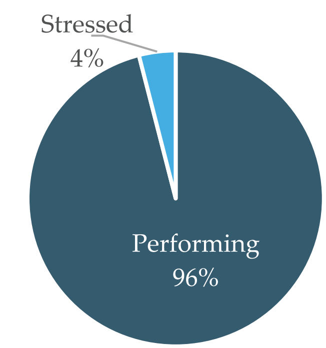


Fund II's Portfolio Construction[1]

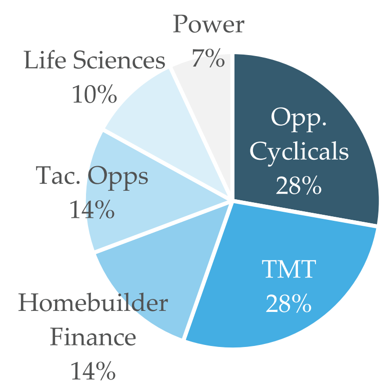
Public / Private



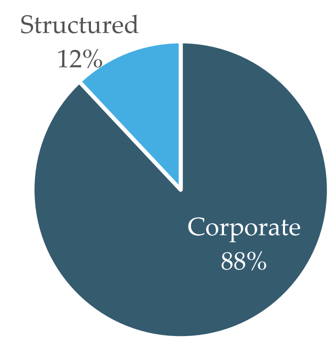
Performing / Stressed



Verticals



Corporate / Structured



Note: Percentages may not sum to 100% due to rounding.

1. Fund I's portfolio construction is as of March 31, 2021, which was the final full quarter before Fund I's investment period ended after which it began making distributions. Fund II's portfolio construction as of September 30, 2022. Presented as a percentage of current cost of active positions, except for Performing/Stressed figures which are presented as a percentage of current market value of active positions. Performing/Stressed figures include all current credit positions, any deals that began with a credit investment (regardless of current holding form), and any warrants/equity that were issued as part of a debt deal.

TRACK RECORD OF OUTPERFORMANCE

- We believe outperformance can be attributed to:
  1. The construction of an insulated portfolio of private positions in sectors that we believe exhibit uncorrelated or countercyclical characteristic to the broader credit markets
  2. Our flexible mandate which has enabled us to quickly and effectively pivot to take advantage of dislocation in the public markets
  3. A focus on capital structure seniority (primarily first lien) with strong collateral and covenant packages
  4. Partnership approach - working closely with management teams to provide structural accommodations that fit the needs of businesses while allowing Kennedy Lewis to earn its target return and protect its principal

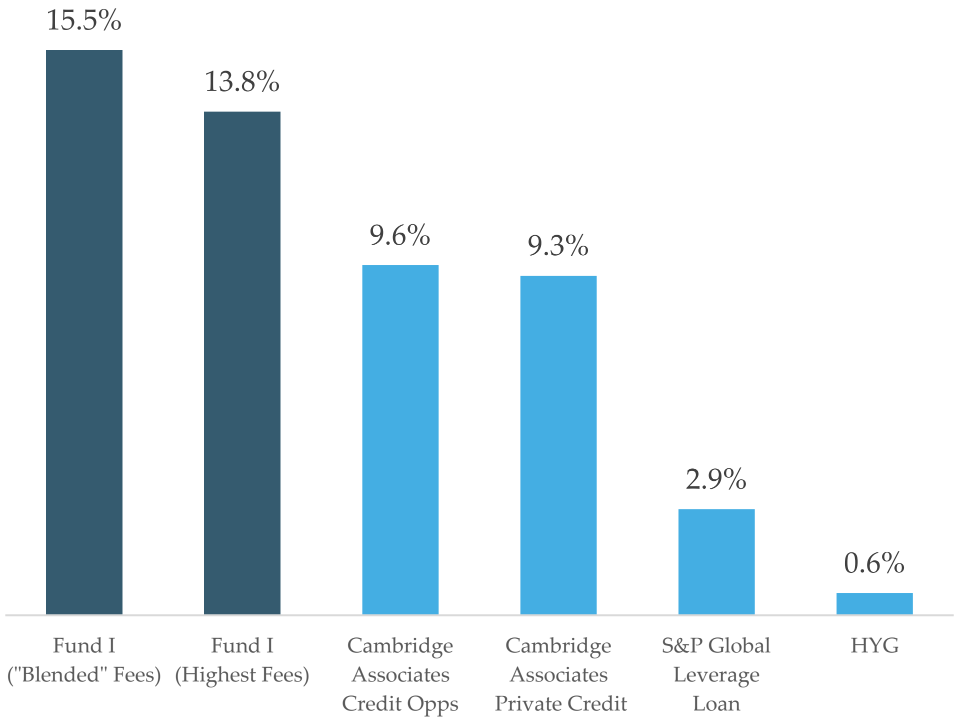
								Based on the highest fee rate offered			Based on the actual "blended" fee rate		
Fund	**Vintage**	**Commitments**	**Stage**	**$ Realized PnL (as a % of Total PnL)[1]**	**Loss Ratio[2]**	**% Performing[3]**	**Term[4]**	**DPI[5,6]**	**TVPI[6]**	**Net IRR[6]**	**DPI[5,7]**	**TVPI[7]**	**Net IRR[7]**
Fund I	2017	$516.5mm	Harvest Period	$220.1mm (71%)	0.8%	91%	5 years	0.80x	1.44x	13.84%	0.82x	1.50x	15.53%
Fund II	2020	$2,102.4mm	Investment Period	$371.3mm (71%)	0%	96%	7 years	N/A	1.19x	11.22%	N/A	1.22x	13.21%
Fund III	2021	$3,000mm *(target)*	Fundraising Period	$27.1mm (34%)	0%	98%	8 years	N/A	1.07x	10.15%	N/A	1.08x	11.61%

Definitions: DPI is the quotient of (i) the sum of Distributions, and (ii) Called Capital. TVPI is the quotient of (i) the sum of Unrealized P(L), Realized P(L) and Called Capital, and (ii) Called Capital. Net IRR is the internal rate of return including deductions for fund level expenses, management fees, and accrued carry.

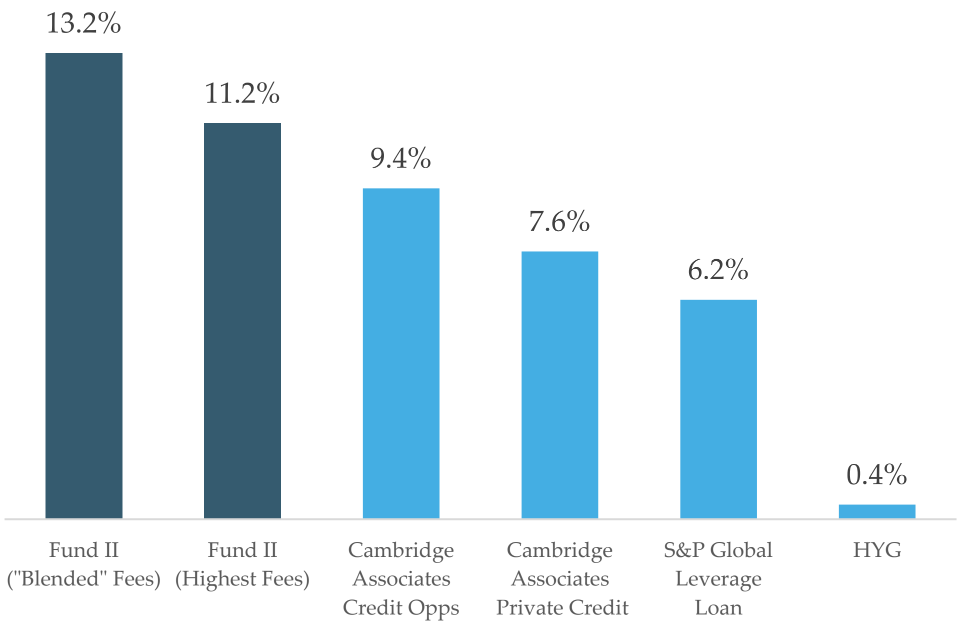
1. As of September 30, 2022. Realized P(L) includes profit or losses from exiting investments (fully and partially realized), cash interest, facility fees and dividends received.
2. As of September 30, 2022. The calculation of Capital Loss Ratio is the percentage of invested capital realized at less than cost, net of any recovered proceeds, over total invested capital.
3. Fund I's portfolio construction is as of March 31, 2021, which was the final full quarter before Fund I's investment period ended; thereafter it began making distributions. Fund II and Fund III's portfolio construction as of September 30, 2022. Performing/Stressed portfolio construction presented as a percentage of current market value. Performing/Stressed figures include all current credit positions, any deals that began with a credit investment (regardless of current holding form), and any warrants/equity that were issued as part of a debt deal.
4. Term includes Fund I and Fund II's 1 year extension option, and Fund III's up to 2 1-year extension options.
5. DPI for Fund II and Fund III are N/A as all proceeds are recycled during the Investment Period and therefore no distributions have been made.
6. As of September 30, 2022. Past performance is not a guarantee of future results. The "Highest Fee Rate Offered" DPI, TVPI, and ITD Net annualized IRR are calculated by Kennedy Lewis Management LP based on the highest fee rate offered for each fund: (i) Fund I's highest fee rate is a management fee of 1.5% on committed capital during the investment period; thereafter, 1.5% on actively invested capital. Carried interest of 20% over a 6% preferred return. (ii) Fund II's highest fee rate is a management fee of 1% on committed capital plus 1% on actively invested capital during the investment period; thereafter, 2% on actively invested capital. Carried interest of 20% over a 7% preferred return. (iii) Fund III's highest fee rate is a management fee of 1% on committed capital during the investment period; thereafter, 1% on actively invested capital. Carried interest of 20% over a 7% preferred return. DPI, TVPI, Net IRR include deductions for fund level expenses, management fees, and accrued carry. Returns to each investor will be impacted by when they closed into the fund, taxes, and specific feeder fund expenses. All performance figures are calculated by Kennedy Lewis and are subject to change. TRS or Repo may be utilized for tax or capital use efficiency.
7. As of September 30, 2022. Past performance is not a guarantee of future results. The "Actual 'Blended' Fee Rate" DPI, TVPI, and ITD Net annualized IRR are calculated by Kennedy Lewis Management LP at the master fund level and includes all capital, including non-fee-paying capital. DPI, TVPI, Net IRR include deductions for fund level expenses, management fees, and accrued carry. While returns are calculated at the master fund level, different investors may have different returns as feeder funds may vary in returns due to timing, taxes, fees and specific feeder fund expenses. All performance figures are calculated by Kennedy Lewis and are subject to change. TRS or Repo may be utilized for tax or capital use efficiency.

TRACK RECORD VS. BENCHMARKS

Fund I (2017 Vintage) Return vs. Benchmarks[1,2,3,4]



Fund II (2020 Vintage) Return vs. Benchmarks[1,2,3,4]



1. As of September 30, 2022. Past performance is not a guarantee of future results. The "Highest Fee Rate Offered" ITD Net annualized IRR is calculated by Kennedy Lewis Management LP based on the highest fee rate offered for each fund: (i) Fund I's highest fee rate is a management fee of 1.5% on committed capital during the investment period; thereafter, 1.5% on actively invested capital. Carried interest of 20% over a 6% preferred return. (ii) Fund II's highest fee rate is a management fee of 1% on committed capital plus 1% on actively invested capital during the investment period; thereafter, 2% on actively invested capital. Carried interest of 20% over a 7% preferred return. (iii) Fund III's highest fee rate is a management fee of 1% on committed capital during the investment period; thereafter, 1% on actively invested capital. Carried interest of 20% over a 7% preferred return. Net IRR is the internal rate of return including deductions for fund level expenses, management fees, and accrued carry. Returns to each investor will be impacted by when they closed into the fund, taxes, and specific feeder fund expenses. All performance figures are calculated by Kennedy Lewis and are subject to change. TRS or Repo may be utilized for tax or capital use efficiency.
2. As of September 30, 2022. Past performance is not a guarantee of future results. The "Actual 'Blended' Fee Rate" ITD Net annualized IRR is calculated by Kennedy Lewis Management LP at the master fund level and includes all capital, including non-fee-paying capital. Net IRR is the internal rate of return including deductions for fund level expenses, management fees, and accrued carry. While returns are calculated at the master fund level, different investors may have different returns as feeder funds may vary in returns due to timing, taxes, fees and specific feeder fund expenses. All performance figures are calculated by Kennedy Lewis and are subject to change. TRS or Repo may be utilized for tax or capital use efficiency.
3. Fund I benchmark returns for HYG and S&P Global Leverage Loan Index are annualized between December 11, 2017 – Sep. 30, 2022. Fund II benchmark returns for HYG and S&P Global Leverage Loan Index are annualized between April 28, 2020 – September 30, 2022.
4. Cambridge Associates' Credit Opportunities and Private Credit fund indices (Median %). Data provided as is and at no cost to Kennedy Lewis. Data is continuously updated and therefore subject to change. The data is as of September 30, 2022.

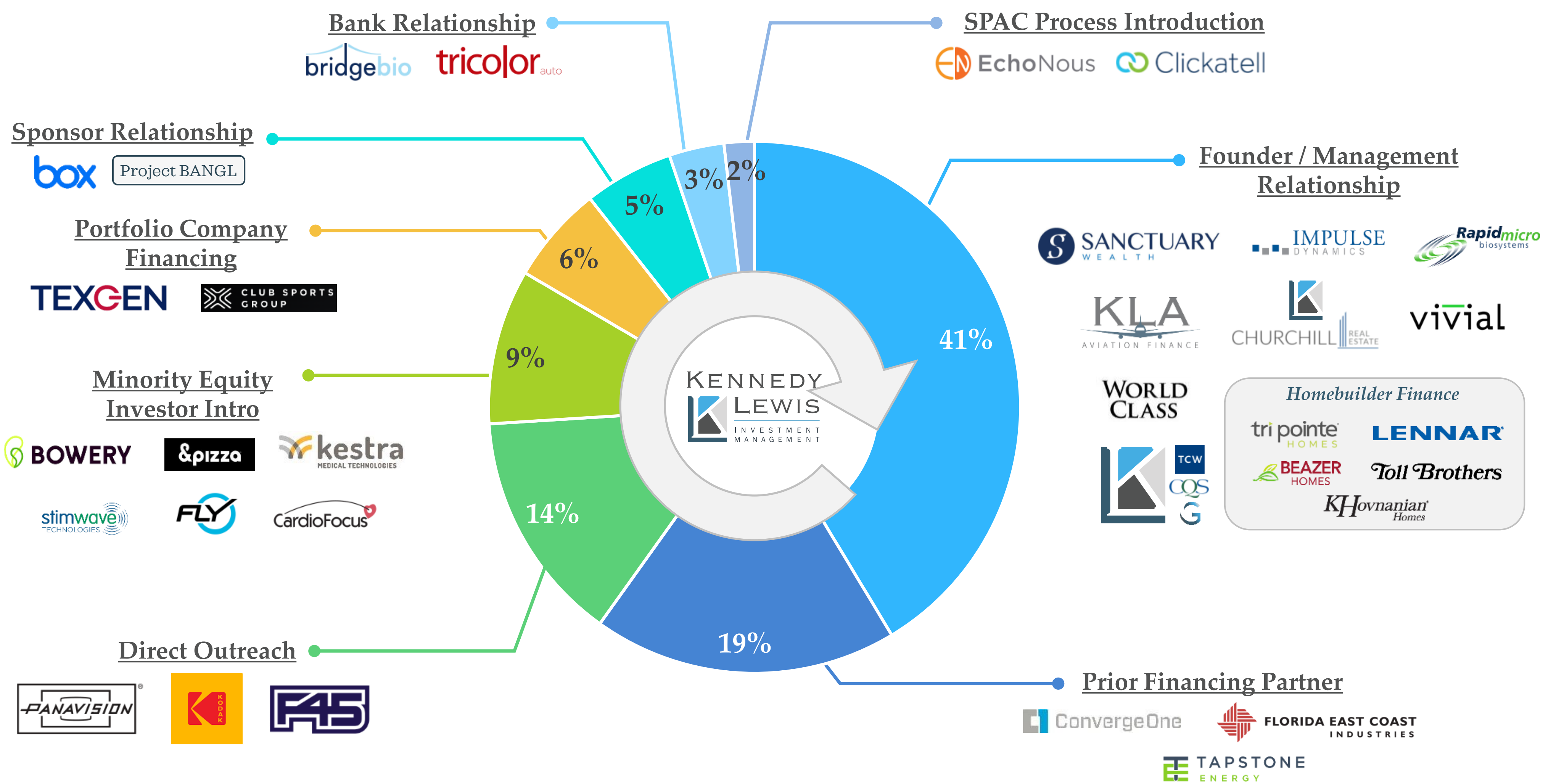
BENEFITS OF KENNEDY LEWIS' FOCUS ON NON-SPONSORED OPPORTUNITIES[1]

1 **Strong Equity Owners**	Equity owners may include founders, management team, minority equity owners, and families, but not necessarily the funds of "control" oriented private equity managers
2 **Proprietary Sourcing**	We believe sourcing through Kennedy Lewis' network (founders, management team, minority equity owners, portfolio companies, banks, prior financing relationships, etc.) can result in less competition and less deal overlap; this can bring a diversification element to an investor's overall private credit portfolio exposure. On occasion Kennedy Lewis may be involved in sponsored deals, but we would endeavor not to compete in processes
3 **High Barrier to Entry**	Kennedy Lewis seeks to source and gain access to deal flow through a variety of industry verticals. Each vertical is led by a senior investment professional with networks and competencies in the specific niche and asset where he/she focuses
4 **More Attractive Terms**	We believe our direct origination approach can lead to a combination of an incremental return, warrant coverage, greater control through board representation or observer rights, traditional financial covenants, and extended call protection[2]
5 **Partnership Approach**	Seek to work closely with management teams to provide structural accommodations that fit the needs of businesses while allowing Kennedy Lewis to earn its return and protect its principal. Greater alignment of interest through close interaction with management and potential board representation which enhances portfolio monitoring and risk-management

1. Framework for illustrative purposes only. It should not be assumed that investments made in the future will be profitable or will equal the performance of any prior investments.
2. As of September 30, 2022. Internal Kennedy Lewis estimate. Bloomberg.

KENNEDY LEWIS' NON-SPONSORED SOURCING ECOSYSTEM[1,2]

- Sourcing non-sponsored opportunities requires time, significant senior level resources with extensive networks and an established brand. Kennedy Lewis has built a track record and reputation as a trusted partner, and its deal origination efforts have achieved a flywheel effect



1. As of November 3, 2022. Includes only private investments with total invested capital across all funds of at least $30mm. As a % of total invested capital in private deals of at least $30mm, across all funds.
1. References to specific companies are for illustrative purposes only and do not represent all portfolio companies in the opportunistic credit funds managed by Kennedy Lewis. A full summary of Kennedy Lewis' track record is available upon request. It should not be assumed that investments made in the future will be profitable or will equal the performance of any prior investments. Please see the "Track Record of Outperformance" slide for Fund level performance.

Kennedy Lewis believes disruptive themes across its verticals are bringing into focus more attractive private investment opportunities for Fund III

Life Sciences

- Private investment into Life Sciences companies is accelerating, but public market exits are not keeping pace, so companies are staying private longer
- Recent equity market headwinds are creating challenges for some companies to raise money, and Kennedy Lewis' highly structured, less expensive (vs. equity financing), highly flexible growth capital is an attractive capital solution alternative

Power

- Pushes to electrify home heating and cooking, increases in electric vehicle adoption, expansion of data centers, and re-patriation of manufacturing capacity are all driving increases in power demand which is putting pressuring on electricity systems as we attempt to transition to clean energy sources
- We believe the electrification of the US economy while attempting to integrate renewables will continue to provide special situation and stressed investment opportunities that require our capital and expertise

TMT

- The Refinitiv Venture Capital Index, an index of over 22,000 VC-backed US firms, is ~60% off highs.[2] With the IPO market stalled and growing corporate interest in private secondary volume, companies are staying private for longer
- We expect private companies will be challenged to raise money in an up-round, providing Kennedy Lewis with the opportunities to provide structured non-equity solutions

Tactical Opportunities

- We see attractive opportunities in asset-based finance with short maturities, floating rate cashflows, and diverse collateral. We are targeting situations where the collateral is comprised of hard or financial assets, and where companies are accelerating the growth of these assets
- Spread widening will cause higher cost of funds putting pressure on specialty finance balance sheets – opportunities could arise in auto lender residual commitments and in home equity line of credit

Homebuilder Finance

- We believe the US is entering a multi-year period of elevated residential housing demand driven by demographic shifts, deficient home supply, and demand for capital. These dynamics support the long-term opportunity for our homebuilding finance strategy
- After years of demand for housing outpacing the available supply, there is now an estimated 1.7mm undersupply of homes in the US given current levels of household formation[3]

Opportunistic Cyclicals

- The unstable macro and market environments have significantly impacted many companies, leading to reduced profitability, working capital constraints and elevated leverage
- Disruptive secular themes that are coming into focus include, i) reshoring, ii) weakening of global supply chain, and iii) inventory buildup

1. There is no guarantee that Kennedy Lewis will transact on any of these investment pipeline opportunities. It should not be assumed that investments made in the future will be profitable or will equal the performance of any prior investments.
2. Source: Bloomberg. September 28, 2022.
3. Source: John Burns Real Estate Consulting. "America's Needed Housing Construction." January 2023.

INVESTMENT PIPELINE[1,2]

- Kennedy Lewis believes it has a diversified near-term actionable investment pipeline representing ~**$7.7bn**[1,2]
- We have a track record of converting our pipeline into real transactions as evidenced by Fund II's accelerated pace of deployment
  - Fund II was >80% called ~9 months into its investment period[3]

Life Sciences
$300mm

Power
~$2.1bn

Homebuilder Finance
~$2bn

TMT
$100mm

Tactical Opportunities
~$750mm

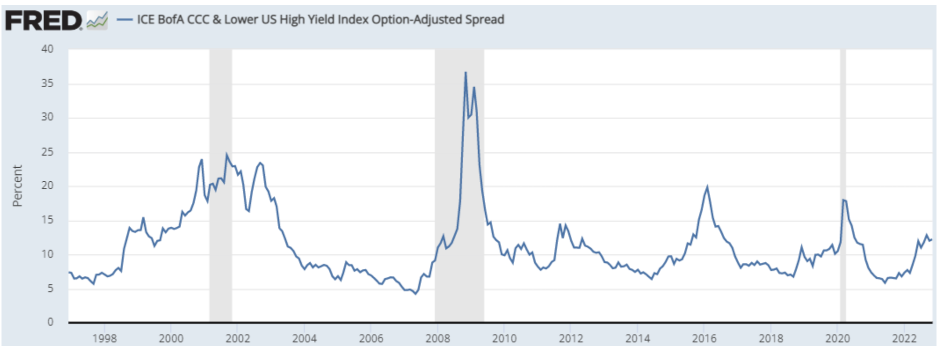
Opportunistic Cyclicals & HY Public Opportunities
~$2.5bn

1. As of September 25, 2022. There is no guarantee that Kennedy Lewis will transact on any of these investment pipeline opportunities.
2. It should not be assumed that investments made in the future will be profitable or will equal the performance of any prior investments. Please see the "Track Record of Outperformance" slide for Fund level performance.
3. As of June 30, 2022. Fund II's Investment Period started on January 15, 2021.

FUND III IS POSITIONED TO TAKE ADVANTAGE OF EMERGING OPPORTUNITIES IN THE PUBLIC MARKETS

- Keeping a close eye on public markets - we have always expressed the view that there is a time to exploit opportunities in the public market
- We believe it is generally during periods of dislocation that an investor is being more than adequately compensated for taking market risk, at which time Kennedy Lewis will pivot to focus its attention on exploiting public market credit opportunities
- Some signs of stress today
  - But, thus far, duration has driven much of the drawdown in high yield bonds
  - Riskier segment of the market showing signs of stress
- Disciplined pricing
  - Nominal growth and elevated inflation benefit short duration portfolios
  - Ability to quickly reinvest at higher yields
- Patience is key
  - Elevated inflation levels mean monetary and fiscal stimulus must be used sparingly
  - Market recovery is not expected to be V-shaped like COVID when inflation was low and stimulus was abundant
  - Given the magnitude of the crisis posed by inflation and geopolitical events, as well as the valuation extremes reached at the end of 2021, we expect a period of capitulation in which markets take a disorderly turn, the Fed pivots to a more hawkish stance, and high yield spreads exceed 700. Historically, this has been an ideal time to buy high quality high yield bonds

1



2

High Yield Investment Performance[3]

Spread Range	Average 12 Month Return	Average 18 Month Return *(Annualized)*	Average 24 Month Return *(Annualized)*
<300	(0.6%)	(8.0%)	(7.1%)
300-400	5.2%	4.5%	3.7%
400-500	2.7%	3.0%	5.1%
500-600	5.4%	7.3%	8.0%
600-700	8.5%	10.2%	10.2%
700-800	**12.4%**	**13.6%**	**11.2%**
800-900	**7.0%**	**12.9%**	**13.3%**
900-1000	**23.1%**	**21.8%**	**16.7%**
>1000	**46.1%**	**35.5%**	**30.4%**

1. Ice Data Indices, LLC, ICE BofA US High Yield Index Option-Adjusted Spread [BAMLH0A0HYM2], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BAMLH0A0HYM2, November 7, 2022.
2. Ice Data Indices, LLC, ICE BofA CCC & Lower US High Yield Index Option-Adjusted Spread [BAMLH0A3HYC], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BAMLH0A3HYC, November 7, 2022.
3. Federal Reserve Economic Data: (i) ICE BofA US High Yield Index Option-Adjusted Spread and (ii) ICE BofA US High Yield Index Total Return Index Value. As of April 6, 2021.

- **Proven Ability to Source and Accelerate Capital Deployment Through Cycles**
  - Fund I (2.6-year investment period / 1.4-year harvest period) was >75% called approximately halfway into its investment period[1]
  - Fund II (3-year investment period / 3-year harvest period) was >80% called ~9 months into its investment period[1]
- **Capital Deployment Capacity:** Kennedy Lewis is often constrained by its existing fund size
  - Actual capital deployment figures fail to capture the excess capacity available in many deals that was ultimately syndicated away
  - Fund III is sized to allow Kennedy Lewis to take more of the positions it already underwrites without changing its investment approach or moving "up-market"
  - Accounting for more of a tranche or an entire tranche is a competitive advantage and ultimately benefits Kennedy Lewis' LPs
- **Large Senior Investment Team**
  - Kennedy Lewis has invested significantly in building a large senior investment team to continue to expand its sourcing capabilities; 11 of the 23 investment professionals are either Partners or Managing Directors
  - By executing the same strategy and continuing to develop its human capital, Kennedy Lewis believes it has the capacity to comfortably deploy Fund III's capital[2]

1. As of September 30, 2022. Fund I and Fund II's Investment Periods started on November 27, 2018 and January 15, 2021, respectively.
2. There is no guarantee that Kennedy Lewis will achieve this pace of deployment.

KENNEDY LEWIS’ OPERATIONAL RESOURCE CENTER

- Kennedy Lewis’ investment team has restructuring and workout experience and expertise
- To extend and compliment its in-house capabilities, Kennedy Lewis has built a network of operational executives and specialists to assist in driving operational improvements and value
- The Operational Resource Center (“ORC”) is led by James Bennett, former President and CEO of SandRidge Energy Corporation, Inc (NYSE: SD), and former Managing Director with Blackstone / GSO Capital Partners where he worked with members of the Kennedy Lewis team. Mr. Bennett was a board member of Tapstone Energy (a realized Fund I and II portfolio company)

Due Diligence	Deep understanding of the key value / risk drivers
Asset Management	Ability to parachute in, stabilize, course correct and create value before a covenant is breached
Risk Management	Risk management through operating expertise

KENNEDY LEWIS' APPROACH TO ESG AND D&I[1]

Governance	Investment
▪ Dik Blewitt (Partner) and Mark Crawford (Partner) are the Co-Heads of ESG and oversee the Firm's ESG-related efforts ▪ ESG Policy & specialized annual ESG training for all professionals ▪ Ramboll US Consulting Inc, an ESG advisor, supports Kennedy Lewis' ESG initiatives ▪ Kennedy Lewis is a proud signatory to the United Nations Principles for Responsible Investment ("PRI")[2] Signatory of: PRI Principles for Responsible Investment	▪ Kennedy Lewis' commercial approach to investment decision-making incorporates ESG considerations ▪ Negative screen for certain industries (e.g., no coal, no tobacco, no prisons, etc.) ▪ Intentional focus on industries and companies with positive ESG characteristics (e.g., life sciences, vertical farming, fitness, energy transition) ▪ Kennedy Lewis believes its funds have exposure to opportunities aligned with the UN Sustainable Development Goals, including *Zero Hunger*, *Good Health and Well-Being*, *Industry, Innovation and Infrastructure*, and *Sustainable Cities and Communities*[3]

Diversity & Inclusion

- Kennedy Lewis believes in supporting the communities in which it operates and has engaged with several nonprofit organizations
- Promote diversity at Kennedy Lewis and in Financial Services broadly by working with individuals early in their career development. To that end:
  - Kennedy Lewis is a member of Morehouse College's Corporate Partners Program. Senior members of our team engage with Morehouse College's students in the classroom, provide career guidance, and offer internship opportunities
  - Darren Richman joined the board of NYU with a goal of providing NYU's underrepresented student population a path into Financial Services

1. ESG considerations are not indicative of the performance of a particular investment or the portfolio on the whole. Framework is for illustrative purposes only. Kennedy Lewis does not manage a comingled fund with "ESG" and/or "Impact" as its primary strategic focus. However, ESG considerations may be integrated into Kennedy Lewis' commercial approach to investment decision-making.
2. Such certifications do not necessarily have any positive or negative effect on returns or on other material issues that arise from the use of ESG designations.
3. The UN Sustainable Development Goals are meant to be a common language and overall framework for developing, managing and communicating sustainable business strategies, goals and related activities, and they are widely adopted

Kennedy Lewis
INVESTMENT MANAGEMENT

INVESTMENT VERTICALS & CASE STUDIES

References to specific companies are for illustrative purposes only and do not represent all portfolio companies in the opportunistic credit funds managed by Kennedy Lewis. A full summary of Kennedy Lewis' track record is available upon request. It should not be assumed that investments made in the future will be profitable or will equal the performance of any prior investments. Please see the "Track Record of Outperformance" slide for Fund level performance.

LIFE SCIENCES[1]

Opportunity Overview

- Global healthcare market was worth $8.45tn in 2018 and was expected to reach $11.9tn by 2022.[2] Growth driven by demographic shifts globally, U.S. healthcare reform and increasing demand for healthcare from EMs
- Commercial-stage healthcare companies are increasingly under-served by debt markets with equity as an expensive alternative
- Companies with commercialized products require significant investment capital to build salesforces, invest in new products, expand manufacturing, etc.
- Structured debt has become an important financing alternative accepted by most healthcare management teams and boards of directors

Strategy

- Provide non-dilutive growth capital to commercial-stage Life Sciences (*Medical Devices, Diagnostics* and *Specialty Pharmaceutical*) companies
- Kennedy Lewis' proprietary healthcare sourcing results in a differentiated pipeline of opportunities in high quality, high growth companies. Sourcing through multiple channels including VC/PE sponsors, executive management, medical meetings and key opinion leaders
  - Rich Gumer and David Kho lead the Life Sciences vertical and previously worked together at Life Sciences Alternative Funding ("LSAF"). LSAF was established in 2013 via a joint venture with Perella Weinberg to provide structured debt financing to commercial stage healthcare and life science companies. Rich Gumer and David Kho have ~50 years of combined experience in the healthcare industry
  - 100% of Kennedy Lewis' current Life Sciences portfolio was sourced on a proprietary basis
- Highly structured debt: i) tailored to the borrower's business model, ii) secured against all assets, and iii) only senior secured debt in the capital structure
- Providing a less expensive alternative to equity financing
- Rigorous focus on downside protection, and we believe returns are not correlated with broader equity or credit markets

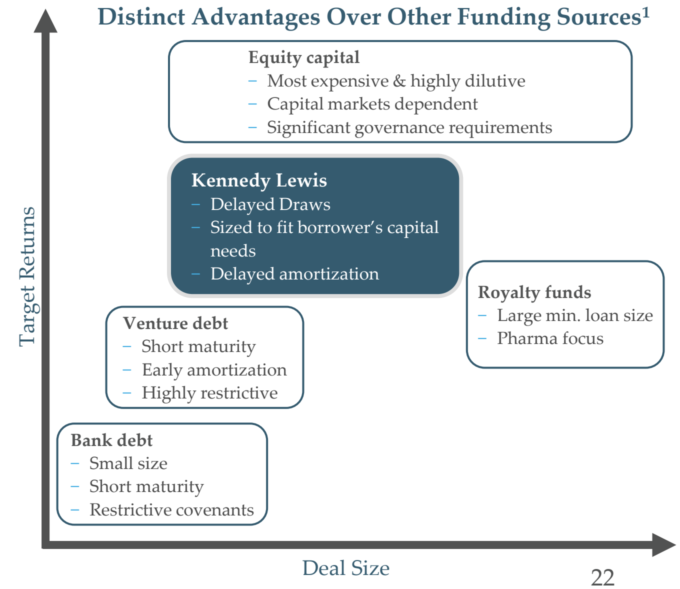
Target Company Attributes

- ✓ Commercial stage products (no binary FDA risk)
- ✓ Large market opportunity addressing significant unmet medical need with leading technology
- ✓ High barriers to entry
- ✓ Existing and durable reimbursement for product
- ✓ High gross margin products
- ✓ Proven management team
- ✓ Product significantly improves patient care and/or reduces costs
- ✓ Clear exit strategy (i.e., multiple identified potential acquirers)

Loan Attributes

- ✓ First lien on all assets (including IP)
- ✓ Loan tranching based on achievement of specific operating milestones
- ✓ Low Loan-to-Value (LTV) ratio: < 25%
- ✓ Average life of <3 years
- ✓ Financial/operating covenant based on achievement of minimum revenues (not covlite)
- ✓ Additional affirmative and negative covenants
- ✓ Pre-payment premiums and upfront facility fees
- ✓ Warrants and/or other equity kickers

We Believe Kennedy Lewis' Structured Debt Provides Distinct Advantages Over Other Funding Sources[1]



1. For illustrative purposes only.
2. Source: HID Corporation. 2021.

Company Overview

- Heart failure ("HF") is a chronic and progressive disease affecting >7mm patients in the US and ~26mm patients globally.[2] Late-stage heart failure patients are characterized by multiple hospitalizations and poor quality of life. The condition is progressive and without a cure
- Patients are typically managed on drug therapies that treat the symptoms of HF until the condition advances to a point that requires medical device intervention, traditionally an implantable cardioverter defibrillator ("ICD") and/or cardiac resynchronization therapy ("CRT"). The CRT and ICD markets are estimated to be $5-7bn and $6-8bn p.a., respectively[3,4]
- Impulse Dynamics manufactures and markets the Optimizer Smart System for the treatment of HF. The Optimizer system provides cardiac contractility modulation ("CCM") – precisely timed electrical signals that allow the heart to contract more forcibly. This provides symptomatic relief, significantly improving patient quality of life and reducing rates of hospitalization. The Optimizer system is an implantable fully wireless technology with a rechargeable battery. Implantation surgery is simple, takes less than 1 hour, and can be performed outside the hospital which significantly reduces the cost to both patients and providers
- The Optimizer system is FDA approved (with FDA Breakthrough designation, a designation only for devices that provide effective treatment of a life-threatening or debilitating disease for which there is no approved alternative) and targets a large subset of patients (~2.9mm in the US) that do not have any other device treatment options for HF. Impulse Dynamics' current product/label addresses a ~$15bn total addressable market[2,5]

Investment Overview

- **<u>Situation:</u>** Concurrent with closing its Series E equity round, the company was seeking a new long-term debt facility primarily to fund (i) the continued build out of its sales force to accelerate revenue growth, and (ii) the launch of two key clinical trials that could substantially increase the total addressable market for the Optimizer system
- **<u>Sourcing</u>**: Sourced on a proprietary basis as a result of Kennedy Lewis' longstanding relationship with the company's management team and Board
- **<u>Structure:</u>** first lien term loan secured by all assets, with equity upside
  - Double-digit contractual IRR based on a PIK coupon, up-front fees, and call protection. Equity upside potential via common equity interest[2]
  - <u>Downside protection</u>: First lien; low LTV; delayed draw feature; only debt in the capital structure; existing commercialized, revenue-generating product with opportunity for expansion; the loan was made in conjunction with a new equity investment; +3 potential strategic acquires of the business are supportive existing investors

IMPULSE DYNAMICS

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2. Source: Impulse Dynamics Corporate Presentation. 2022.
3. Source: Grandview Research. "Cardiac Resynchronization Therapy Market Size, Share & Trends. Analysis." 2022.
4. Source: Fortune Business Insights. "Implantable Cardioverter Defibrillator Market Size, Share and Industry Analysis." 2019.
5. Source: Impulse Dynamics. "Why CCM Therapy?" 2022.

Kennedy Lewis believes it is well equipped to invest in the key infrastructure and businesses that will be critical to the transition to a clean and renewables based electrified economy

- Covering the broader energy sector with a specific focus on investing in power and energy infrastructure; we believe the team's experience and understanding of middle market power assets allows for a quick and effective pursuit of the most compelling opportunities
  - Mark Crawford, Partner, leads Power investments and has >15 years of experience investing in the sector. Mark and the team have experience successfully restructuring, managing and monetizing power projects across the US
- Identifying key sector themes and targeting opportunities to invest in securities that are downside protected based on the intrinsic value of the business
- Our historical focus on power provides us with insights on sourcing and evaluating investment opportunities in businesses that are critical to the transition to clean energy and a net zero emissions world

Focused on Businesses That are Critical to the Transition to a Net Zero Emissions World

Energy Transition

- Energy storage (transportation and power generation)
- Development and construction of infrastructure needed to support electric vehicles
- Metals and mining supply chain that will produce the necessary base products needed to support the energy transition
- Manufacturing and product development businesses that will improve the efficacy of electric based transportation

Energy Infrastructure

- Pipelines and processing plants that facilitate the movement of natural gas, hydrogen and other products in North America and globally
- Renewable focused and lower emitting downstream processing facilities (Chemicals/Refining)
- Businesses that will aid in meeting net zero goals by developing replacements for products that are currently crude oil based

Power

- Efficient and low/zero emitting North American power assets
- Businesses that help enable or improve the efficient use of electricity
- Redevelop/repurpose existing infrastructure for green energy or alternative uses
- Avoid coal fired assets without a plan to redevelop/convert them into green fuel sources

1. For illustrative purposes only.

TEMPLE GENERATION I, LLC

- **Description**:
  - Owner of a 758MW natural gas-fired, combined-cycle electric generation facility located in ERCOT
  - Among the most efficient, cleanest, and flexible CCGT plants in the U.S., employing "quick start" turbines, which can achieve 50% power production in 10 minutes and baseload in 30 minutes
  - An increase in renewable generation in ERCOT, persistent low natural gas prices and a lack of weather volatility depressed power prices relative to expectations. Temple I defaulted and filed for Chapter 11 in 2017
- **Investment**: In December 2017 invested in the pre-petition senior secured credit facility (L+800 2nd lien term loan) which converted into 100% of the re-org equity. Kennedy Lewis has one board seat
- **Downside Protection**: Created a class leading asset at a discount to both new build cost and acquisition multiples for comparable assets
- **Update**: During February 2021, Texas and the ERCOT market suffered major outages due to Winter Storm Uri. Temple I supplied electricity during the entirety of this event when power prices peaked to $9,000/MWh (i.e., scarcity pricing)
- **Result / Exit**: In November 2021, a U.S. subsidiary of Banpu Power acquired Temple I for $430mm and, as a result, Kennedy Lewis fully exited its investment

TEXGEN

- **Description**:
  - Owner of four independent power plants in ERCOT totaling 2.1GW, including 2 combined cycle, located in the DFW & Houston metros, and 2 simple-cycle gas-fired
  - Previously owned by Exelon
  - An increase in renewable generation in ERCOT, persistent low natural gas prices and a lack of weather volatility depressed power prices relative to expectations. TexGen defaulted and filed for Chapter 11 in 2017
- **Investment**: In June 2018 invested in the pre-petition senior secured credit facility which converted into 100% of the re-org equity
- **Downside Protection**:
  - Emerged from bankruptcy unlevered with $130mm of cash
  - Attractively located assets created at a discount to comparable sales
  - An option on ~1GW of peaking (SCGT) capacity which could opt to mothball/retire if prices do not recover
- **Update**: During February 2021, Texas and the ERCOT market suffered major outages due to Winter Storm Uri. TexGen supplied electricity during the entirety of this event when power prices peaked to $9,000/MWh (i.e., scarcity pricing)

PG&E

- **Description**:
  - In January 2019, Kennedy Lewis sourced two project finance opportunities in the OTC markets, Crockett Cogeneration and Panoche Energy. Both assets were under long-term power purchase agreements ("PPA") with PG&E and traded down when PG&E filed for bankruptcy
  - Kennedy Lewis built positions at a discount due to the structural impediment that was idiosyncratic to the sellers
- **Investment**: In January 2019, purchased the bonds of Crockett at a weighted average in the high $60s and the bonds of Panoche at a weighted average in the low $50s
- **Downside Protection**: We believed that PG&E would not reject the PPAs, but in the unlikely event that they did, we understood there was sufficient collateral to recover our principal and accrued interest
- **Result/Exit**: Shortly after making the investment, PG&E announced it would not reject the PPAs and the bonds traded up significantly. In April 2019, Kennedy Lewis sold out of its positions in the bonds of both Crockett and Panoche at a weighted average in the low $90s

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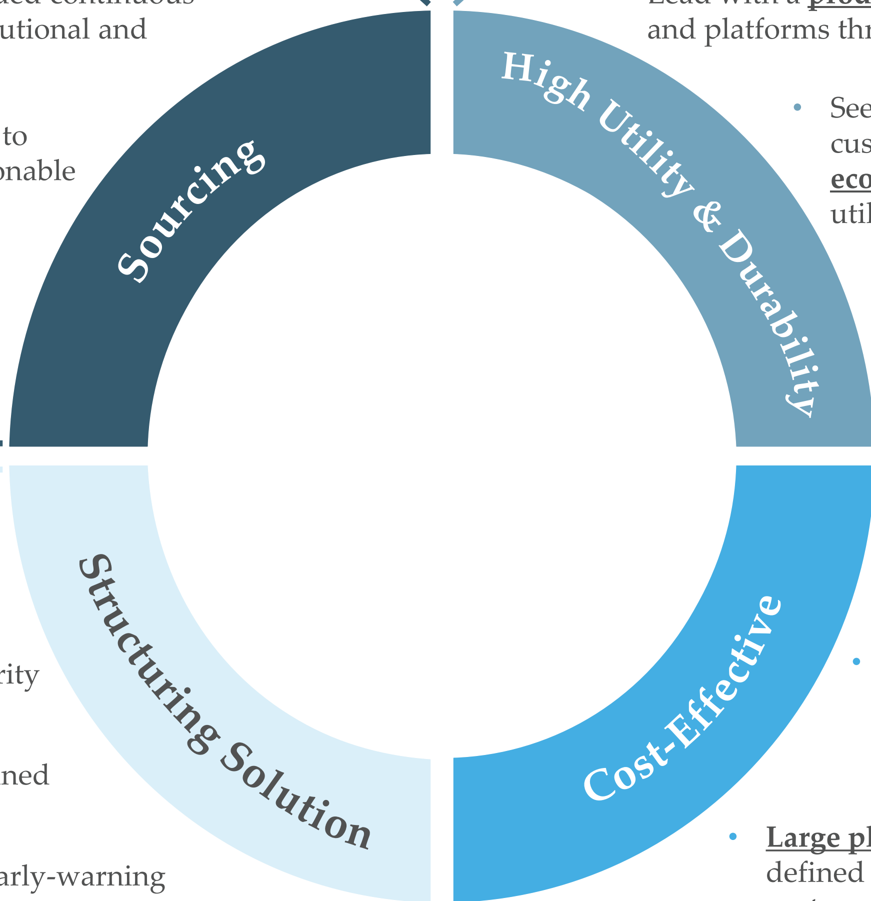
Within Technology, Media, and Telecommunications, Kennedy Lewis focuses on structuring responsive credit solutions to high quality businesses in need of bridge and growth capital

- Our **partnership** approach has provided continuous sourcing and diligence through institutional and strategic relationships
- Provide **responsive capital** solutions to support sustainable growth at a reasonable gross margin



- Lead with a **product-first** approach by evaluating services and platforms through the lens of customer utility
- Seek sustainable business models from the customer up, with **defensive unit economics** grounded in high customer utilization and dependency
- Conduct extensive industry and customer diligence to determine product / service / platform entrenchment

- Investments are structured with priority given to **downside protection**
- Quantum and type of capital determined based on the needs of the business
- Covenants incorporated to provide early-warning signal

- Identify attractive market structures with companies demonstrating high **incumbency** or **insurgency**
- Focus on product criticality paired with **low input cost : output price ratio** to determine opportunity for re-occurrence and pricing insulation
- **Large players in small ponds**… we verify defined market opportunities through third-party research

1. For illustrative purposes only.

Company Overview

- Eastman Kodak Company ("Kodak", NYSE: KODK) is a global technology company

Investment Overview

- **Situation**:
  - The company was in a period of transition; the management team was seeking to grow market share and increase profitability by harvesting traditional print cash flows to (i) support growth in its digital print segment, (ii) accelerate the removal of structural costs, and (iii) invest in advanced applications of chemicals and film to develop the company's strategic growth areas, leveraging its existing specialty chemical & manufacturing infrastructure expertise
  - Kennedy Lewis had been looking for situations that will benefit from (i) a COVID-19 economic recovery, (ii) the re-shoring of supply chains and manufacturing back to the US, (iii) and where Kennedy Lewis' capital can be used to support companies causing technological disruption. Through this thematic lens, Kennedy Lewis identified Kodak as an attractive investment opportunity
- **Sourcing**: Kennedy Lewis sourced this opportunity on a proprietary basis through its long-standing relationship with members of Kodak's management team; Kennedy Lewis worked with the management team to craft a financing package that would meet the company's immediate and expected needs
- **Structure:** Kennedy Lewis structured a highly complex investment comprised of three components to help fund growth initiatives. Kennedy Lewis is also on the board. Kennedy Lewis believes that its investment, coupled with management's efforts to reduce net debt to its lowest level since 2013, placed Kodak in its best capitalized position in years
  - $225mm First Lien Term Loan (with a $50mm delayed draw), $25mm Unsecured Convertible Note, Common Stock
  - First Lien: 12.5% (8.5% cash, 4% PIK) | Unsecured Convert: 5% PIK
  - Commitment fee and call protection
  - Low LTV and significant collateral coverage

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TACTICAL OPPORTUNITIES[1]

Within Tactical Opportunities, Kennedy Lewis has strategically deployed capital across various asset classes using a flexible sourcing approach and disciplined underwriting process

- The Tactical Opportunities vertical was formed to provide broad exposure to corporate and asset level investment opportunities
- A solutions-based, relative value approach to deploying capital opportunistically across public securities, direct loans, debt and equity
- Properly pricing risk-adjusted returns by adhering to a detailed investment framework that incorporates back testing, counterparty due diligence and structural protections
- **Experience**: Kennedy Lewis has deep securitization and derivatives expertise as well as asset level and credit insights across various sectors. Dik Blewitt, Partner, and Adam Goldberg, Director, lead the Tactical Opportunities vertical. Mr. Blewitt oversaw multi-billion-dollar portfolios at Blackstone, Blackrock and R3 Capital/Lehman Brothers. Mr. Blewitt has 25+ years of experience and expertise in structured products, and managed funds through the GFC (TALF/PPIF/Structured Credit Funds - Senior PM & SP Co-Head)
- **Flexibility**: Wide and diverse sourcing abilities with the flexibility to move dynamically between sectors and public/private markets to identify compelling relative value

Solutions Based

- Provide **highly customized capital solutions** across a range of industries, structures and levels of performance
- Work directly with companies to structure optimal solutions while **enhancing returns and mitigating risk** for Kennedy Lewis' investors
- Leverage Kennedy Lewis' in-house **sector expertise**

Opportunistic

- **Invest opportunistically** in asset-backed structured credit and specialty finance sectors
- **Flexible mandate** enhanced by diverse sourcing abilities enables dynamic movement across public and private markets, asset types, industries and the capital stack to identify compelling relative value
  - **Public:** traded broadly by broker dealer desks
  - **Private:** outside of public offerings. Often direct with an entity or within a specified asset class

Extensive Network

- Leverage **proprietary network of relationships** to "see" the universe of opportunities and deploy capital in areas we believe offer the potential to generate maximum alpha
- Source opportunities from **direct relationships** with companies, banks, lenders and capital providers

Thorough Underwriting

- **Conservative** approach incorporating stress cases informed by previous cycles and fundamental research on underlying collateral
- **Bottom-up** underwriting to understand complex pools of underlying assets while incorporating top-down industry and counterparty analysis
- **Responsible levels of leverage**

1. For illustrative purposes only.

Situation Overview

- TCW is a global asset management firm with over $253bn in AUM.[1] TCW's credit platform manages including an established collateralized loan obligation ("CLO") business
- TCW was looking to ramp up its CLO business but had limited balance sheet capital to invest in its underlying businesses, including the equity capital needed to launch new CLOs
- Performance on leveraged loans improved since the months immediately following the COVID-19 volatility
- Opportunity to partner with an established CLO issuer (TCW) and CLO underwriter (Jefferies) to make a scalable investment in CLO equity at an attractive moment in time:
  - TCW is an established CLO issuer with analyst industry coverage, technology, structuring and securitization expertise as well as a strong credit selection track record
  - Jefferies has an established CLO distribution platform, and a strong presence in the market for CLO equity. Kennedy Lewis believed it would benefit from Jefferies' ability to secure attractive terms and pricing, as well as proficient screening

Investment Overview

- **Structure:** In November 2020 formed an opportunistic strategic partnership between Kennedy Lewis and Jefferies' CLO group (the "Partners") to fund pro-rata a portion of the equity (i) during the warehouse aggregation phase prior to a TCW CLO launch and (ii) up to $160mm ($80mm from Kennedy Lewis) of TCW CLO equity over the next ~30-months
  - Size: $80mm commitment from Kennedy Lewis
  - Investment Discretion: Kennedy Lewis has the ability to analyze asset composition and equity return profiles to determine in the warehouse phase whether to fund the CLO equity
  - Management Fee Trailer: Kennedy Lewis is entitled to share in the management fees earned by TCW on all CLO securitizations originated over the medium term, which should increase yield and protect against losses on our CLO equity investments
  - Liquidity Optionality: Kennedy Lewis has the optionality to sell its CLO equity at any point while retaining its management fee entitlement
  - High IRR warehouse financing opportunity with strong partner alignment: prior to launching a new CLO, Kennedy Lewis and Jefferies will provide short-term senior secured financing (20:80) to TCW for the acquisition (or "warehousing") of a portfolio of loans during the 2–3-month (typically) ramp period. Upon issuing the CLO, the warehouse investment will be repaid, and Kennedy Lewis and Jefferies will then have the option to purchase the CLO equity

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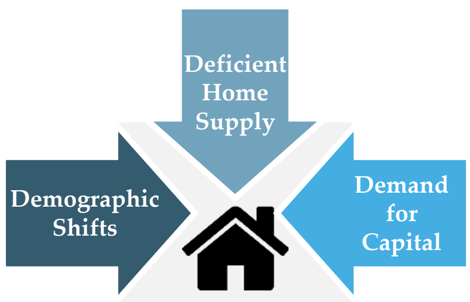
2. As of March 31, 2021.

Long-Term Secular Tailwinds Driving the Homebuilder Finance Opportunity

- We believe Kennedy Lewis' deal origination and asset management capabilities make it well equipped to exploit the compelling residential real estate investment opportunity in the US which is supported by long-term secular tailwinds

Long-Term Secular Drivers (the 3 "Ds")

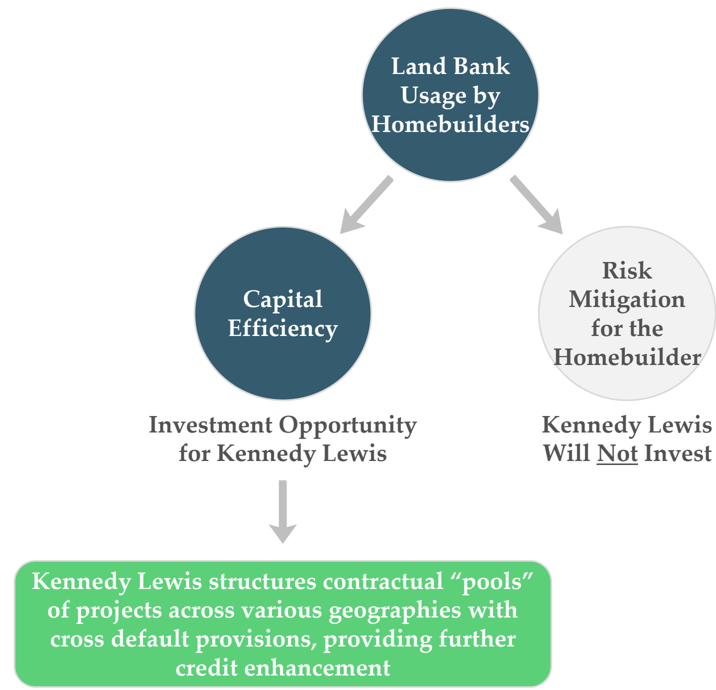
- Low home inventory
- Shortage of developed lots
- Aging housing stock



- Millennials
- Rising homeownership
- Migration & deurbanization

- Homebuilder's want off-balance sheet capital to acquire & develop land to improve ROE
- Land developers want capital to acquire & develop lots for homebuilders

How Homebuilders Utilize Land Banks



Kennedy Lewis' Homebuilder Finance Strategy

- We believe our expertise coupled with the flexible and patient nature of its capital make it ideally suited to provide highly structured capital solutions to homebuilders that enables just-in-time lot inventory creation and improvement to the homebuilder's bottom line4
  - An element of Kennedy Lewis' strategy is to generally acquire land, providing direct ownership. The homebuilder invests subordinate capital of ~25-35%, and a has completion and cost guaranty to complete land development
  - Seek to build a geographically diversified portfolio of communities with short duration (2-3-year WAL), amortization generally commencing within ~1 year and fully amortizing over a total term of 3-6 years
  - Strong downside protection as well as demand from single-family rental (SFR) / build-to-rent (BTR) institutions who are seeking to access more lots
- We also leverage our relationships with private land developers to provide first mortgage development financing on land under option to homebuilders

Kennedy Lewis' Homebuilder Finance Strategy (cont'd)

- Kennedy Lewis focuses exclusively on horizontal finance (i.e., from raw, permitted land to finished lots) which includes:

Land Purchase / Entry	"Horizontal" Development	Lot Acquisition / Realization
▪ Kennedy Lewis is nominated by homebuilder to purchase and hold title to the land on behalf of a homebuilder. Homebuilder puts down 20-30% of land's purchase price ▪ Homebuilder enters into a construction agreement with Kennedy Lewis to develop the land into finished lots ▪ Homebuilder contracts to acquire finished lots at a set price and schedule according to an option agreement	▪ Homebuilder begins land development ▪ Kennedy Lewis disburses capital to the homebuilder to finance lot development, up to the budgeted amount ▪ Homebuilder is responsible for any cost overruns and is contractually obligated to complete development of land into finished lots (Kennedy Lewis has a corporate guarantee from the homebuilder)	▪ Builder exercises option to acquire finished lots according to the price and schedule in the option agreement ▪ Failure to acquire lots as agreed results in i) deposit forfeit, ii) loss of right to acquire future lots, and iii) reputational harm ▪ Homebuilder is required to complete lots even if not selling homes

Downside Protection

- ✓ No permitting / entitlement risk - Kennedy Lewis only finances approved/zoned land in locations with proven demand for housing
- ✓ Completing development of the land with the installation of infrastructure (e.g., roads and utilities) to achieve finished lots is value-added (i.e., finished lots are worth more than the land and the cost to develop it)
- ✓ Kennedy Lewis only finances the acquisition of land that is already approved by government and regulatory entities for the construction of homes (i.e., entitled). The land entitlement process is a lengthy and challenging process which creates a significant barrier to increasing housing supply. Therefore, entitled land should retain its value
- ✓ Principal protection in a stressed-test scenario: Focus on opportunities with an expected 20-30% margin of safety to home price declines, mitigating home price risk. Returns are not dependent on home price appreciation
- ✓ Kennedy Lewis only finances established homebuilders and land developers who are already active in the market with product acceptance and access to sub-contractors, mitigating execution risk
- ✓ Collateralized by land which Kennedy Lewis owns at a discount to its total value at acquisition
- ✓ Completion guarantee from homebuilder obligating them to complete development, with an associated corporate guarantee to fund cost over-runs
- ✓ Structure contractual "pools" of projects across various geographies, further mitigating "walk away" risk
- ✓ Exposure reduces over time from structural amortization, and fully amortizes over term
- ✓ Geographically diversified portfolio and US home prices do not move uniformly across the country

Kennedy Lewis' Edge

- David Valiaveedan leads Kennedy Lewis' homebuilder finance investment strategy. Prior to joining Kennedy Lewis, David led the residential investment strategy (Domain Real Estate) for DW Partners from 2015 – 2021. While at Blackstone, Darren Richman (Kennedy Lewis' Co-Founder, Co-Portfolio Manager & Co-Managing Partner) and Doug Logigian (Kennedy Lewis' Co-Managing Partner & President) worked directly with David while he was Vice President of Finance & Treasurer at Hovnanian Enterprises, Inc, a national homebuilder
- Hands-on approach to asset management: KL Servicers LLC is Kennedy Lewis' vertically integrated in-house asset monitoring and loan servicing team

OPPORTUNISTIC CYCLICALS[1]

- **Defining Opportunistic Cyclicals:** opportunistic investments in situations where an exogenous shock causes a company to experience its own cycle, resulting in the need for a tailor-made capital solution
- In these situations, our capital can serve as a valuable bridge to less structured, underbanked segments of the market that are under pressure but overlooked or misunderstood by others (the proverbial good company bad balance sheet). Kennedy Lewis will seek to provide capital on a secured basis to companies with a reason to exist and underwrite to a recovery
- Requires a contrarian mindset and a creative approach to analysis: These complex and misunderstood special situations allow Kennedy Lewis to use its ingenuity and problem-solving skills to find ways to infuse highly structured rescue capital into discrete situations to create catalysts for growth, and in part, to stabilize affected capital structures
- During periods of severe market dislocation, the Fund will also pivot to opportunistically invest in the public markets which is a powerful tool to enhance full-cycle performance
  - "Flight-to-safety" selling behavior can create attractive buying opportunities for select investment grade credits, high-quality high-yield bonds, and leveraged loans
- **Kennedy Lewis' Edge:** Flexible strategy allows for quickly shifting across public and private markets as well as sectors to capture windows of opportunity and optimize risk/return
  - With a senior team that has experience across geographies, market environments, asset classes, sectors and rating categories, including cyclicals, Kennedy Lewis is positioned to opportunistically take advantage of disruption

Opportunistic Cyclicals Case Study | FECI

- **Company:** Florida East Coast Industries ("FECI") is a diversified real estate and transportation infrastructure company involved in the development and operation of the "Brightline" passenger rail project as well as the development, stabilization and sale of industrial, commercial and residential real estate assets adjacent to major transit hubs
- **Situation:**
  - Opportunity to refinance the company's existing corporate debt that was maturing in the near-term. The refinancing was intended to bridge to upcoming asset sales as well as finance the continued build out of the industrial properties
  - Kennedy Lewis believed the loan had an attractive collateral portfolio which was comprised of high-quality real estate concentrated in what Kennedy Lewis believed were COVID-19 resistant asset classes (i.e., most of the value was in industrial and residential assets in South Florida)
  - Coming in side-by-side with a large banking institution's balance sheet capital gave Kennedy Lewis high confidence in loan monitoring, servicing and theoretical workout scenarios
- **Structure:**
  - Negotiated a short-dated senior secured term loan with a double-digit coupon, call protection, and OID
  - The loan was secured against assets with a net FMV which Kennedy Lewis believed implied >2x net asset coverage
  - Kennedy Lewis believed the loan principal and interest remained well covered, even in a severe downside stress case
- **Result / Exit:**
  - In June 2021, the loan was refinanced after a hold period of less than 10.5 months[1]

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Kennedy Lewis
Investment Management

APPENDIX

ILLUSTRATIVE INVESTMENT PROCESS OVERVIEW[1]

Sector Review

- Focus on sourcing proprietary, idiosyncratic, and structurally complex opportunities that fall outside or cut across lanes where there is generally both less capital and an increased opportunity to deliver what we believe is an attractive risk-adjusted return
- Identify sectors facing transition, and then determine the conditions that sparked the disruption: secular, cyclical, regulatory, and innovation related
- The forces of disruption are not mutually exclusive; often multiple catalysts for disruption are associated with Kennedy Lewis' investments
- We believe the investment team has specific sector-level expertise, and the Firm is organized according to specialty

Proprietary Sourcing

- The team seeks to source and gain access to unique deal flow through its scalable verticals which we believe allows Kennedy Lewis to exploit identified themes in sectors that are experiencing disruption or going through transition
- The team possess industry relationships across management teams, prior deal teams, fund sponsors, merchant banks, capital markets desks and advisors
- Kennedy Lewis is a capital solutions provider for companies lacking access to traditional forms of capital. We believe the proliferation of private credit has led to overly defined investment mandates for most firms; our ability to source deals outside of these channels has allowed us to generate attractive risk-adjusted returns

Bottom-Up Fundamental Analysis

- The team actively tracks "target" companies so that when a financing opportunity becomes available, we have an information advantage which allows us to lead/structure an investment
- We typically get to know companies/management teams over several months/years before structuring a potential investment and presenting it to our IC
- Document the investment plan in a memo that, inter alia, outlines downside protection return scenarios and potential upside
- Evaluate material ESG considerations in accordance with the firm's ESG Policy (e.g., negative screening)[2]

IC Review / Approval

- The investment team and IC members meet regularly to discuss a potential investment by the fund. This generally includes but is not limited to:
  - Reviewing the comprehensive credit file
  - Considering relative value alternatives
  - Reviewing return scenarios
  - Determining appropriate structure and sizing
  - Outlining exit plan

Execution & Monitoring

- Trade implementation
- Continual monitoring vs. thesis; re-underwriting of position if financials no longer support thesis
- Private equity-style monitoring:
  - Each investment is assigned a senior investment professional who is responsible for day-to-day management and monitoring of the investment
- Pursue an activist approach when necessary

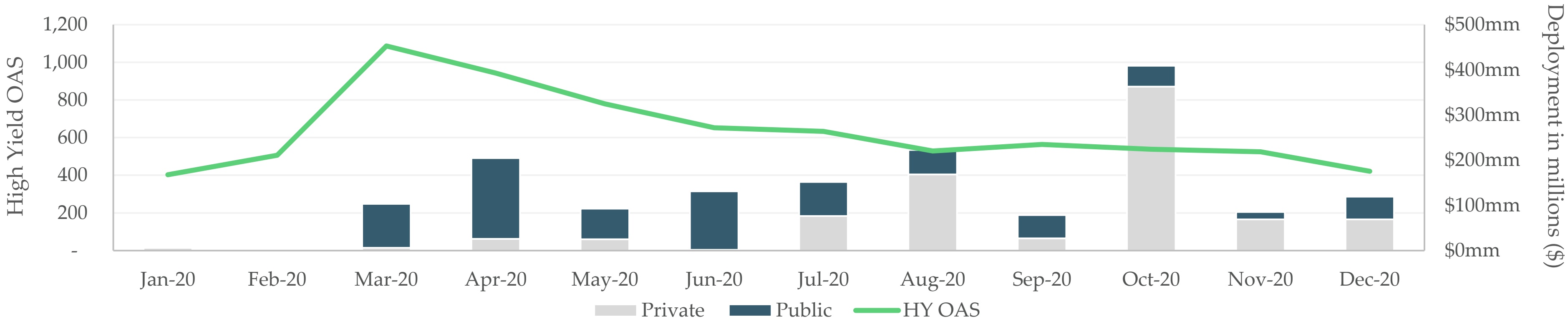
Monetization

- Harvest investment when the catalyst occurs
- Credit investments are typically structed with a combination of OID, Pre-Payment Penalties, Warrants, and Converts. We typically favor deals with a high likelihood of early pre-payment, as our funds seek to limit duration risk

SOURCE — **UP TO 60 MONTHS** — **HARVEST**

1. Framework is for illustrative purposes only.
2. ESG considerations are not indicative of the performance of a particular investment or the portfolio on the whole.

Kennedy Lewis Fund I & Fund II Capital Deployment vs. HY OAS[1]



Pre-COVID-19

- Going into 2020 the High Yield market was priced tightly
- Markets were at elevated multiples/valuations
- Accordingly, Kennedy Lewis took a cautious approach, deploying capital judiciously in idiosyncratic private opportunities

Initial Shock

- Initial COVID-19 shock in March jolted the High Yield market and sent yields skyward
- <u>Pivot to publics</u> - Leveraging our collective credit investment experience, our team jumped in, investing available capital in known capital structures in the public markets with, inter alia, healthy free cash flow generation in a downside scenario, strong liquidity, and no near-term maturities
- This occurred in the context of the emergence of COVID-19 and the resulting shock to the financial markets. While these exact conditions may be unlikely to recur, Kennedy Lewis believes current macroeconomic conditions of elevated risk could lead to a similar dislocation in the credit markets and an opportunity for the Fund to invest in high quality corporate credits at depressed levels

Recovery Phase 1: Intervention

- We continued public capital investment through summer until the Fed backstop kicked in, which facilitated a recovery in markets in which it directly intervened; as a result, markets by late June rebounded to near-pre-crisis levels
- Kennedy Lewis scaled back the pace of public investment and realized some of the gains achieved in the recovery. Focus shifted to middle market distress in anticipation of the "solvency" phase

Recovery Phase 2: Solvency

- By year end, the market came full circle and traded tighter, with significant distress remaining outside the public markets
- A large swath of middle market companies have been left behind, unable to access the syndicated markets and shunned by traditional sources of financing, including banks, looking to pare risk
- In response, Kennedy Lewis pivoted once again to deploy highly structured senior secured rescue capital to support private companies experiencing acute pain

1. Kennedy Lewis Fund I & II deployment data Bloomberg (ICE BofA US High Yield Index Option-Adjusted Spread).

CREATIVE APPROACH TO STRUCTURING[1]

- Kennedy Lewis "truffle hunts" for alpha across the credit spectrum, seeking to construct a diversified portfolio of best ideas with ample upside and downside protection
- Below is an illustrative table of Kennedy Lewis' private investments which demonstrates how we structure and invest. The below is not an exhaustive list of all investments made by the funds[1]

	ConvergeOne	Florida East Coast Industries	Hilco 56	Impulse Dynamics	vivial
Description	IT services provider of collaboration & technology solutions	Real estate developer in South Florida	Portfolio of Broadcom semiconductor patents	Manufacturer of the Optimizer implant system to treat heart failure	Provider of Marketing solutions
Investment Date	July 2020	August 2020	January 2018	April 2019	December 2018
Instrument	First Lien Secured Notes	First Lien Term Loan	First Lien Term Loan	First Lien Term Loan	First Lien Term Loan
Loan Size	$75mm	$485mm	$35mm	$15mm	$85mm
Maturity	5.5 years	364 days	3 years	4 years	4 years
Coupon	10%	L+950 (with a 1% Libor floor)	14% cash pay or 16% PIK at borrower's option	12% fixed cash (up to 4% PIK and 8% fixed cash at borrower's option)	12%
Fees / OID	4 points OID	5 points OID	10 points OID	1.5% up-front fee	3 points OID
Call Protection	NC-2, 3-105, 4-102.5, Par thereafter	102 hard call; par at three months prior to maturity. Asset sale prepayments at par	NC for life	1-112, 2-104, 3-102, 4-Par	1-112, 2-110, 3-105, 4-Par
Equity Kicker	-	-	Profit share: 25% of FCF for first $150mm of recoveries, then 15% in perpetuity	0.75% of the company in warrants and, subsequent to the initial investment, preferred equity	Profit share

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Kennedy Lewis Employs a Replicable and Process-Driven Approach to Risk Management Throughout the Investment Process, with Three Primary Lines of Defense

1 Credit Underwriting

- Deep initial due diligence on each trade
- Consideration of, inter alia, regulatory, market, reputational and operational risks as well as other ESG risks and opportunities
- Require Significant Margin of Safety:
  - Seniority: Invest in fulcrum of the capital structure or higher
  - Value Coverage:
    - Performing Investments: conservative LTV
    - Stressed Investments: material discount to forecasted valuation with allowance for process risk and time to exit
  - Risk Focused Sizing: Analyst down case capped at 2% of commitments

2 Trade Execution

- **Operational checks and balances**
  - Low turnover strategy means trades are scrutinized
  - Investment team is structured such that no member is incentivized or empowered to take outsized risk
  - *Risk Oversight Committee*: Darren Richman, David Chene, Doug Logigian, Anthony Pasqua (COO/CFO) and Josh Smith (Chief Risk Officer)
  - Investments require unanimous Investment Committee approval
  - Analysts do not have execution authority

3 Portfolio Risk

- **Measurement**
  - Leverage available data (portfolio data, valuation models, analyst models, risk models, market data)
  - Provide relevant transparency and analytics on timely basis with tightly integrated systems
- **Management**
  - Understand market beta exposure relative to historical cycles – leverage flexible platform mandate and extensive investment experience to pivot capital to best risk-adjusted market opportunities
  - Understand market exposure relative to historical cycles – promote selective shorts and targeted hedges where appropriate
- **Structure**
  - Closed-end fund structure to ensure alignment between duration of assets and liabilities and act as natural hedge against bouts of market volatility

DAVID KENNEDY CHENE
Co-Founder, Co-Portfolio Manager & Co-Managing Partner

- CarVal Investors - Managing Director, Head of U.S. Corporate Securities & Co-Head of European Corporate Securities
- Credit Suisse - Head of European Distressed Credit
- Morgan Stanley - Executive Director, Distressed Credit Trading
- DiMaio Ahmad Capital - Director
- Previously at CIBC

DARREN LEWIS RICHMAN
Co-Founder, Co-Portfolio Manager & Co-Managing Partner

- Blackstone / GSO Capital - Senior Managing Director & Head of Research
- DiMaio Ahmad Capital - Managing Director & Co-Head of Research
- Goldman Sachs - Vice President, High Yield
- Deloitte & Touche - Manager, M&A

DOUG LOGIGIAN
Co-Managing Partner & President

- Blackstone / GSO Capital - Senior Managing Director & Head of Capital Markets / Portfolio Manager
- Previously at Citibank and Salomon Smith Barney

J. RICHARD "DIK" BLEWITT
Partner
Head of Tactical Opportunities & Co-Head of ESG

- Blackstone / GSO Capital - Managing Director & Senior Portfolio Manager
- Blackrock - Managing Director & Co-Head of Securitized Assets
- R3 Capital - Partner, Securitization & Insurance Products
- Lehman Brothers - Managing Director & Head of Securitization
- Bank of America - Managing Director & Global Head of Distribution for the Global Structured Products Group & Co-Head of New York MBS/ABS distribution
- Previously at JP Morgan

MARK CRAWFORD
Partner
Head of Power & Co-Head of ESG

- CarVal Investors - Director focused on power investments
- GSC Group - Distressed and Special Situations Analyst focused on power
- The Carlyle Group - Power analyst within the High Yield Group
- Previously at Credit Suisse focused on energy
- U.S. Navy - Electrical and Auxiliaries Officer

BRIAN DUBIN
Partner

- Mariner Investment Group - Senior Analyst
- MehanCombs - Partner & Research Analyst
- Eos Partners - Senior Analyst
- Blackstone / GSO Capital - Analyst
- Previously at UBS

1. Please refer to the full biographies on the following pages.

DAVID KENNEDY CHENE

Co-Founder, Co-Portfolio Manager & Co-Managing Partner

David Chene co-founded Kennedy Lewis with Darren Richman in 2017. Mr. Chene is a Co-Portfolio Manager and a Co-Managing Partner of Kennedy Lewis, and he Co-Chairs the Firm's Investment Committee and Executive Committee. Mr. Chene was formerly a Managing Director with CarVal Investors, responsible for managing the US Corporate Securities business based in Minneapolis, from 2012 to 2016. Prior to his role in the US, he was Co-Head of CarVal's European Corporate Securities business based in London. In both roles, he focused on special situations and distressed investments, including the firm's global liquidations exposures and European financial investments. Before joining CarVal, Mr. Chene worked at Credit Suisse in London, running the firm's European Distressed business, and was responsible for risk management across the firm's European Leveraged Finance trading activities, from 2010 to 2012. Prior to Credit Suisse, Mr. Chene was a Senior Distressed Trader for Morgan Stanley in London, from 2009 to 2010. Prior to Morgan Stanley, Mr. Chene was a Research Analyst at DiMaio Ahmad Capital from 2003 to 2009, first in New York and then later as Head of the Firm's Asian Platform, based in Singapore. Mr. Chene began his career at CIBC World Markets as a Research Analyst in its Leveraged Finance Investment Banking Division in New York, from 2001 to 2003. Mr. Chene actively supports charitable causes such as Ironman Foundation, Seeds of Peace, TreeHouse, Urban Ventures, WATCH, and Women for Women International. He is an Eagle Scout and an 8-time full distance Ironman finisher, including 2-times at the Ironman World Championships in Kona, Hawaii. He received a BA in Business Economics and Accounting from the University of California at Los Angeles in 2001.

DARREN LEWIS RICHMAN

Co-Founder, Co-Portfolio Manager & Co-Managing Partner

Darren Richman co-founded Kennedy Lewis with David Chene in 2017. Mr. Richman is a Co-Portfolio Manager and a Co-Managing Partner of Kennedy Lewis, and he Co-Chairs the Firm's Investment Committee and Executive Committee. Mr. Richman was formerly a Senior Managing Director with Blackstone from 2006 to 2016. He focused on special situations and distressed investments, and he sat on the Investment Committee for many of GSO's special situation-oriented funds. Before joining GSO Capital Partners, Mr. Richman worked at DiMaio Ahmad Capital, where he was a Founding Member and the Co-Head of its Investment Research Team, from 2003 to 2006. Prior to joining DiMaio Ahmad, Mr. Richman was a Vice President and Senior Special Situations Analyst at Goldman Sachs, from 1999 to 2003. Mr. Richman began his career with Deloitte & Touche, ultimately serving as a Manager in the Firm's Mergers & Acquisitions Services Group, from 1994 to 1999. Mr. Richman is on the Boards of Eastman Kodak and Outward Bound USA, and the Executive Board of New York University's Stern School of Business. He previously sat on the Board of Sorenson Communications, F45, Seneca Mortgage and Warrior Coal. He is a member of the Economic Club of New York and formerly served on its strategic planning committee. Mr. Richman received a BS/BA degrees in Accounting from the University of Hartford in 1993, and an MBA from NYU's Stern School of Business in 2000. He was formerly a Certified Public Accountant and a Member of the American Institute of Certified Public Accountants.

DOUG LOGIGIAN

Co-Managing Partner & President

Doug Logigian joined Kennedy Lewis in 2020 as a Co-Managing Partner and the President of the Firm. Mr. Logigian serves on the Firm's Investment Committee as well as the Executive Committee. Mr. Logigian was formerly a Senior Managing Director with Blackstone from 2006 to 2019. He was the Head of Capital Markets and a Portfolio Manager for GSO Capital Partners, and he sat on the Investment Committee for GSO's special situation-oriented funds. Mr. Logigian also served on Blackstone's Capital Markets Committee. Prior to his portfolio management responsibilities, Mr. Logigian served as the Head Trader across the GSO alternatives platform, where he oversaw the operations of the trading desk and transacted in all of the asset classes in which GSO trafficked. Prior to joining GSO in 2006, Mr. Logigian worked as an Associate at Citibank where he was responsible for managing a book of high yield cash bonds and credit default swaps on the Credit Trading Desk. While at Blackstone, Mr. Logigian served on the Board of Directors for Seneca Mortgage. Mr. Logigian received a B.A. with honors from Harvard University.

J. RICHARD "DIK" BLEWITT
Partner, Head of Tactical Opportunities and Co-Head of ESG

J. Richard "Dik" Blewitt joined Kennedy Lewis in 2020 and is a Partner, the Head of Tactical Opportunities, and the Co-Head of ESG. Mr. Blewitt serves on the Firm's Investment Committee. Mr. Blewitt previously spent 6 years at GSO Capital Partners, a division of Blackstone, as a Managing Director focused on structured finance/credit investments. He was the Senior Portfolio Manager for Carador Income Fund PLC, a member of the Global Structured Credit Investment committee for the firm's Liquid Credit business, as well as a member of Blackstone Insurance Solutions Investment Committee. Prior to that, he was a Managing Director and Co-Head of the Securitized Asset Team within Blackrock's Fixed Income Portfolio Management Group, a senior PM for Blackrock BMI, PPIF, and TALF funds, as well as the Partner in charge of Securitization and Insurance Products for the R3 Capital Hedge Fund. Prior to Blackrock acquiring R3, Mr. Blewitt was with Lehman Brothers as a Managing Director and Head of Securitization and Insurance Product Investments for the Global Principal Strategies business. Mr. Blewitt was formerly a Managing Director and Global Head of Distribution for the Global Structured Products Group at Bank of America Securities, and previously spent 7 years with JP Morgan in Structured Finance. Mr. Blewitt was on the Board of Viva Life Settlement Co, Altus Power America, JG Wentworth, Vendor Assistance Program, and LoanX. Mr. Blewitt earned a BS in Finance from Lehigh University, and an MBA in Finance/International Business from the Stern School of Business at New York University.

MARK CRAWFORD
Partner, Head of Power and Co-Head of ESG

Mark Crawford joined Kennedy Lewis in 2017 and is a Partner, the Head of Power, and the Co-Head of ESG. Mr. Crawford serves on the Firm's Investment Committee. Mr. Crawford was formerly a Director with CarVal Investors, responsible for managing North American special situations and distressed investments, specifically focusing on power and energy investments, from 2008 to 2016. Before joining CarVal, he was a Senior Credit Analyst with GSC Group, focusing on liquid investment strategies within the firm's distressed for control private equity unit, from 2006 to 2008. Prior to GSC Group, Mr. Crawford was a Research Analyst in the Carlyle Group's High Yield Business, focusing on power, automotive and consumer product investments, from 2005 to 2006. Prior to Carlyle, he was an Investment Banking Associate at Credit Suisse First Boston, primarily working in the Distressed Finance and Global Energy groups, from 2003 to 2005. Prior to starting a career in finance, Mr. Crawford began as a Surface Warfare Officer in the U.S. Navy, during which he deployed to the North Atlantic, Mediterranean, Middle East and Latin America, from 1993 to 1998. Mr. Crawford is on the Boards of T1 Holdings and TexGen. He was formerly a member of the Boards of Granite Ridge Holdings, Bosque Power Company and Tapstone Energy. Mr. Crawford received a BS in Economics from the United States Naval Academy in 1993, a MS in Information and Telecommunications Systems from Johns Hopkins University in 2000, and an MBA from the Wharton School at the University of Pennsylvania in 2003.

BRIAN DUBIN
Partner

Brian Dubin joined Kennedy Lewis in 2018 and is a Partner focused on investments in the Technology, Media, and Telecom (TMT), Industrials and Fitness sectors. Mr. Dubin serves on the Firm's Investment Committee. Mr. Dubin was formerly a Senior Analyst at Mariner Investment Group, a leading alternative investment advisory firm, specifically focusing on stressed loans, from 2015 to 2018. Before joining Mariner Investment Group, Mr. Dubin was a Partner and Research Analyst at MeehanCombs, a global credit opportunities fund, where he was responsible for specialty finance investments, from 2012 to 2015. Prior to MeehanCombs, Mr. Dubin was a Senior Analyst at Eos Partners, a distressed credit fund, where he focused on investments in the financial services industry, from 2008 to 2012. Prior to Eos Partners, Mr. Dubin was a Specialty Finance and Industrials Analyst at GSO Capital Partners from 2005 to 2008. Mr. Dubin began his career as an Investment Banking Analyst in the Global Industrial Group of UBS investment bank from 2003 to 2005. Mr. Dubin received a BS from the Wharton School at the University of Pennsylvania in 2002.

RICH GUMER
Partner

Rich Gumer joined Kennedy Lewis in 2018 and is a Partner focused on investments in the Life Sciences sector. Mr. Gumer has over 30 years of experience in the healthcare industry, focused primarily on medical devices and pharmaceutical companies. Prior to joining Kennedy Lewis, Mr. Gumer, together with Steve DeNelsky, founded Life Sciences Alternative Funding ("LSAF"), a joint venture with Perella Weinberg Partners' Asset Based Value Strategy, in early 2013 to provide structured growth capital to medical device and diagnostics companies. structured growth capital to the medical device and diagnostics companies. Prior to LSAF Mr. Gumer was a senior healthcare analyst responsible for all healthcare investing at Avenue Capital, a global hedge fund with $20bn of AUM. Prior to Avenue, Mr. Gumer was the Global Head of healthcare private equity investing for GE Capital. Mr. Gumer previously headed the healthcare investment banking unit of ABN Amro and was involved in more than $10 billion of equity, debt and M&A transactions. Mr. Gumer has been on the board of several private companies, including Steri-Oss (sold to Nobel Biocare) and IVPcare (sold to Oncology Therapeutics Network). Mr. Gumer has an AB in Biochemistry from Brown University and an MBA in Finance from University of California, Berkeley.

PIERRE AHLSELL DE TOULZA
Managing Director

Pierre Ahlsell de Toulza joined Kennedy Lewis in 2022 and is a Managing Director focused on investments in Europe. Prior to joining Kennedy Lewis, Mr Ahlsell de Toulza was a Managing Director and the Head of Fixed Income at the Pictet Investment Office, a Geneva-based multi-family office owned by Banque Pictet. At Pictet he founded the Credit Opportunities team and was responsible for managing total return credit strategies across global macro, fixed income, credit, high yield, distressed and private debt. Prior to joining Pictet in 2012, Mr. Ahlsell de Toulza was the Head of Investments at SAF & Co Financial Services, a multi-family office. Prior to that, he worked at Louis Dreyfus Trading as a proprietary trader and at Fortis Investments as a Senior Emerging Markets Portfolio Manager. Mr. Ahlsell began his career in 1998 as an Emerging Markets Economist/Strategist at FP Consult.

Mr. Ahlsell de Toulza received a Masters degree in Econometrics from the University of Paris II Panthéon-Assas and a postgraduate degree in Business Strategy and Management from the University Paris IX Dauphine, where he graduated with honors.

DAVID KHO
Managing Director

David Kho joined Kennedy Lewis in 2019 and is a Managing Director focused on investments in the Life Sciences sector. Mr. Kho was formerly a Vice President at Bridge Bank, responsible for originating and managing credits in the life sciences industry, from 2018 to 2019. Before joining Bridge Bank, he was a Vice President with Life Sciences Alternative Funding ("LSAF"), a joint venture with Perella Weinberg Partners' Asset Based Value Strategy, focused on providing structured growth capital to medical device and diagnostics companies, from 2014 to 2018. Prior to Life Sciences Alternative Funding, Mr. Kho was a Vice President in Square 1 Bank's life sciences group, from 2008 to 2014. Mr. Kho began his career as a Performance Analyst at Hatteras Investment Partners. Mr. Kho received a BS in Business Administration from the University of North Carolina at Chapel Hill in 2007.

BRIEANNE NIKRANDT
Managing Director

Brieanne Nikrandt joined Kennedy Lewis in 2021 and is a Managing Director focused on investments in Homebuilding and Land Development. Over her 20+ year career in real estate and finance, Ms. Nikrandt has originated and underwritten over $4 billion in land banking and joint venture transactions and has extensive experience restructuring, repositioning, and selling residential real estate assets.

Prior to joining Kennedy Lewis, Ms. Nikrandt was a Managing Director at DW Partners, LP where she was responsible for originating and overseeing residential investments as well as the day-to-day management of the portfolio.

Before joining DW Partners in October 2015, Ms. Nikrandt held a senior role at Community Development Capital Group ("CDCG"), the residential investment platform of GSO Capital Partners, a division of Blackstone. Prior to CDCG, from 2006-2013, she was a Vice President at Saybrook Community Capital where she was focused on residential real estate investments. From 2003-2006, Ms. Nikrandt served as Vice President of Real Estate at JPMorgan Chase where she managed several key residential real estate relationships. She began her career at Bank One.

Ms. Nikrandt graduated from the University of Iowa with a BA in Finance.

DAVID VALIAVEEDAN
Managing Director

David Valiaveedan joined Kennedy Lewis in 2021 and is a Managing Director focused on investments in Homebuilding and Land Development. Mr. Valiaveedan has over 30 years of experience in real estate focused on the structuring and placement of debt and equity for public and private companies across the homebuilding, multifamily, office and hotel segments. Prior to joining Kennedy Lewis, Mr. Valiaveedan was at DW Partners, LP where he led the formation of Domain Real Estate Partners and targeted residential investment.

Prior to joining DW Partners in August 2015, David was Vice President of Finance & Treasurer at Hovnanian Enterprises, Inc, a leading national homebuilder. At Hovnanian, he was a member of senior management responsible for the treasury and corporate finance functions and served as a member of the company's land acquisition committee. He focused on raising debt and equity capital at both the entity level through senior notes and share issuances, and at the community level through project debt and joint venture equity including land banking.

Prior to joining Hovnanian in 2005, Mr. Valiaveedan was a Vice President at AIG Global Real Estate where he led capital markets for a portfolio of six AIG sponsored global private equity funds and direct portfolio investments with a gross invested balance of over $6 billion.

Prior to AIG, from 2000-2002, he was a Vice President in Real Estate Investment Banking at Credit Suisse; he held the same position at Donaldson, Lufkin & Jenrette before it was acquired by Credit Suisse. At both firms he was involved in the structuring and placement of debt and equity capital as well as mergers and acquisitions for real estate companies.

From 1997-2000, Mr. Valiaveedan was a Vice President at Credit Re Mortgage Capital, a merchant bank focused on credit enhancement for affordable housing. From 1994-1997, he was an Associate in Real Estate Investment Banking at Bankers Trust (now Deutsche Bank) and participated in the acquisition of distressed and non-performing loan portfolios from various sellers, including the Resolution Trust Corporation.

Mr. Valiaveedan holds a BS in Finance from Georgetown University and an MBA from the Darden Graduate School of Business Administration at the University of Virginia.

ANTHONY PASQUA

Partner, Chief Operating Officer/Chief Financial Officer

Anthony Pasqua joined Kennedy Lewis in 2017 and is a Partner and the Firm's Chief Operating Officer and Chief Financial Officer. Mr. Pasqua has direct responsibility across Legal, Finance, Compliance, IT, and HR, and he serves on the Firm's Executive Committee. Mr. Pasqua was formerly the COO/CFO of several credit related hedge funds, including Ellis Lake Capital where he was a Founding Member. Prior to being a COO/CFO Mr. Pasqua was the Head of Operations at Shumway Capital Partners (2008-2009) and the Controller/Director of Operations at Chatham Asset Management (2003-2008). Mr. Pasqua graduated from East Stroudsburg University in 2000 with a BA in Business Management and earned his MBA from Fairleigh Dickinson University in 2007. Mr. Pasqua is a Certified Public Accountant.

RICHARD MONJE

Managing Director, Head of Legal Affairs & Strategy

Richard Monje joined Kennedy Lewis in 2019 and is a Managing Director and the Head of Legal Affairs & Strategy. Mr. Monje has 40 years of experience as a lawyer with a practice divided between transactions, counseling, business litigation, and governmental relations and entitlements. Mr. Monje has also served as general counsel for a savings and loan association, general counsel for a land development and home building company, and chief executive officer for a development company.

KC O'BRIEN

Managing Director, Director of Operations

KC O'Brien joined Kennedy Lewis in 2021 and is a Managing Director focused on finance and front to back operations. Mr. O'Brien was formerly Director of Operations at Calypso Capital Management LP where he managed the middle office / operations team. Prior to joining Calypso, Mr. O'Brien was Director of Operations at GoldenTree Asset Management. He started his career at Morgan Stanley working in the Global High Yield middle office. Mr. O'Brien received a BS in Marketing from the University of Scranton.

JOSH SMITH

Managing Director, Chief Risk Officer

Josh Smith joined Kennedy Lewis in 2019 and is a Managing Director and the Chief Risk Officer. Mr. Smith is responsible for monitoring and analyzing investment risk across the platform, including significant focus on macroeconomic factors that inform portfolio strategy and construction. Mr. Smith was formerly Chief Risk Officer with GSO Capital Partners, a division of Blackstone now known as Blackstone Credit, where he worked from 2008 to 2019. At GSO he managed a team of 20 across Dublin and New York and was responsible for leading the firm's Quantitative Portfolio Analytics, Portfolio Compliance and Risk Management efforts. Prior to GSO, he spent 10 years in technology designing, developing, and implementing financial systems for the corporate and public sectors. From 1994 to 1997 he was a calculus teacher at Delbarton School in New Jersey. Mr. Smith received a BS in Mathematics and Economics from Williams College and a Masters in Financial Engineering from Columbia University in 2008. He is a CFA charterholder.

BEN SCHRYBER
Partner, Head of Business Development

Ben Schryber joined Kennedy Lewis in 2018 and is a Partner and the Head of Business Development with responsibility for the Firm's investor relations activities. Mr. Schryber was formerly a Managing Director at the Carlyle Group where he led its credit sales activities globally. Prior to Carlyle, Mr. Schryber was the Global Head of Credit at First Avenue Partners, a leading credit placement agent, where he oversaw for the origination, distribution, and ongoing management of credit funds. Prior to First Avenue, Mr. Schryber worked for Albourne Partners where he led the Firm's due diligence on private credit funds. Prior to that, he worked for Blue Ridge Partners as a management consultant focused on company-level due diligence on behalf of private equity funds. Mr. Schryber earned a B.A. with Highest Honors from the University of Florida and was a Visiting Scholar at the University of Cambridge.

BEN BERNSTEIN
Managing Director

Ben Bernstein joined Kennedy Lewis in 2019 and is a Managing Director focused on the Firm's business development and investor relations activities. Mr. Bernstein was formerly a Principal at Actis, the leading emerging markets alternative investment manager, where he focused on the firm's private equity, real estate and infrastructure fundraising and investor relations activities. Prior to Actis, Mr. Bernstein was an Analyst at Fortress Investment Group where he worked on capital formation and investor relations for the firm's private equity business. He started his career at Albourne Partners where he was an Associate primarily responsible for conducting due diligence on private equity funds. Mr. Bernstein received a BA in Political Science from Trinity College where he graduated with Honors in General Scholarship, Honors in Political Science and Faculty Honors.

SYLVIA OWENS
Managing Director

Sylvia Owens joined Kennedy Lewis in 2021 and is a Managing Director focused on the Firm's business development and investor relations activities. Ms. Owens was formerly a Managing Director and Global Private Credit and Real Assets Strategist with Aksia, a specialty investment consultant. In her role at Aksia, she was responsible for overseeing the implementation of private credit and real assets portfolios across a global base of LPs, and advised investors with respect to portfolio construction, investment selection, pacing, risk and tactical plans. Ms. Owens has partnered with prominent industry organizations to increase awareness of private credit as an asset class, including spearheading the development of Institutional Limited Partners Association's (ILPA) Private Credit Specialist Series, where she was one of the lead instructors for the course. Prior to joining Aksia, Ms. Owens spent nearly a decade in the private markets space, working with both investors and GPs across private equity, real assets, and private credit selection and positioning. She began her career at Goldman Sachs in Chicago, where she oversaw the Midwest Convertibles business and then moved to New York to co-lead the institutional synthetics convertibles business. Ms. Owens graduated from the University of Southern California with a BA in Economics and East Asian Studies and holds an MBA in Finance from the University of Chicago Graduate School of Business.

Auditor / Tax Advisor	Deloitte & Touche
Counsel	Seward & Kissel LLP (U.S.), Maples (Cayman)
Custodian	US Bank
Prime Broker	Goldman Sachs
Administrator	HedgeServ
ESG Advisor	Ramboll US Consulting Inc
OMS / PMS System	PortfolioBi
Internal Accounting System	FIS VPM
Compliance Consultant	AVIV Compliance
Cyber Security Consultant	Drawbridge

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Unless otherwise noted, all internal rates of return ("IRRs") are presented on a "gross" basis (i.e., they do not reflect any management fees, carried interest, taxes, transaction costs and other expenses to be borne by certain and/or all investors, which will reduce returns and, in the aggregate, are expected to be substantial). In considering the targeted performance information contained herein, prospective investors should bear in mind that forecasted or targeted performance is not necessarily indicative of future results, and there can be no assurance that comparable results will be achieved.

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Kennedy Lewis
Investment Management

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MONTHLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

DECEMBER 31, 2022

Allan Martin, Partner
Dan Hennessy, CFA, CAIA, Senior Consultant
Leah Tongco, Consulting Analyst

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	**7,119,462,356**	**100.0**	**100.0**	**-2.0**	**6.0**	**1.1**	**-11.2**	**6.3**	**6.6**	**8.0**	**7.9**	**Apr-94**
Policy Index				-3.1	6.8	2.3	-12.5	5.0	6.1	7.9	7.9	
Over/Under				1.1	-0.8	-1.2	1.3	1.3	0.5	0.1	0.0	
60% MSCI ACWI (Net)/ 40% Bloomberg Global Agg				-2.1	7.7	0.4	-17.3	0.8	2.7	4.7	-	
Over/Under				0.1	-1.7	0.7	6.1	5.5	3.9	3.3	-	
60% S&P 500 / 40% Bloomberg Aggregate				-3.6	5.4	0.4	-15.8	3.8	6.0	8.1	8.0	
Over/Under				1.6	0.6	0.7	4.6	2.5	0.6	-0.1	-0.1	
Total Fund ex Parametric	**7,043,504,068**	**98.9**	**100.0**	**-1.9**	**5.6**	**0.9**	**-11.4**	**6.4**	**6.6**	**-**	**7.2**	**Nov-13**
Total Fund ex Private Equity	**5,813,172,238**	**81.7**	**82.0**	**-2.8**	**7.2**	**2.2**	**-13.4**	**3.8**	**5.0**	**6.9**	**7.5**	**Jan-12**
Policy Index				-3.1	6.8	2.3	-12.5	5.0	6.1	7.9	8.4	
Over/Under				0.3	0.4	-0.1	-0.9	-1.2	-1.1	-1.0	-0.9	
Total US Equity	**1,832,388,113**	**25.7**	**26.0**	**-5.8**	**7.3**	**2.4**	**-19.4**	**7.1**	**9.0**	**12.3**	**9.3**	**Jan-94**
Russell 3000				-5.9	7.2	2.4	-19.2	7.1	8.8	11.9	9.5	
Over/Under				0.1	0.1	0.0	-0.2	0.0	0.2	0.4	-0.2	
Western U.S. Index Plus	205,623,769	2.9		-6.0	7.8	2.4	-20.9	6.2	8.7	12.5	6.8	Jun-07
S&P 500 Index				-5.8	7.6	2.3	-18.1	7.7	9.4	12.6	8.2	
Over/Under				-0.2	0.2	0.1	-2.8	-1.5	-0.7	-0.1	-1.4	
Blackrock Russell 1000 Index	1,544,892,742	21.7		-5.8	7.2	2.3	-19.2	7.4	9.2	-	10.5	May-17
Russell 1000 Index				-5.8	7.2	2.3	-19.1	7.3	9.1	-	10.5	
Over/Under				0.0	0.0	0.0	-0.1	0.1	0.1	-	0.0	
Blackrock Russell 2500 Index	81,871,602	1.1		-5.9	7.4	4.4	-18.3	5.0	5.9	-	7.3	May-17
Russell 2500 Index				-5.9	7.4	4.4	-18.4	5.0	5.9	-	7.2	
Over/Under				0.0	0.0	0.0	0.1	0.0	0.0	-	0.1	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	**997,442,527**	**14.0**	**15.0**	**-0.5**	**14.6**	**4.0**	**-17.0**	**-0.4**	**0.8**	**4.1**	**5.7**	**Mar-94**
MSCI ACWI ex USA				-0.7	14.3	3.0	-16.0	0.1	0.9	3.8	4.7	
Over/Under				0.2	0.3	1.0	-1.0	-0.5	-0.1	0.3	1.0	
MSCI AC World x USA in LC (Net)				-2.9	7.8	2.6	-9.6	2.7	3.2	6.7	-	
Over/Under				2.4	6.8	1.4	-7.4	-3.1	-2.4	-2.6	-	
BlackRock ACWI ex-U.S. Index	517,826,400	7.3		-0.6	14.2	3.1	-16.4	0.4	1.0	4.2	2.6	Apr-07
MSCI AC World ex USA IMI (Net)				-0.6	14.1	3.1	-16.6	0.2	0.8	4.0	2.4	
Over/Under				0.0	0.1	0.0	0.2	0.2	0.2	0.2	0.2	
Sprucegrove	238,234,533	3.3		-0.4	16.0	6.0	-12.0	-0.7	-0.2	3.8	6.1	Apr-02
MSCI EAFE (Net)				0.1	17.3	6.4	-14.5	0.9	1.5	4.7	5.3	
Over/Under				-0.5	-1.3	-0.4	2.5	-1.6	-1.7	-0.9	0.8	
MSCI EAFE Value Index (Net)				1.3	19.6	7.4	-5.6	0.6	0.2	3.5	4.8	
Over/Under				-1.7	-3.6	-1.4	-6.4	-1.3	-0.4	0.3	1.3	
Walter Scott	241,381,594	3.4		-0.5	14.0	3.8	-22.6	1.2	4.2	5.8	5.6	Jan-11
MSCI EAFE (Net)				0.1	17.3	6.4	-14.5	0.9	1.5	4.7	4.1	
Over/Under				-0.6	-3.3	-2.6	-8.1	0.3	2.7	1.1	1.5	
Total Global Equity	**687,396,248**	**9.7**	**9.0**	**-3.9**	**9.8**	**2.4**	**-18.1**	**4.4**	**5.6**	**7.9**	**6.2**	**May-05**
MSCI AC World Index (Net)				-3.9	9.8	2.3	-18.4	4.0	5.2	8.0	6.7	
Over/Under				0.0	0.0	0.1	0.3	0.4	0.4	-0.1	-0.5	
BlackRock MSCI ACWI Equity Index	687,396,248	9.7		-3.9	9.8	2.4	-18.1	4.4	5.6	8.4	8.9	Aug-12
MSCI AC World Index (Net)				-3.9	9.8	2.3	-18.4	4.0	5.2	8.0	8.5	
Over/Under				0.0	0.0	0.1	0.3	0.4	0.4	0.4	0.4	
Total Private Equity	**1,306,290,117**	**18.3**	**18.0**	**1.9**	**0.8**	**-3.7**	**1.6**	**25.1**	**20.3**	**17.7**	**17.0**	**Jan-12**
Private Equity Benchmark				-5.7	7.7	3.4	-17.6	9.7	11.7	15.3	15.7	
Over/Under				7.6	-6.9	-7.1	19.2	15.4	8.6	2.4	1.3	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
US Fixed Income	**733,931,115**	**10.3**	**8.0**	**-0.3**	**2.9**	**-0.7**	**-10.7**	**-0.5**	**1.4**	**1.9**	**5.1**	**Mar-94**
Blmbg. U.S. Aggregate Index				-0.5	1.9	-3.0	-13.0	-2.7	0.0	1.1	4.4	
Over/Under				0.2	1.0	2.3	2.3	2.2	1.4	0.8	0.7	
BlackRock U.S. Debt Fund	153,571,855	2.2		-0.6	1.7	-3.1	-13.1	-2.7	0.0	1.1	4.2	Dec-95
Blmbg. U.S. Aggregate Index				-0.5	1.9	-3.0	-13.0	-2.7	0.0	1.1	4.2	
Over/Under				-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	
Western	183,995,462	2.6		-0.5	1.9	-3.2	-16.1	-2.9	0.1	1.7	5.0	Jan-97
Blmbg. U.S. Aggregate Index				-0.5	1.9	-3.0	-13.0	-2.7	0.0	1.1	4.2	
Over/Under				0.0	0.0	-0.2	-3.1	-0.2	0.1	0.6	0.8	
Reams	268,650,871	3.8		0.0	4.6	1.9	-5.0	2.1	2.7	2.1	4.7	Oct-01
Blmbg. U.S. Aggregate Index				-0.5	1.9	-3.0	-13.0	-2.7	0.0	1.1	3.4	
Over/Under				0.5	2.7	4.9	8.0	4.8	2.7	1.0	1.3	
Reams Custom Index				0.3	0.9	1.2	1.2	0.8	1.4	0.9	3.3	
Over/Under				-0.3	3.7	0.7	-6.2	1.3	1.3	1.2	1.4	
Loomis Strategic Alpha	45,612,861	0.6		0.3	2.1	1.5	-7.9	1.2	1.7	-	2.2	Aug-13
Blmbg. U.S. Aggregate Index				-0.5	1.9	-3.0	-13.0	-2.7	0.0	-	1.4	
Over/Under				0.8	0.2	4.5	5.1	3.9	1.7	-	0.8	
Loomis Sayles Multi Strategy	82,100,066	1.2		-0.1	2.6	-0.3	-11.5	0.4	1.9	3.1	5.2	Aug-05
5% Bmbg. U.S. Int Agg / 65% Blmbg. U.S. Agg / 30% FTSE HY				-0.5	2.5	-1.0	-12.2	-1.8	0.8	1.9	3.9	
Over/Under				0.4	0.1	0.7	0.7	2.2	1.1	1.2	1.3	
Treasuries	**74,271,778**	**1.0**	**2.0**	**-1.0**	**0.1**	**-5.8**	**-16.6**	**-3.6**	**-**	**-**	**-1.5**	**Apr-19**
Blmbg. U.S. Treasury: 7-10 Year				-1.1	1.0	-4.6	-14.9	-3.2	-	-	-1.2	
Over/Under				0.1	-0.9	-1.2	-1.7	-0.4	-	-	-0.3	
Reams 10-Year Treasuries	74,271,778	1.0		-1.0	0.1	-5.8	-16.6	-3.6	-	-	-1.5	Apr-19
Blmbg. U.S. Treasury: 7-10 Year				-1.1	1.0	-4.6	-14.9	-3.2	-	-	-1.2	
Over/Under				0.1	-0.9	-1.2	-1.7	-0.4	-	-	-0.3	
Private Debt	**366,683,029**	**5.2**	**8.0**	**0.2**	**0.8**	**0.5**	**3.4**	**8.7**	**7.8**	**-**	**7.8**	**Jan-18**
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				-0.2	3.3	3.6	-5.8	1.9	3.9	-	3.9	
Over/Under				0.4	-2.5	-3.1	9.2	6.8	3.9	-	3.9	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	**566,919,558**	**8.0**	**8.0**	**0.0**	**0.1**	**5.1**	**14.4**	**9.8**	**7.3**	**8.4**	**7.7**	**Apr-94**
NCREIF ODCE Net				-5.1	-5.1	-4.8	6.6	9.0	7.7	9.1	8.1	
Over/Under				5.1	5.2	9.9	7.8	0.8	-0.4	-0.7	-0.4	
Prudential Real Estate	229,970,113	3.2		0.0	0.0	0.1	12.3	11.5	9.7	10.4	7.1	Jul-04
NCREIF ODCE Net				-5.1	-5.1	-4.8	6.6	9.0	7.7	9.1	7.3	
Over/Under				5.1	5.1	4.9	5.7	2.5	2.0	1.3	-0.2	
UBS Real Estate	268,651,439	3.8		0.0	0.0	5.4	10.7	6.8	4.7	6.6	6.7	Apr-03
NCREIF ODCE Net				-5.1	-5.1	-4.8	6.6	9.0	7.7	9.1	7.4	
Over/Under				5.1	5.1	10.2	4.1	-2.2	-3.0	-2.5	-0.7	
LaSalle Income + Growth VIII Limited Partnership	46,409,528	0.7		0.0	1.7	2.1	23.6	-	-	-	13.9	Mar-20
NCREIF ODCE Net				-5.1	-5.1	-4.8	6.6	-	-	-	9.5	
Over/Under				5.1	6.8	6.9	17.0	-	-	-	4.4	
Alterra IOS Venture II	21,888,479	0.3		0.0	-1.3	-5.3	-	-	-	-	-5.3	May-22
NCREIF ODCE Net				-5.1	-5.1	-4.8	-	-	-	-	-0.5	
Over/Under				5.1	3.8	-0.5	-	-	-	-	-4.8	
Total Real Assets	**418,662,713**	**5.9**	**6.0**	**-3.0**	**5.8**	**1.8**	**-9.7**	**1.6**	**2.2**	**-**	**3.6**	**May-13**
Real Assets Index				-0.1	0.5	1.2	8.6	7.0	6.5	-	6.3	
Over/Under				-2.9	5.3	0.6	-18.3	-5.4	-4.3	-	-2.7	
Bridgewater All Weather Fund	202,599,547	2.8		-4.2	7.1	-4.2	-21.9	-1.5	1.2	-	3.3	Sep-13
CPI + 5% (Unadjusted)				0.1	1.2	2.6	11.8	10.2	9.0	-	7.7	
Over/Under				-4.3	5.9	-6.8	-33.7	-11.7	-7.8	-	-4.4	
Tortoise Energy Infrastructure	108,767,864	1.5		-5.0	9.7	16.7	30.4	9.2	4.0	-	2.7	May-13
Tortoise MLP Index				-4.2	9.1	18.6	26.4	8.9	4.3	-	0.7	
Over/Under				-0.8	0.6	-1.9	4.0	0.3	-0.3	-	2.0	
Brookfield Infra Fund IV B LP	42,480,889	0.6		-4.1	-4.1	-1.5	6.6	-	-	-	8.5	Apr-20
CPI + 2% (Unadjusted)				-0.1	0.5	1.2	8.6	-	-	-	7.3	
Over/Under				-4.0	-4.6	-2.7	-2.0	-	-	-	1.2	
Harbourvest Real Assets Fund IV L.P.	64,814,414	0.9		5.9	5.9	26.4	26.4	-	-	-	41.2	Apr-21
CPI + 2% (Unadjusted)				-0.1	0.5	1.2	8.6	-	-	-	8.9	
Over/Under				6.0	5.4	25.2	17.8	-	-	-	32.3	
Overlay	**135,477,158**	**1.9**	**0.0**									
Parametric	75,958,288	1.1										
Abbott Capital Cash	59,518,870	0.8										

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Private Equity	**1,306,290,117**	**18.3**	**18.0**	**1.9**	**0.8**	**-3.7**	**1.6**	**25.1**	**20.3**	**17.7**	**17.0**	**Jan-12**
Private Equity Benchmark				-5.7	7.7	3.4	-17.6	9.7	11.7	15.3	15.7	
Over/Under				7.6	-6.9	-7.1	19.2	15.4	8.6	2.4	1.3	
Adams Street Global Fund Series	256,254,065	3.6		-0.8	-0.8	-7.6	-7.0	25.7	19.9	16.4	15.9	Jan-12
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	11.0	14.4	14.8	
Over/Under				4.9	-8.5	-11.0	10.6	16.5	8.9	2.0	1.1	
Harbourvest	107,693,849	1.5		23.4	23.4	-3.6	-3.3	16.3	16.7	-	17.9	Aug-13
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	11.0	-	12.9	
Over/Under				29.1	15.7	-7.0	14.3	7.1	5.7	-	5.0	
Pantheon Global Secondary Funds	87,799,736	1.2		3.7	3.7	8.7	3.2	15.5	12.4	13.9	12.7	Jan-12
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	11.0	14.4	14.8	
Over/Under				9.4	-4.0	5.3	20.8	6.3	1.4	-0.5	-2.1	
Drive Capital Fund II	29,760,745	0.4		0.0	0.5	1.8	-9.0	19.8	20.8	-	3.0	Sep-16
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	11.0	-	13.1	
Over/Under				5.7	-7.2	-1.6	8.6	10.6	9.8	-	-10.1	
Abbott Secondary Opportunities	10,609,192	0.1		0.0	0.0	-5.4	-10.6	26.2	22.5	-	22.5	Jan-18
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	11.0	-	11.0	
Over/Under				5.7	-7.7	-8.8	7.0	17.0	11.5	-	11.5	
Clearlake Capital Partners V	12,541,051	0.2		-2.1	-6.2	-12.0	-35.5	17.1	-	-	26.6	Mar-18
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.0	
Over/Under				3.6	-13.9	-15.4	-17.9	7.9	-	-	15.6	
Battery Ventures XII	29,556,064	0.4		-0.7	-9.6	-12.4	4.4	45.8	-	-	26.1	Apr-18
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.6	
Over/Under				5.0	-17.3	-15.8	22.0	36.6	-	-	14.5	
Insight Venture Partners X	51,437,953	0.7		1.0	-20.0	-20.0	-10.2	30.6	-	-	22.2	May-18
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.7	
Over/Under				6.7	-27.7	-23.4	7.4	21.4	-	-	10.5	
GTCR Fund XII	32,264,261	0.5		0.0	-0.3	-3.6	6.0	34.4	-	-	2.9	Jun-18
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.2	
Over/Under				5.7	-8.0	-7.0	23.6	25.2	-	-	-8.3	
Buenaventure One, LLC	193,909,152	2.7		0.0	1.2	-1.2	11.1	24.3	-	-	17.1	Jul-18
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.2	
Over/Under				5.7	-6.5	-4.6	28.7	15.1	-	-	5.9	
ECI 11	7,412,380	0.1		1.0	-6.0	-8.4	5.7	19.7	-	-	23.1	Jan-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	14.9	
Over/Under				6.7	-13.7	-11.8	23.3	10.5	-	-	8.2	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Buenaventure Two, LLC	1,958,680	0.0		0.0	2.8	0.1	12.9	21.0	-	-	35.6	Dec-18
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.9	
Over/Under				5.7	-4.9	-3.3	30.5	11.8	-	-	23.7	
The Resolute Fund IV L.P	30,317,298	0.4		4.1	11.6	11.6	24.7	33.7	-	-	44.3	Jan-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	14.9	
Over/Under				9.8	3.9	8.2	42.3	24.5	-	-	29.4	
GGV Capital VII L.P.	13,847,882	0.2		0.0	-1.6	-5.3	5.9	17.7	-	-	6.0	Feb-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	12.8	
Over/Under				5.7	-9.3	-8.7	23.5	8.5	-	-	-6.8	
GGV Discovery II, L.P.	3,921,640	0.1		0.0	-1.0	-1.2	36.1	31.2	-	-	22.3	Feb-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	12.8	
Over/Under				5.7	-8.7	-4.6	53.7	22.0	-	-	9.5	
Drive Capital Overdrive Fund I	13,914,068	0.2		0.0	-0.5	-1.1	1.6	34.1	-	-	25.8	May-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	10.8	
Over/Under				5.7	-8.2	-4.5	19.2	24.9	-	-	15.0	
Riverside Micro Cap Fund V, LP	11,731,408	0.2		7.1	4.6	4.6	34.1	21.6	-	-	7.1	May-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	10.8	
Over/Under				12.8	-3.1	1.2	51.7	12.4	-	-	-3.7	
GGV Capital VII Plus, LP	3,080,682	0.0		0.0	-0.2	-7.3	0.9	10.0	-	-	8.4	Jun-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	13.1	
Over/Under				5.7	-7.9	-10.7	18.5	0.8	-	-	-4.7	
Astorg VII L.P.	10,587,347	0.1		3.7	-10.3	-16.4	-2.4	22.0	-	-	-0.4	Jul-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.2	
Over/Under				9.4	-18.0	-19.8	15.2	12.8	-	-	-11.6	
M/C Partners Fund VIII LP. Limited Partnership	7,941,748	0.1		-2.4	1.7	1.7	28.8	-2.8	-	-	-7.9	Jul-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.2	
Over/Under				3.3	-6.0	-1.7	46.4	-12.0	-	-	-19.1	
Genstar Capital Partners IX	9,694,200	0.1		-0.1	6.0	20.6	31.8	34.9	-	-	-192.1	Aug-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.0	
Over/Under				5.6	-1.7	17.2	49.4	25.7	-	-	-203.1	
Genstar IX Opportunities Fund I	2,925,589	0.0		-0.1	5.5	22.2	32.4	26.3	-	-	22.7	Aug-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.0	
Over/Under				5.6	-2.2	18.8	50.0	17.1	-	-	11.7	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
ABRY Partners IX, LP	11,904,070	0.2		12.8	12.8	12.9	25.2	11.7	-	-	5.1	Sep-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.9	
Over/Under				18.5	5.1	9.5	42.8	2.5	-	-	-6.8	
Advent International GPE IX LP	12,634,210	0.2		0.0	-9.3	-17.4	-30.4	36.9	-	-	32.0	Nov-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	11.1	
Over/Under				5.7	-17.0	-20.8	-12.8	27.7	-	-	20.9	
Drive Capital Fund III LP	7,934,235	0.1		0.0	-2.0	10.2	16.0	8.5	-	-	8.3	Dec-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	10.0	
Over/Under				5.7	-9.7	6.8	33.6	-0.7	-	-	-1.7	
Oak HC/FT Partners III LP	23,440,571	0.3		0.0	-2.9	-29.6	-6.6	23.1	-	-	22.4	Dec-19
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	10.0	
Over/Under				5.7	-10.6	-33.0	11.0	13.9	-	-	12.4	
TA XIII A LP	12,371,026	0.2		0.0	0.5	3.0	12.8	26.0	-	-	26.0	Jan-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	9.2	-	-	9.2	
Over/Under				5.7	-7.2	-0.4	30.4	16.8	-	-	16.8	
Dover Street X, LP	29,797,484	0.4		-1.5	-1.5	3.6	14.7	-	-	-	37.6	Feb-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	9.5	
Over/Under				4.2	-9.2	0.2	32.3	-	-	-	28.1	
Hellman & Friedman CP IX	22,737,190	0.3		0.0	-3.1	-8.2	0.2	-	-	-	6.5	Apr-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	19.7	
Over/Under				5.7	-10.8	-11.6	17.8	-	-	-	-13.2	
Clearlake Capital Partners VI	26,297,210	0.4		-2.7	-2.7	-4.8	2.9	-	-	-	28.8	Jun-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	12.9	
Over/Under				3.0	-10.4	-8.2	20.5	-	-	-	15.9	
Flexpoint Fund IV	7,987,624	0.1		0.0	-1.0	17.5	37.3	-	-	-	31.7	Jun-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	12.9	
Over/Under				5.7	-8.7	14.1	54.9	-	-	-	18.8	
Battery Ventures XIII	16,798,338	0.2		0.0	-2.1	-2.7	19.4	-	-	-	18.1	Jun-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	12.9	
Over/Under				5.7	-9.8	-6.1	37.0	-	-	-	5.2	
Green Equity Investors VIII, L.P.	13,769,676	0.2		0.0	0.0	-0.2	3.0	-	-	-	2.4	Nov-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	10.5	
Over/Under				5.7	-7.7	-3.6	20.6	-	-	-	-8.1	
CapVest Private Equity Partners IV, SCSp	9,855,075	0.1		0.5	16.4	9.0	29.8	-	-	-	48.3	Dec-20
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	4.9	
Over/Under				6.2	8.7	5.6	47.4	-	-	-	43.4	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Drive Capital Fund IV LP	3,628,598	0.1		0.0	-1.5	-2.9	-5.4	-	-	-	-5.4	Jan-22
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-17.6	
Over/Under				5.7	-9.2	-6.3	12.2	-	-	-	12.2	
Great Hill Equity Partners VII	7,069,170	0.1		0.0	1.4	-2.8	-11.3	-	-	-	103.9	Jan-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	2.8	
Over/Under				5.7	-6.3	-6.2	6.3	-	-	-	101.1	
Great Hill Equity Partners VIII	1,288,109	0.0		0.0	-	-	-	-	-	-	0.0	Dec-22
Russell 3000 + 2%				-5.7	-	-	-	-	-	-	-5.7	
Over/Under				5.7	-	-	-	-	-	-	5.7	
Vitruvian Investment Partners IV	13,941,574	0.2		3.7	14.7	8.6	34.0	-	-	-	-100.0	Jan-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	2.8	
Over/Under				9.4	7.0	5.2	51.6	-	-	-	-102.8	
CRV XVIII, L.P.	15,278,875	0.2		0.0	-1.8	-0.9	13.1	-	-	-	7.6	Mar-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	1.4	
Over/Under				5.7	-9.5	-4.3	30.7	-	-	-	6.2	
GGV Capital VIII, L.P.	5,685,365	0.1		0.0	3.5	1.3	8.8	-	-	-	13.1	May-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-3.7	
Over/Under				5.7	-4.2	-2.1	26.4	-	-	-	16.8	
GGV Discovery III, L.P.	2,506,721	0.0		0.0	12.0	14.7	29.0	-	-	-	32.9	May-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-3.7	
Over/Under				5.7	4.3	11.3	46.6	-	-	-	36.6	
Oak HC/FT Partners IV, L.P.	8,587,276	0.1		0.0	-0.4	5.6	22.9	-	-	-	9.9	May-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-3.7	
Over/Under				5.7	-8.1	2.2	40.5	-	-	-	13.6	
Prairie Capital VII, LP	4,032,289	0.1		0.0	-2.6	-0.5	13.6	-	-	-	2.9	Jun-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-4.3	
Over/Under				5.7	-10.3	-3.9	31.2	-	-	-	7.2	
GGV Capital VIII Plus, L.P.	1,111,244	0.0		0.0	2.0	1.6	5.8	-	-	-	3.9	Jul-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-6.2	
Over/Under				5.7	-5.7	-1.8	23.4	-	-	-	10.1	
Flexpoint Overage Fund IV A, L.P.	2,530,080	0.0		0.0	-3.4	-0.3	11.6	-	-	-	7.4	Jul-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-6.2	
Over/Under				5.7	-11.1	-3.7	29.2	-	-	-	13.6	
Abbott Secondary Opportunities II, L.P.	15,965,750	0.2		0.0	2.3	31.0	29.5	-	-	-	81.3	Jul-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-6.2	
Over/Under				5.7	-5.4	27.6	47.1	-	-	-	87.5	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Genstar X Opportunities Fund I, LP	3,024,953	0.0		0.0	1.6	-0.7	10.0	-	-	-	7.1	Sep-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-10.2	
Over/Under				5.7	-6.1	-4.1	27.6	-	-	-	17.3	
Charlesbank Overage Fund X	4,647,139	0.1		0.0	2.7	5.2	10.9	-	-	-	9.5	Sep-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-10.2	
Over/Under				5.7	-5.0	1.8	28.5	-	-	-	19.7	
Charlesbank Equity Fund X	10,472,111	0.1		0.0	4.7	3.4	7.3	-	-	-	4.8	Sep-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-10.2	
Over/Under				5.7	-3.0	0.0	24.9	-	-	-	15.0	
GTCR Fund XIII	15,196,449	0.2		0.0	-1.5	0.6	27.8	-	-	-	49.4	Sep-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-10.2	
Over/Under				5.7	-9.2	-2.8	45.4	-	-	-	59.6	
Hellman & Friedman CP X	9,811,763	0.1		0.0	-2.9	-8.6	-10.0	-	-	-	-8.6	Nov-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-13.3	
Over/Under				5.7	-10.6	-12.0	7.6	-	-	-	4.7	
Genstar Capital Partners X LP	7,742,612	0.1		0.0	2.1	0.0	12.6	-	-	-	12.8	Dec-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-13.2	
Over/Under				5.7	-5.6	-3.4	30.2	-	-	-	26.0	
TA XIV A LP	5,357,866	0.1		0.0	-4.8	-11.6	-11.6	-	-	-	-10.8	Dec-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-13.2	
Over/Under				5.7	-12.5	-15.0	6.0	-	-	-	2.4	
CVC Capital Partners VIII A LP	12,522,325	0.2		8.7	14.2	18.0	16.5	-	-	-	29.7	Dec-21
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-13.2	
Over/Under				14.4	6.5	14.6	34.1	-	-	-	42.9	
Drive Capital Overdrive	3,989,911	0.1		0.0	-2.0	-3.7	-6.3	-	-	-	-6.3	Jan-22
Russell 3000 + 2%				-5.7	7.7	3.4	-17.6	-	-	-	-17.6	
Over/Under				5.7	-9.7	-7.1	11.3	-	-	-	11.3	
Kinderhook Capital Fund 7	2,679,129	0.0		0.0	-6.3	-7.7	-	-	-	-	-21.9	Mar-22
Russell 3000 + 2%				-5.7	7.7	3.4	-	-	-	-	-10.5	
Over/Under				5.7	-14.0	-11.1	-	-	-	-	-11.4	
Pantheon Global Secondary Funds VII	4,940,091	0.1		0.0	0.0	14.1	-	-	-	-	14.1	Apr-22
Russell 3000 + 2%				-5.7	7.7	3.4	-	-	-	-	-13.4	
Over/Under				5.7	-7.7	10.7	-	-	-	-	27.5	
Harbourvest PTN Co Inv VI LP	8,096,603	0.1		-5.9	-9.9	-8.5	-	-	-	-	-8.5	May-22
Russell 3000 + 2%				-5.7	7.7	3.4	-	-	-	-	-5.1	
Over/Under				-0.2	-17.6	-11.9	-	-	-	-	-3.4	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Clearlake Capital Partners VII	8,090,058	0.1		0.0	-1.7	-1.7	-	-	-	-	-1.7	Jun-22
Russell 3000 + 2%				-5.7	7.7	3.4	-	-	-	-	-5.1	
Over/Under				5.7	-9.4	-5.1	-	-	-	-	3.4	
Battery Ventures XIV	685,318	0.0		0.0	-8.2	-	-	-	-	-	-	Jul-22
Russell 3000 + 2%				-5.7	7.7	3.4	-	-	-	-	3.4	
Over/Under				5.7	-15.9	-	-	-	-	-	-	
Oak HC/FT Partners V	627,467	0.0		0.0	71.7	-	-	-	-	-	-	Jul-22
Russell 3000 + 2%				-5.7	7.7	3.4	-	-	-	-	3.4	
Over/Under				5.7	64.0	-	-	-	-	-	-	
Advent International GPE X LP	580,992	0.0		0.0	-17.0	-	-	-	-	-	-17.0	Sep-22
Russell 3000 + 2%				-5.7	7.7	-	-	-	-	-	6.1	
Over/Under				5.7	-24.7	-	-	-	-	-	-23.1	
GTCR Strategic Growth 1/A	68,000	0.0		0.0	0.0	-	-	-	-	-	0.0	Sep-22
Russell 3000 + 2%				-5.7	7.7	-	-	-	-	-	7.1	
Over/Under				5.7	-7.7	-	-	-	-	-	-7.1	
GTCR Strategic Growth 1/B	250,670	0.0		0.0	2.3	-	-	-	-	-	2.3	Sep-22
Russell 3000 + 2%				-5.7	7.7	-	-	-	-	-	7.1	
Over/Under				5.7	-5.4	-	-	-	-	-	-4.8	
Riverside Micro Cap Fund VI, LP	1,195,911	0.0		-10.0	-10.0	-	-	-	-	-	-10.0	Sep-22
Russell 3000 + 2%				-5.7	7.7	-	-	-	-	-	7.4	
Over/Under				-4.3	-17.7	-	-	-	-	-	-17.4	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Credit	**366,683,029**	**5.2**	**8.0**	**0.2**	**0.8**	**0.5**	**3.4**	**8.7**	**7.8**	**-**	**7.8**	**Jan-18**
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				-0.2	3.3	3.6	-5.8	1.9	3.9	-	3.9	
Over/Under				0.4	-2.5	-3.1	9.2	6.8	3.9	-	3.9	
CVI Credit Value Fund IV	27,458,338	0.4		1.6	2.0	6.6	7.7	8.0	7.1	-	7.1	Jan-18
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	2.6	4.3	-	4.3	
Over/Under				1.7	-1.7	2.2	12.1	5.4	2.8	-	2.8	
Monroe Capital Private Credit Fund III	21,522,017	0.3		0.0	2.1	3.0	9.2	11.4	-	-	11.1	Dec-18
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	2.6	-	-	4.6	
Over/Under				0.1	-1.6	-1.4	13.6	8.8	-	-	6.5	
Bluebay Direct Lending Fund III	16,978,894	0.2		1.6	1.6	3.4	8.4	10.0	-	-	10.2	Apr-19
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	2.6	-	-	3.9	
Over/Under				1.7	-2.1	-1.0	12.8	7.4	-	-	6.3	
Pimco Private Income Fund	71,099,567	1.0		0.0	-0.9	0.3	1.6	9.4	-	-	8.9	Nov-19
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	2.6	-	-	3.3	
Over/Under				0.1	-4.6	-4.1	6.0	6.8	-	-	5.6	
Bridge Debt Strategies III Limited Partner	16,530,145	0.2		1.5	1.5	1.5	3.3	6.9	-	-	6.9	Jan-20
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	2.6	-	-	2.6	
Over/Under				1.6	-2.2	-2.9	7.7	4.3	-	-	4.3	
PIMCO Corp Opps Fund III	50,042,692	0.7		0.0	2.1	-4.2	1.9	-	-	-	35.5	May-20
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	-	-	-	6.4	
Over/Under				0.1	-1.6	-8.6	6.3	-	-	-	29.1	
Torchlight Debt Fund VII, L.P.	13,149,725	0.2		1.1	1.1	4.3	6.0	-	-	-	3.6	Jan-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	-	-	-	0.9	
Over/Under				1.2	-2.6	-0.1	10.4	-	-	-	2.7	
Crayhill Principal Strategies Fund II	12,230,042	0.2		0.0	0.5	4.1	30.1	-	-	-	20.9	May-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	-	-	-	-0.3	
Over/Under				0.1	-3.2	-0.3	34.5	-	-	-	21.2	
CVI Credit Value Fund A V	19,905,306	0.3		0.1	-1.0	0.3	-1.0	-	-	-	4.3	Jun-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				-0.1	3.7	4.4	-4.4	-	-	-	-0.7	
Over/Under				0.2	-4.7	-4.1	3.4	-	-	-	5.0	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Bridge Debt Strategies Fund IV LP	19,617,349	0.3		1.3	1.3	0.8	6.2	-	-	-	4.9	Aug-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	*3.7*	*4.4*	*-4.4*	-	-	-	*-1.7*	
Over/Under				1.4	-2.4	-3.6	10.6	-	-	-	6.6	
Cross Ocean USD ESS Fund IV	15,358,332	0.2		0.0	1.0	-0.3	6.3	-	-	-	4.7	Sep-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	*3.7*	*4.4*	*-4.4*	-	-	-	*-2.2*	
Over/Under				0.1	-2.7	-4.7	10.7	-	-	-	6.9	
Harbourvest Direct Lending L	18,144,633	0.3		-2.6	1.3	1.3	1.3	-	-	-	0.9	Sep-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	*3.7*	*4.4*	*-4.4*	-	-	-	*-2.2*	
Over/Under				-2.5	-2.4	-3.1	5.7	-	-	-	3.1	
Bain Capital Special Situations Asia Fund II	2,769,804	0.0		0.2	0.2	2.1	9.5	-	-	-	8.1	Nov-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	*3.7*	*4.4*	*-4.4*	-	-	-	*-3.0*	
Over/Under				0.3	-3.5	-2.3	13.9	-	-	-	11.1	
Arbour Lane Credit Opp III A	11,482,304	0.2		0.0	-1.2	-9.7	-10.6	-	-	-	-9.9	Dec-21
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	*3.7*	*4.4*	*-4.4*	-	-	-	*-2.9*	
Over/Under				0.1	-4.9	-14.1	-6.2	-	-	-	-7.0	
Monroe Private Capital Fund IV	25,153,684	0.4		0.0	2.0	1.9	6.1	-	-	-	6.1	Jan-22
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	*3.7*	*4.4*	*-4.4*	-	-	-	*-4.4*	
Over/Under				0.1	-1.7	-2.5	10.5	-	-	-	10.5	
Crescent Cove Opportunity Fund LP	12,323,946	0.2		-0.4	-0.4	-1.1	-	-	-	-	-1.1	Jun-22
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	*3.7*	*4.4*	-	-	-	-	*-0.1*	
Over/Under				-0.3	-4.1	-5.5	-	-	-	-	-1.0	
VWH Partners III LP	12,916,252	0.2		0.0	-	-	-	-	-	-	0.0	Dec-22
50% BofA ML US HY BB-B Constrained/ 50% CS Leveraged Loan +150bps				*-0.1*	-	-	-	-	-	-	*-0.1*	
Over/Under				0.1	-	-	-	-	-	-	0.1	

Policy Index as of July 2021: 26% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 16% Russell 3000 +2%, 12% Bloomberg US Aggregate, 6% 50% CS Leveraged Loan/50% ICE BofA US HY
BB-B Rated Constrained Index, 8% NCREIF ODCE, 6% CPI+2%.
Prior to January 2016 the Total U.S. Equity Benchmark was a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013,
the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.
Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Bloomberg Aggregate.
Loomis Custom Index: 65% Bloomberg US Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index.
Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.
Total Real Assets Benchmark CPI + 4% from inception until 6/30/2019; CPI +2% from 6/30/2019 to present.
Real Estate managers and NCREIF ODCE are valued on a quarterly basis. Performance is not applicable in mid-quarter months, therefore 0% return is shown.
Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows.
Fiscal year ends 6/30.

PRIVATE EQUITY LP PERFORMANCE

												Since Inception		
Fund Name	Vintage Year	Initial Closing Date	Commitment	Capital Called to Date[1]	Outstanding Commitment[1]	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	$25,000,000	$24,984,164	$378,552	98%	$29,843,875	$10,834,528	$40,678,403	$15,694,239	25.3%	1.19x	1.63x
Abbott Secondary Opportunities II, LP.	2020	1/31/2020	$40,000,000	$15,606,722	$24,393,278	--	$4,200,000	$15,881,796	$20,081,796	$4,475,074	62.8%	0.27x	1.29x
ABRY Partners IX	2019	12/6/2018	$10,600,000	$9,925,619	$2,282,491	94%	$1,608,110	$11,832,833	$13,440,943	$3,515,324	16.6%	0.16x	1.35x
Adams Street 2010 U.S. Fund	2010	5/21/2010	$42,500,000	$37,442,500	$5,057,500	88%	$67,869,468	$29,004,020	$96,873,488	$59,415,775	17.2%	1.81x	2.59x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	$25,500,000	$22,962,749	$2,537,251	90%	$33,107,393	$10,945,204	$44,052,597	$21,088,259	13.1%	1.44x	1.92x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	$8,500,000	$7,633,000	$867,000	90%	$7,605,239	$8,045,840	$15,651,079	$8,018,079	10.9%	1x	2.05x
Adams Street 2010 Direct Fund	2010	5/21/2010	$8,500,000	$8,168,500	$331,500	96%	$11,837,557	$3,705,077	$15,542,634	$7,367,437	12.1%	1.45x	1.9x
Adams Street 2013 Global Fund	2013	6/27/2013	$75,000,000	$69,319,741	$5,680,259	92%	$63,903,906	$85,653,267	$149,557,173	$80,226,704	15.1%	0.92x	2.16x
Adams Street 2016 Global Fund	2016	8/16/2016	$60,000,000	$49,384,776	$10,615,224	82%	$21,068,412	$73,061,096	$94,129,508	$44,744,732	21.3%	0.43x	1.91x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	$30,000,000	$28,267,931	$5,062,521	94%	$9,740,499	$34,196,907	$43,937,406	$15,601,667	22.5%	0.34x	1.55x
Adams Street Co-Investment Fund V	2022	9/30/2021	$35,000,000	$1,750,000	$33,250,000	5%	--	$1,711,841	$1,711,841	($38,159)	-3.8%	--	0.98x
Advent International GPE IX	2019	5/23/2019	$10,000,000	$8,700,722	$1,299,278	87%	$799,600	$12,634,207	$13,433,807	$4,733,085	29.3%	0.09x	1.54x
Advent International GPE X	2022	4/28/2022	$20,000,000	$700,000	$19,300,000	4%	--	$580,992	$580,992	($119,008)	-50.8%	--	0.83x
Astorg VII	2019	12/17/2018	$8,715,479	$7,770,216	$945,263	89%	--	$9,311,945	$9,311,945	$1,541,729	11.6%	--	1.2x
Astorg VIII	2022	2/1/2022	$18,138,577	$2,987,691	$15,150,886	16%	--	$2,801,322	$2,801,322	($186,369)	-19.6%	--	0.94x
Battery Ventures XII	2018	2/1/2018	$9,050,000	$8,161,290	$888,710	90%	$4,839,132	$19,560,158	$24,399,290	$16,238,000	37.9%	0.59x	2.99x
Battery Ventures XII Side Fund	2018	2/1/2018	$5,050,000	$4,772,755	$277,245	95%	$5,433,191	$9,995,905	$15,429,096	$10,656,341	41.8%	1.14x	3.23x
Battery Ventures XIII	2020	2/11/2020	$9,240,000	$7,331,940	$1,908,060	79%	--	$9,785,554	$9,785,554	$2,453,614	19.5%	--	1.33x
Battery Ventures XIII Side Fund	2020	2/11/2020	$6,160,000	$4,918,144	$1,241,856	80%	--	$7,012,784	$7,012,784	$2,094,640	23.5%	--	1.43x
Battery Ventures XIV	2022	2/24/2022	$10,000,000	$800,000	$9,200,000	8%	--	$685,318	$685,318	($114,682)	-40.1%	--	0.86x
Buenaventure One, LLC	2018	1/5/2018	$289,599,750	$140,620,590	$148,979,160	49%	$17,233,156	$193,909,186	$211,142,342	$70,521,752	22.1%	0.12x	1.5x
CapVest Equity Partners IV	2019	7/11/2018	$12,398,348	$7,966,915	$4,431,433	64%	--	$9,857,297	$9,857,297	$1,890,382	16.1%	--	1.24x
CapVest Equity Partners V	2021	11/23/2021	$18,467,577	--	$18,467,577	--	--	($234,113)	($234,113)	--	-100.00%	--	--
Charlesbank Equity Fund X	2020	11/20/2020	$24,000,000	$10,074,622	$13,925,378	42%	$73,953	$10,343,538	$10,417,491	$342,869	4.4%	0.01x	1.03x
Charlesbank Equity Overage Fund X	2020	11/20/2020	$6,000,000	$4,337,517	$1,662,483	72%	$31,636	$4,647,078	$4,678,714	$341,197	11.8%	0.01x	1.08x
Clearlake Capital Partners V	2017	12/22/2017	$9,950,000	$14,059,510	$2,129,324	79%	$17,758,524	$12,535,892	$30,294,416	$16,188,748	44.5%	1.26x	2.15x
Clearlake Capital Partners VI	2020	1/2/2020	$18,700,000	$18,922,043	$522,109	101%	$1,566,382	$26,297,215	$27,863,597	$8,941,554	28.6%	0.08x	1.47x
Clearlake Capital Partners VII	2021	9/17/2021	$20,000,000	$8,205,789	$11,794,211	41%	$487	$8,090,062	$8,090,549	($115,240)	-2.7%	0x	0.99x
CRV XVIII	2020	7/2/2020	$15,000,000	$12,112,500	$2,887,500	81%	--	$14,136,943	$14,136,943	$2,024,443	12.4%	--	1.17x
CRV XIX	2022	1/27/2022	$10,000,000	$1,275,000	$8,725,000	13%	--	$1,141,928	$1,141,928	($133,072)	-22.5%	--	0.9x
CVC Capital Partners VIII	2020	5/22/2020	$19,775,665	$11,476,347	$8,299,318	58%	--	$11,856,241	$11,856,241	$379,894	6.6%	--	1.03x
Drive Capital Fund II	2016	8/19/2016	$15,000,000	$14,946,053	$57,157	100%	$3,410,764	$29,760,749	$33,171,513	$18,222,250	22.0%	--	2.22x
Drive Capital Fund III	2019	4/5/2019	$7,500,000	$6,190,327	$1,309,673	83%	--	$7,934,232	$7,934,232	$1,743,905	16.5%	--	1.28x
Drive Capital Fund IV	2021	12/27/2021	$10,000,000	$3,833,000	$6,167,000	38%	--	$3,628,599	$3,628,599	($204,401)	-7.1%	--	0.95x
Drive Capital Overdrive Fund I	2019	4/5/2019	$7,500,000	$7,316,687	$183,313	98%	$12,492	$13,914,070	$13,926,562	$6,609,875	29.0%	--	1.9x
Drive Capital Overdrive Fund II	2021	12/27/2021	$10,000,000	$4,169,953	$5,830,047	42%	--	$3,989,912	$3,989,912	($180,041)	-8.0%	--	0.96x
ECI 11	2018	7/5/2018	$9,710,273	$7,720,670	$1,989,603	80%	$3,884,612	$7,430,370	$11,314,982	$3,594,312	19.3%	0.5x	1.47x
ECI 12	2022	7/15/2022	$20,137,194	--	$20,137,194	--	--	--	--	--	--	--	--
Flexpoint Fund IV-A	2019	7/2/2019	$10,650,000	$6,105,377	$4,544,623	57%	$1,412,900	$7,987,625	$9,400,525	$3,295,148	31.7%	--	1.54x
Flexpoint Overage Fund IV-A	2019	7/2/2019	$3,550,000	$2,271,591	$1,278,409	64%	--	$2,530,081	$2,530,081	$258,490	9.4%	--	1.11x

PRIVATE EQUITY LP PERFORMANCE

Fund Name	Vintage Year	Initial Closing Date	Commitment	Capital Called to Date[1]	Outstanding Commitment[1]	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	Since Inception IRR	Since Inception Distributions to Paid In Multiple (DPI)	Since Inception Total Value to Paid In Multiple (TVPI)
Genstar Capital Partners IX	2019	2/21/2019	$7,500,000	$7,113,299	$386,701	95%	$3,147,426	$9,670,235	$12,817,661	$5,704,362	36.2%	0.44x	1.8x
Genstar Capital Partners IX Opportunities Program	2019	2/21/2019	$2,500,000	$2,152,214	$347,786	86%	$940,541	$2,921,107	$3,861,648	$1,709,434	28.6%	--	1.79x
Genstar Capital Partners X	2021	4/1/2021	$15,000,000	$7,507,769	$7,492,231	50%	--	$7,742,611	$7,742,611	$234,842	5.8%	--	1.03x
Genstar Capital Partners X Opportunities Program	2021	4/1/2021	$5,000,000	$2,919,779	$2,080,221	58%	--	$3,024,952	$3,024,952	$105,173	5.6%	--	1.04x
GGV Capital VII	2019	8/15/2018	$10,160,000	$9,550,400	$609,600	94%	$69,608	$13,847,881	$13,917,489	$4,367,089	15.8%	0.01x	1.46x
GGV Capital VII Plus	2019	8/15/2018	$2,540,000	$2,476,500	$63,500	98%	--	$3,080,683	$3,080,683	$604,183	9.0%	--	1.24x
GGV Capital VIII	2020	10/30/2020	$9,180,000	$4,911,300	$4,268,700	54%	--	$5,685,363	$5,685,363	$774,063	13.7%	--	1.16x
GGV Capital VIII Plus	2020	10/30/2020	$2,295,000	$1,055,700	$1,239,300	46%	--	$1,111,244	$1,111,244	$55,544	4.8%	--	1.05x
GGV Discovery II	2019	8/15/2018	$2,100,000	$1,953,000	$147,000	93%	--	$3,921,640	$3,921,640	$1,968,640	32.1%	--	2.01x
GGV Discovery III	2020	10/30/2020	$3,825,000	$1,740,375	$2,084,625	46%	--	$2,506,721	$2,506,721	$766,346	34.6%	--	1.44x
Great Hill Equity Partners VII	2019	6/28/2019	$8,900,000	$8,007,493	$892,507	90%	$2,458,521	$8,282,070	$10,740,591	$2,733,098	73.6%	0.31x	1.34x
Great Hill Equity Partners VIII	2021	11/1/2021	$25,000,000	$1,288,109	$23,711,891	--	--	($266,479)	($266,479)	--	-100.0%	--	-0.21x
Green Equity Investors VIII	2019	10/18/2019	$15,000,000	$13,070,155	$2,049,081	87%	$119,236	$13,919,777	$14,039,013	$968,858	5.5%	0.01x	1.07x
Green Equity Investors IX	2022	3/1/2022	$13,300,000	--	$13,300,000	--	--	--	--	--	--	--	--
GTCR Fund XII	2017	9/29/2017	$30,000,000	$24,532,892	$5,467,108	82%	$12,846,870	$32,264,256	$45,111,126	$20,578,234	27.4%	0.52x	1.84x
GTCR Fund XIII	2020	10/27/2020	$30,000,000	$15,343,652	$14,656,348	51%	$3,268,145	$14,616,588	$17,884,733	$2,541,081	29.8%	0.21x	1.17x
GTCR Strategic Growth Fund I	2022	1/18/2022	$10,000,000	$313,000	$9,687,000	3%	--	$185,823	$185,823	--	-87.1%	--	0.59x
HarbourVest - Dover Street VIII	2013	5/30/2013	$67,500,000	$62,184,954	$5,400,000	92%	$97,765,779	$7,828,058	$105,593,837	$43,323,929	19.9%	1.57x	1.7x
HarbourVest - Dover Street IX	2016	12/16/2016	$60,000,000	$52,200,000	$7,800,000	87%	$53,689,599	$37,847,724	$91,537,323	$39,337,323	23.8%	1.03x	1.75x
HarbourVest - Dover Street X	2019	5/31/2019	$40,000,000	$25,300,000	$14,700,000	63%	$8,766,500	$29,797,485	$38,563,985	$13,263,985	38.7%	0.35x	1.52x
HarbourVest Partners Co-Investment IV	2017	6/2/2017	$30,000,000	$24,464,388	$5,732,352	82%	$23,670,200	$22,264,117	$45,934,317	$21,469,929	16.9%	0.97x	1.88x
HarbourVest Partners Co-Investment V	2019	7/31/2018	$35,000,000	$27,125,000	$7,875,000	78%	$5,592,394	$39,753,940	$45,346,334	$18,221,334	23.6%	0.21x	1.67x
HarbourVest Partners Co-Investment VI	2021	6/24/2021	$35,000,000	$8,750,000	$26,250,000	25%	--	$8,096,604	$8,096,604	($653,396)	-19.6%	--	0.93x
Hellman & Friedman Capital Partners IX	2019	9/28/2018	$19,800,000	$20,256,309	$592,948	102%	$1,156,489	$22,737,189	$23,893,678	$3,637,369	9.2%	0.06x	1.18x
Hellman & Friedman Capital Partners X	2021	5/10/2021	$20,000,000	$10,901,910	$9,098,090	--	--	$9,811,766	$9,811,766	($1,090,144)	-10.3%	--	0.9x
Insight Venture Partners X	2017	10/13/2017	$25,000,000	$25,680,872	$1,235,312	103%	$10,857,572	$51,437,950	$62,295,522	$36,614,650	29.4%	0.42x	2.43x
Jade Equity Investors II	2022	3/1/2022	$6,700,000	--	$6,700,000	--	--	--	--	--	--	--	--
Kinderhook Capital Fund 7	2022	1/28/2022	$10,000,000	$2,893,578	$7,106,422	29%	$4,083	$2,615,886	$2,619,969	-$273,609	-29.4%	0x	0.91x
M/C Partners VIII	2019	4/2/2018	$10,000,000	$7,328,792	$2,671,208	73%	$929,368	$7,941,750	$8,871,118	$1,542,326	11.0%	0.13x	1.21x
M/C Partners IX	2022	5/6/2022	$10,000,000	--	$10,000,000	--	--	--	--	--	--	--	--
Oak HC/FT Partners III	2019	7/31/2019	$15,000,000	$14,526,349	$1,821,841	97%	$1,348,190	$23,440,565	$24,788,755	$10,262,406	29.8%	0.09x	1.71x
Oak HC/FT Partners IV	2021	2/17/2021	$10,000,000	$7,836,872	$2,163,128	78%	--	$8,539,947	$8,539,947	$703,075	8.0%	--	1.09x
Oak HC/FT Partners V	2022	5/11/2022	$10,000,000	$416,298	$9,583,702	4%	--	$547,410	$547,410	$131,112	117.7%	--	1.31x
Pantheon Global Secondary Fund IV	2010	6/24/2010	$15,000,000	$9,960,000	$2,040,000	66%	$14,929,293	$998,926	$15,928,219	$5,968,219	12.9%	1.5x	1.6x
Pantheon Global Secondary Fund V	2015	2/6/2015	$50,000,000	$39,616,509	$10,383,491	79%	$30,059,454	$34,716,063	$64,775,517	$25,321,522	13.4%	0.76x	1.64x
Pantheon Global Secondary Fund VI	2018	2/24/2020	$25,000,000	$16,847,805	$8,637,113	67%	$3,224,621	$24,405,127	$27,629,748	$10,781,943	27.8%	0.19x	1.64x
Pantheon Global Secondary Fund VII	2022	10/28/2021	$25,000,000	$4,473,346	$20,526,654	18%	$48,551	$4,942,979	$4,991,530	$518,184	20.5%	0.01x	1.12x
Prairie Capital VII QP	2021	4/6/2021	$10,800,000	$3,672,000	$7,128,000	34%	--	$4,032,289	$4,032,289	$360,289	9.3%	--	1.1x
The Resolute Fund IV	2018	5/2/2018	$20,000,000	$21,313,069	$2,358,372	107%	$12,324,946	$30,181,994	$42,506,940	$21,193,871	41.1%	0.58x	1.99x
Ridgemont Equity Partners IV	2021	10/29/2021	$20,000,000	--	$20,000,000	--	--	$149,866	$149,866	--	--	--	--
Riverside Micro-Cap Fund V	2018	8/21/2018	$10,000,000	$8,061,200	$1,938,800	81%	--	$11,664,917	$11,664,917	$3,603,717	19.5%	--	1.45x
Riverside Micro-Cap Fund VI	2021	8/26/2021	$20,000,000	$1,328,389	$18,671,611	7%	--	$1,195,911	$1,195,911	--	-34.1%	--	0.9x
TA XIII	2019	5/2/2019	$10,000,000	$9,800,000	$200,000	98%	$3,650,000	$12,371,024	$16,021,024	$6,221,024	34.5%	0.37x	1.63x
TA XIV	2021	5/27/2021	$10,000,000	$5,800,000	$4,200,000	--	--	$5,357,865	$5,357,865	--	-13.3%	--	0.92x
Vitruvian Investment Partnership IV	2020	6/3/2020	$20,193,551	$12,374,480	$7,819,071	61%	--	$13,502,888	$13,502,888	$1,128,408	10.1%	--	1.09x
Total VCERA Private Equity Program		*5/21/2010*	*$1,827,186,414*	*$1,130,240,708*	*$715,104,100*	*62%*	*$598,108,674*	*$1,265,692,211*	*$1,863,800,885*	*$733,486,334*	*18.9%*	*0.53x*	*1.65x*

1. Includes recycled/recallable distributions received to date.
2. Add'l Fees represents notional interest paid/(received).
2. Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.
Note: Private Equity performance data is reported net of fees.
Performance shown is based on 12/31/2022 statement of investments produced by Abbott Capital.

PRIVATE CREDIT LP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date[1]	Outstanding Commitment [1]	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	Since Inception IRR	Since Inception Distributions to Paid In Multiple (DPI)	Since Inception Total Value to Paid In Multiple (TVPI)
Arbour Lane Credit Opp III A	2021	11/15/2021	$30,000,000	$12,662,011	$17,337,989	42%	$0	$11,482,304	$11,482,304	-$1,179,707	-12.5%	0x	0.91x
Bain Capital Special Situations Asia Fund II	2021	7/26/2021	$25,000,000	$2,529,966	$22,470,034	10%	$0	$2,769,804	$2,769,804	$0	8.6%	0x	1.09x
BlueBay Direct Lending III	2019	2/12/2019	$25,000,000	$16,105,933	$8,894,067	64%	$3,075,371	$16,978,894	$20,054,264	$3,948,331	10.1%	0.19x	1.25x
Bridge Debt Strategies III	2019	12/20/2019	$25,000,000	$24,072,665	$927,335	96%	$9,437,807	$16,530,145	$25,967,952	$1,895,287	0.0%	0.39x	1.08x
Bridge Debt Strategies Fund IV	2021	7/26/2021	$25,000,000	$21,877,399	$3,122,601	88%	$3,379,815	$19,617,349	$22,997,164	$1,119,765	5.2%	0.15x	1.05x
Crayhill Principal Strategies II	2021	4/23/2021	$25,000,000	$19,194,150	$5,805,850	77%	$7,518,298	$12,230,042	$19,748,339	$554,189	0.0%	0.39x	1.03x
Crescent Cove Opportunity Fund LP	2022	5/20/2022	$25,000,000	$12,500,000	$12,500,000	50%	$41,250	$12,323,946	$12,365,196	-$134,804	0.0%	0x	0.99x
Cross Ocean USD ESS Fund IV	2021	6/21/2021	$25,000,000	$14,847,833	$10,152,167	59%	$0	$15,538,332	$15,538,332	$690,499	8.2%	0x	1.05x
CVI Credit Value Fund IV	2017	12/31/2017	$30,000,000	$33,600,000	-$3,600,000	112%	$14,889,955	$27,458,338	$42,348,294	$8,748,294	8.1%	0.44x	1.26x
CVI Credit Value Fund V	2021	3/29/2021	$30,000,000	$19,674,333	$10,325,667	66%	$1,618	$19,905,306	$19,906,924	$232,591	0.0%	0x	1.01x
Harbourvest Direct Lending L	2021	6/21/2021	$25,000,000	$18,974,922	$6,025,078	76%	$641,229	$18,144,633	$18,785,862	-$189,060	-1.5%	0.03x	0.99x
Monroe Capital Private Credit Fund III	2018	9/5/2018	$25,000,000	$21,253,151	$3,746,849	85%	$7,819,655	$21,522,017	$29,341,672	$8,088,521	11.6%	0.37x	1.38x
Monroe Capital Private Credit Fund IV	2022	1/10/2022	$30,000,000	$31,672,755	-$1,672,755	106%	$7,525,319	$25,153,684	$32,679,003	$1,006,248	5.5%	0.24x	1.03x
PIMCO Corporate Opportunities Fund III	2020	1/26/2020	$50,000,000	$45,000,000	$5,000,000	90%	$126,148	$50,042,692	$50,168,840	$5,168,840	9.2%	0x	1.11x
PIMCO Private Income Fund	2019	3/25/2019	$55,000,000	$55,000,000	$0	100%	$22,651	$71,099,567	$71,122,218	$16,122,218	9.7%	0x	1.29x
Torchlight Debt Fund VII	2021	1/25/2021	$25,000,000	$13,765,285	$11,234,715	55%	$1,265,285	$13,149,725	$14,415,010	$649,725	4.7%	0.09x	1.05x
VWH Partners III LP	2022	12/1/2022	$50,000,000	$12,916,252	$37,083,748	26%	$0	$12,916,252	$12,916,252	$0	0.0%	0x	1x
Total VCERA Private Credit Program			*$525,000,000*	*$375,646,656*	*$149,353,344*	*72%*	*$55,744,401*	*$366,863,029*	*$422,607,430*	*$46,720,936*	*7.5%*	*0.15x*	*1.13x*

1. Includes recycled/recallable distributions received to date.

Note: Private Credit performance data is reported net of fees.

Performance shown is based on 12/31/2022 cash-adjusted market values.

PRIVATE REAL ASSETS LP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date[1]	Outstanding Commitment[1]	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	Since Inception IRR	Since Inception Distributions to Paid In Multiple (DPI)	Since Inception Total Value to Paid In Multiple (TVPI)
Brookfield Infrastructure Fund IV, LP	2019	10/21/2019	$50,000,000	$46,461,990	$3,538,010	93%	$8,312,802	$42,480,889	$50,793,690	$4,331,700	8.4%	0.18x	1.09x
Harbourvest Real Assets Fund IV, LP	2019	7/15/2019	$100,000,000	$52,052,632	$47,947,368	52%	$9,317,655	$64,814,414	$74,132,069	$22,079,437	54.4%	0.18x	1.42x
Total VCERA Private Real Assets Program			*$150,000,000*	*$98,514,622*	*$51,485,378*	*66%*	*$17,630,457*	*$107,295,302*	*$124,925,759*	*$26,411,136*	*23.3%*	*0.18x*	*1.27x*

1. Includes recycled/recallable distributions received to date.

Note: Private Real Assets performance data is reported net of fees.

Performance shown is based on 12/31/2022 cash-adjusted market values.

PRIVATE REAL ESTATE LP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date[1]	Outstanding Commitment[1]	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	Since Inception IRR	Since Inception Distributions to Paid In Multiple (DPI)	Since Inception Total Value to Paid In Multiple (TVPI)
Alterra IOS Venture II LP	2022	4/7/2022	$35,000,000	$22,527,540	$12,472,460	64%	$0	$21,888,479	$21,888,479	-$639,061	-6.5%	0x	0.97x
LaSalle Income & Growth Fund VIII, LP	2019	2/26/2020	$100,000,000	$60,067,784	$41,522,854	60%	$24,390,944	$46,409,528	$70,800,472	$10,732,688	16.4%	0.41x	1.18x
Total VCERA Private Real Estate Program			*$135,000,000*	*$82,595,324*	*$53,995,314*	*61%*	*$24,390,944*	*$68,298,006*	*$92,688,950*	*$10,093,626*	*15.2%*	*0.3x*	*1.12x*

1. Includes recycled/recallable distributions received to date.

Note: Private Real Estate performance data is reported net of fees.

Performance shown is based on 12/31/2022 cash-adjusted market values.

CASH FLOW SUMMARY BY MANAGER

	1 Month Ending December 31, 2022							
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value	Month Return
Abbott Capital Cash	$116,247,231	$23,038,042	-$79,766,403	-$56,728,361	-	-	$59,518,870	0.00
Abbott Secondary Opportunities	$10,609,192	-	-	-	-	-	$10,609,192	0.00
Abbott Secondary Opportunities II, L.P.	$14,918,623	$1,047,129	-	$1,047,129	-	-$2	$15,965,750	0.00
ABRY Partners IX, LP	$10,228,275	$364,150	-	$364,150	-	$1,311,645	$11,904,070	12.75
Adams Street Global Fund Series	$258,908,362	$180,000	-$816,772	-$636,772	-	-$2,017,525	$256,254,065	-0.78
Advent International GPE IX LP	$12,634,210	-	-	-	-	-	$12,634,210	0.00
Advent International GPE X LP	$580,992	-	-	-	-	-	$580,992	0.00
Alterra IOS Venture II	$21,888,479	-	-	-	-	-	$21,888,479	0.00
Arbour Lane Credit Opp III A	$11,482,304	-	-	-	-	-	$11,482,304	0.00
Astorg VII L.P.	$10,214,350	-	-	-	-	$372,998	$10,587,347	3.65
Bain Capital Special Situations Asia Fund II	$2,765,141	-	-	-	-	$4,663	$2,769,804	0.17
Battery Ventures XII	$30,002,552	-	-$222,351	-$222,351	-	-$224,138	$29,556,064	-0.75
Battery Ventures XIII	$16,798,338	-	-	-	-	-	$16,798,338	0.00
Battery Ventures XIV	$685,318	-	-	-	-	-	$685,318	0.00
BlackRock ACWI ex-U.S. Index	$520,862,718	-	-	-	-$45,072	-$2,991,246	$517,826,400	-0.59
BlackRock MSCI ACWI Equity Index	$715,255,416	-	-	-	-$25,509	-$27,833,659	$687,396,248	-3.90
Blackrock Russell 1000 Index	$1,640,294,349	-	-	-	-$14,086	-$95,387,521	$1,544,892,742	-5.82
Blackrock Russell 2500 Index	$87,040,660	-	-	-	-$1,451	-$5,167,607	$81,871,602	-5.94
BlackRock U.S. Debt Fund	$154,554,083	-	-	-	-$8,485	-$973,743	$153,571,855	-0.64
Bluebay Direct Lending Fund III	$16,717,939	-	-	-	-	$260,955	$16,978,894	1.56
Bridge Debt Strategies Fund IV LP	$19,369,675	-	-	-	-	$247,674	$19,617,349	1.28
Bridge Debt Strategies III Limited Partner	$16,292,697	-	-	-	-	$237,448	$16,530,145	1.46
Bridgewater All Weather Fund	$211,435,721	-	-	-	-$74,169	-$8,762,006	$202,599,547	-4.18
Brookfield Infra Fund IV B LP	$44,282,160	-	-	-	-	-$1,801,271	$42,480,889	-4.07
Buenaventure One, LLC	$193,909,152	-	-	-	-	-	$193,909,152	0.00
Buenaventure Two, LLC	$1,958,680	-	-	-	-	-	$1,958,680	0.00
CapVest Private Equity Partners IV, SCSp	$9,806,888	-	-	-	-	$48,187	$9,855,075	0.49
Charlesbank Equity Fund X	$10,472,111	-	-	-	-	-	$10,472,111	0.00
Charlesbank Overage Fund X	$4,647,139	-	-	-	-	-	$4,647,139	0.00
Clearlake Capital Partners V	$12,806,492	-	-	-	-	-$265,441	$12,541,051	-2.07
Clearlake Capital Partners VI	$27,032,726	-	-	-	-	-$735,516	$26,297,210	-2.72
Clearlake Capital Partners VII	$6,780,792	$1,309,270	-	$1,309,270	-	-$4	$8,090,058	0.00
Crayhill Principal Strategies Fund II	$9,185,990	$3,044,051	-	$3,044,051	-	$1	$12,230,042	0.00
Crescent Cove Opportunity Fund LP	$12,369,209	-	-	-	-	-$45,263	$12,323,946	-0.37
Cross Ocean USD ESS Fund IV	$12,652,451	$2,705,879	-	$2,705,879	-	$2	$15,358,332	0.00
CRV XVIII, L.P.	$14,853,869	$425,000	-	$425,000	-	$6	$15,278,875	0.00

CASH FLOW SUMMARY BY MANAGER

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value	Month Return
CVC Capital Partners VIII A LP	$6,963,553	$4,653,984	-	$4,653,984	-	$904,788	$12,522,325	8.69
CVI Credit Value Fund A V	$18,391,587	$1,500,000	-	$1,500,000	-	$13,718	$19,905,306	0.07
CVI Credit Value Fund IV	$27,012,953	-	-	-	-	$445,385	$27,458,338	1.65
Dover Street X, LP	$31,289,865	-	-$1,009,625	-$1,009,625	-	-$482,756	$29,797,484	-1.55
Drive Capital Fund II	$29,760,745	-	-	-	-	-	$29,760,745	0.00
Drive Capital Fund III LP	$7,934,235	-	-	-	-	-	$7,934,235	0.00
Drive Capital Fund IV LP	$3,628,598	-	-	-	-	-	$3,628,598	0.00
Drive Capital Overdrive	$3,989,911	-	-	-	-	-	$3,989,911	0.00
Drive Capital Overdrive Fund I	$13,914,068	-	-	-	-	-	$13,914,068	0.00
ECI 11	$7,338,433	-	-	-	-	$73,947	$7,412,380	1.01
Flexpoint Fund IV	$9,400,522	-	-$1,412,900	-$1,412,900	-	$1	$7,987,624	0.00
Flexpoint Overage Fund IV A, L.P.	$2,530,080	-	-	-	-	-	$2,530,080	0.00
Genstar Capital Partners IX	$9,703,651	-	-	-	-	-$9,451	$9,694,200	-0.10
Genstar Capital Partners X LP	$7,592,224	$150,385	-	$150,385	-	$3	$7,742,612	0.00
Genstar IX Opportunities Fund I	$2,929,197	-	-	-	-	-$3,607	$2,925,589	-0.12
Genstar X Opportunities Fund I, LP	$2,691,619	$333,333	-	$333,333	-	$1	$3,024,953	0.00
GGV Capital VII L.P.	$13,847,882	-	-	-	-	-	$13,847,882	0.00
GGV Capital VII Plus, LP	$3,080,682	-	-	-	-	-	$3,080,682	0.00
GGV Capital VIII Plus, L.P.	$1,111,244	-	-	-	-	-	$1,111,244	0.00
GGV Capital VIII, L.P.	$5,685,365	-	-	-	-	-	$5,685,365	0.00
GGV Discovery II, L.P.	$3,921,640	-	-	-	-	-	$3,921,640	0.00
GGV Discovery III, L.P.	$2,506,721	-	-	-	-	-	$2,506,721	0.00
Great Hill Equity Partners VII	$6,470,218	$598,951	-	$598,951	-	$1	$7,069,170	0.00
Green Equity Investors VIII, L.P.	$13,874,793	-	-$105,105	-$105,105	-	-$12	$13,769,676	0.00
Great Hill Equity Partners VIII	-	$1,288,109	-	$1,288,109	-	-	$1,288,109	0.00
GTCR Fund XII	$32,264,261	-	-	-	-	-	$32,264,261	0.00
GTCR Fund XIII	$15,196,449	-	-	-	-	-	$15,196,449	0.00
GTCR Strategic Growth 1/A	$68,000	-	-	-	-	-	$68,000	0.00
GTCR Strategic Growth 1/B	$250,670	-	-	-	-	-	$250,670	0.00
Harbourvest	$89,349,582	-	-$2,382,172	-$2,382,172	-	$20,726,439	$107,693,849	23.43
Harbourvest Direct Lending L	$18,629,329	-	-	-	-	-$484,696	$18,144,633	-2.60
Harbourvest PTN Co Inv VI LP	$8,604,593	-	-	-	-	-$507,990	$8,096,603	-5.90
Harbourvest Real Assets Fund IV L.P.	$61,192,328	-	-	-	-	$3,622,085	$64,814,414	5.92
Hellman & Friedman CP IX	$22,737,190	-	-	-	-	-	$22,737,190	0.00
Hellman & Friedman CP X	$9,811,763	-	-	-	-	-	$9,811,763	0.00
Insight Venture Partners X	$50,907,744	-	-	-	-	$530,209	$51,437,953	1.04
Kinderhook Capital Fund 7	$2,446,445	$232,684	-	$232,684	-	-$1	$2,679,129	0.00
LaSalle Income + Growth VIII Limited Partnership	$46,409,528	-	-	-	-	-	$46,409,528	0.00

CASH FLOW SUMMARY BY MANAGER

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value	Month Return
Loomis Sayles Multi Strategy	$82,138,903	-	-	-	-$26,368	-$12,469	$82,100,066	-0.08
Loomis Strategic Alpha	$45,444,424	-	-	-	-$15,148	$183,585	$45,612,861	0.34
M/C Partners Fund VIII LP. Limited Partnership	$8,136,423	-	-	-	-	-$194,675	$7,941,748	-2.39
Monroe Capital Private Credit Fund III	$21,522,017	-	-	-	-	-	$21,522,017	0.00
Monroe Private Capital Fund IV	$25,153,684	-	-	-	-	-	$25,153,684	0.00
Oak HC/FT Partners III LP	$23,440,571	-	-	-	-	-	$23,440,571	0.00
Oak HC/FT Partners IV, L.P.	$8,587,276	-	-	-	-	-	$8,587,276	0.00
Oak HC/FT Partners V	$627,467	-	-	-	-	-	$627,467	0.00
Pantheon Global Secondary Funds	$77,021,925	$7,850,000	-	$7,850,000	-	$2,927,811	$87,799,736	3.65
Pantheon Global Secondary Funds VII	$3,818,444	$1,121,650	-	$1,121,650	-	-$2	$4,940,091	0.00
Parametric	$83,906,758	-	-	-	-$8,034	-$7,940,436	$75,958,288	-9.48
PIMCO Corp Opps Fund III	$50,042,692	-	-	-	-	-	$50,042,692	0.00
Pimco Private Income Fund	$71,099,567	-	-	-	-	-	$71,099,567	0.00
Prairie Capital VII, LP	$4,032,289	-	-	-	-	-	$4,032,289	0.00
Prudential Real Estate	$229,970,113	-	-	-	-	-	$229,970,113	0.00
Reams	$268,738,218	-	-	-	-$39,842	-$47,505	$268,650,871	-0.05
Reams 10-Year Treasuries	$74,990,112	-	-	-	-	-$718,334	$74,271,778	-0.96
Riverside Micro Cap Fund V, LP	$10,953,720	-	-	-	-	$777,688	$11,731,408	7.10
Riverside Micro Cap Fund VI, LP	$1,328,389	-	-	-	-	-$132,478	$1,195,911	-9.97
Sprucegrove	$239,191,298	-	-	-	-$69,415	-$887,350	$238,234,533	-0.43
TA XIII A LP	$11,921,026	$450,000	-	$450,000	-	$1	$12,371,026	0.00
TA XIV A LP	$3,357,866	$2,000,000	-	$2,000,000	-	-	$5,357,866	0.00
The Resolute Fund IV L.P	$28,739,161	$401,634	-$606	$401,028	-	$1,177,110	$30,317,298	4.06
Torchlight Debt Fund VII, L.P.	$13,002,863	-	-	-	-	$146,863	$13,149,725	1.13
Tortoise Energy Infrastructure	$114,481,288	-	-	-	-$59,626	-$5,653,798	$108,767,864	-5.04
UBS Real Estate	$268,651,439	-	-	-	-	-	$268,651,439	0.00
VWH Partners III LP	-	$12,916,252	-	$12,916,252	-	-	$12,916,252	0.00
Vitruvian Investment Partners IV	$13,450,405	-	-	-	-	$491,169	$13,941,574	3.65
Walter Scott	$242,329,939	-	-	-	-$143,040	-$805,305	$241,381,594	-0.45
Western	$184,944,952	-	-	-	-$35,618	-$913,873	$183,995,462	-0.53
Western U.S. Index Plus	$218,690,269	-	-	-	-$39,836	-$13,026,664	$205,623,769	-5.99
Total	**$7,283,695,447**	**$65,610,504**	**-$85,715,934**	**-$20,105,430**	**-$605,698**	**-$143,521,963**	**$7,119,462,356**	**-**

DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC's preferred data source is the plan's custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv

Ventura County Employees' Retirement Association

Actuarial Valuation and Review

As of June 30, 2022

This report has been prepared at the request of the Board of Retirement to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Segal

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December 20, 2022

Board of Retirement
Ventura County Employees' Retirement Association
1190 S. Victoria Avenue, Suite 200
Ventura, CA 93003-6572

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2022. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for July 1, 2023 to June 30, 2024.

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, 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, MAAA, FCA, EA Senior Vice President and Actuary	Molly Calcagno, ASA, MAAA, EA Actuary

JY/jl

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report was prepared by Segal to present a valuation of the Ventura County Employees' Retirement Association ("VCERA" or "the Association") as of June 30, 2022. 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 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 contribution requirements presented in this report are based on:

- The benefit provisions of the pension plan, 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, 2022, provided by VCERA;
- The assets of the plan as of June 30, 2022, provided by VCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2022 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2022 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 and adopted by the Board in 2018. Details of the funding policy are provided in *Section 4, Exhibit 1* on pages 83 and 84.

A schedule of current amortization balances and payments may be found in *Section 3, Exhibit H* starting on page 65. A graphical projection of the Unfunded Actuarial Accrued Liability (UAAL) amortization balances and payments has been included in *Section 3, Exhibit I* on pages 69 and 70.

The Actuarial Standards Board Actuarial Standard of Practice (ASOP) No. 4 provides guidelines for actuaries to follow when measuring pension obligations. For a plan such as that offered by the Retirement Association that may use undesignated excess earnings to provide supplemental benefits, the valuation report must indicate that the impact of any such future use of undesignated excess earnings on the future financial condition of the plan has not been explicitly measured or otherwise reflected in the valuation. However, it should be noted that under the Board's Interest Crediting Policy, the balance of $1.19 billion (negative) in the Interest Crediting Shortfall Tracking Account (ICSTA) has to be fully restored out of future excess earnings before any subsequent earnings can be used to provide for any supplemental benefits. The ICSTA tracks any cumulative shortfalls in investment earnings relative to earnings required to credit full interest at the assumed rate to valuation reserves.

In this report, the employer and member contribution rates shown in *Section 2, Subsection F* and *Section 4, Exhibit 3*, respectively, are calculated based on a 50/50 sharing of Normal Cost for both PEPRA and non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers.

The employer and member contribution rates calculated under the prior method (i.e., under the CERL statutory formula <u>without</u> 50/50 sharing of Normal Cost for non-PEPRA tiers) are shown in *Section 4, Exhibit 4* and *Exhibit 5*, respectively, 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, 2023 through June 30, 2024.
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Valuation Highlights

1. Effective July 1, 2021, there was a substantial increase in the number of County employees as a result of the transition of County healthcare clinics from private to County ownership and operation. The County absorbed many of those employees into the County workforce and they became PEPRA tier members upon their entry into VCERA. Since these members only accrue VCERA benefit service on a prospective basis beginning July 1, 2021, there is no material impact on the Actuarial Accrued Liability upon their entry into VCERA.

Pg. 36

2. The ratio of the Valuation Value of Assets to Actuarial Accrued Liability increased from 92.9% to 97.2%. This ratio is one measure of funding status, and its history is a measure of funding progress. The ratio of the Market Value of Assets to the Actuarial Accrued Liability decreased from 107.4% to 93.8%. These measurements are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation or the need for of the amount of future contributions.

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3. The Association’s UAAL (which is based on the Valuation Value of Assets) has decreased from $507 million to $212 million. The decrease in UAAL is primarily due to investment return (after “smoothing”) greater than the 7.00% return assumption. A complete reconciliation of the Association’s UAAL is provided in *Section 2, Subsection E*.

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4. The net actuarial gain from investment and contribution experience is $266.0 million, or 3.6% of Actuarial Accrued Liability. The net experience loss from sources other than investment and contribution experience is $27.4 million, or 0.4% of the Actuarial Accrued Liability. This loss was primarily due to higher than expected cost-of-living adjustment (COLA) increases for retirees and beneficiaries partially offset by other demographic gains.

Pg. 31

5. The average employer contribution rate calculated in this valuation decreased from 21.32% of payroll to 18.23% of payroll. This decrease is primarily due to the investment return (after “smoothing”) greater than the 7.00% return assumption. A complete reconciliation of the Association’s average employer rate is provided in *Section 2, Subsection F*.

   As previously adopted by the Board, we have continued to calculate the Basic and COLA UAAL rates on a combined basis for all General Tiers even though General Tier 2 and associated PEPRA tiers are overfunded this year. This results in more stable UAAL rates for General Tier 1.

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6. The average member rate calculated in this valuation decreased from 10.55% of payroll to 10.49% of payroll. This change is due to changes in membership demographics amongst tiers. A complete reconciliation of the Association’s average member rate is provided in *Section 2, Subsection F*.

Pg. 24

7. The rate of return on the Market Value of Assets was -7.37% for the 2021-2022 plan year. The return on the Valuation Value of Assets was 10.99% for the same period after deferring recognition of the most recent investment loss and considering the recognition of prior years’ investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 7.00%. This actuarial investment gain decreased the average employer contribution rate by 2.68% of payroll.

Pg. 20 8. The total unrecognized net investment loss as of June 30, 2022 is about $254.3 million as compared to an unrecognized net investment gain of $1.0 billion in the previous valuation. This net deferred investment loss of $254.3 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 losses of $254.3 million represent about 3.6% of the Market Value of Assets. Unless offset by future investment gains or other favorable experience, the recognition of the $254.3 million market losses 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:

a. If the net deferred losses in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the funded ratio would decrease from 97.2% to 93.8%.

For comparison purposes, if all the net deferred gains in the June 30, 2021 valuation had been recognized immediately in the June 30, 2021 valuation, the funded ratio in last year's valuation would have increased from 92.9% to 107.4%.

b. If the net deferred losses in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the average employer contribution rate would increase from 18.23% to 20.82% of payroll.

For comparison purposes, if all the net deferred gains in the June 30, 2021 valuation had been recognized immediately in the June 30, 2021 valuation, the average employer contribution rate in last year's valuation would have decreased from 21.32% to 10.43% of payroll (i.e., Normal Cost component only).

9. 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 non-PEPRA members and pensionable compensation for PEPRA members. In response, the Board adopted a Resolution, which detailed the implementation of certain aspects of the Alameda decision including reclassifying certain pay items so that they are no longer included in compensation earnable, including standby and call-back pay. However, the Board has delayed certain exclusions including flexible benefit credits. Our understanding is that the membership data provided in this valuation reflects some of the reclassifications of the pay codes that have been adopted by the Board for active members, including standby and call-back pay. As discussed with VCERA staff, the effect of the Alameda Decision will be reflected as gains and losses as issues are settled and corrections continue to be made to the membership data provided for each upcoming valuation. In addition, any additional impact on the UAAL related to recovery of benefits and/or refunds of member contributions previously paid in conjunction with these pay items has not been reflected in this valuation but will be reflected in future valuations once it is known.

Pg. 40 10. Actuarial Standard of Practice No. 51 (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 VCERA 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 plan. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Association's future financial condition, but have included a brief discussion of key risks that may affect the Association in *Section 2, Subsection J*. A more detailed assessment of the risks tailored to specific interests or concerns of the Board would provide the Board with a better understanding of the inherent risks. This assessment would further discuss and highlight information and risks particular to VCERA such as detailed historical experience and key events, growing plan maturity, heightened contribution sensitivity to asset and liability changes, and projected sensitivity to potential future investment returns through selected scenario or stress test projections.

11. 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 Unfunded Actuarial Accrued Liability and the principal balance. The funding policy adopted by the Board meets this standard.
12. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution (ADC) under the plan'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, 2022, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.
13. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2022. 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 does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2022. 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

		June 30, 2022		June 30, 2021	
		Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)	Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Employer Contribution Rates:[2]	• General Tier 1	22.64%	$397	24.56%	$564
	• General Tier 2	10.91%	21,549	13.85%	28,103
	• General PEPRA Tier 2	10.92%	14,084	13.80%	13,173
	• General Tier 2 w/ COLA[3]	17.91%	32,088	20.82%	40,687
	• General PEPRA Tier 2 w/ COLA[3]	17.84%	30,183	20.77%	26,878
	• General Combined	14.53%	98,301	17.49%	109,405
	• Safety	31.74%	45,381	34.51%	50,743
	• Safety PEPRA	29.04%	15,530	31.34%	14,148
	• Safety Combined	31.00%	60,911	33.77%	64,891
	All Categories Combined	**18.23%**	**$159,212**	**21.32%**	**$174,296**
Average Member Contribution Rates:[2,4,5]	• General Tier 1	12.21%	$214	11.62%	$267
	• General Tier 2	7.72%	15,248	7.82%	15,862
	• General PEPRA Tier 2	7.73%	9,970	7.77%	7,416
	• General Tier 2 w/ COLA[3]	10.35%	18,543	10.45%	20,424
	• General PEPRA Tier 2 w/ COLA[3]	10.36%	17,528	10.40%	13,460
	• Safety	15.27%	21,833	14.91%	21,924
	• Safety PEPRA	15.41%	8,241	15.34%	6,925
	All Categories Combined	**10.49%**	**$91,577**	**10.55%**	**$86,278**

1 Based on projected compensation for each year.
2 Before reflection of any member rate that may be "picked-up" by the employer. Contributions are assumed to be paid throughout the year.
3 Throughout this report, this category represents those Tier 2 members who contribute a negotiated 2.63% of compensation for a fixed 2% COLA pursuant to Government Code 31627 that applies to service after March 2003.
4 The non-refundability factors are 1.00 for General Tier 1, Tier 2 (non-PEPRA) and Safety (non-PEPRA) for both June 30, 2022 and June 30, 2021.
5 Average member contribution rates for non-PEPRA tiers as shown in this exhibit are after reflecting the impact of the cessation of member contributions after 30 years of service. Individual member rates can be found in *Section 4, Exhibit 3*.

Summary of Key Valuation Results (continued)

		June 30, 2022 ($ in '000s)	June 30, 2021 ($ in '000s)
Actuarial Accrued Liability as of June 30:	• Retired members and beneficiaries	$4,399,379	$4,073,549
	• Inactive vested members[1]	234,807	240,545
	• Active members	2,857,141	2,840,791
	• Total Actuarial Accrued Liability	$7,491,327	$7,154,885
	• Normal Cost for plan year beginning June 30	$180,302	$171,528
Assets as of June 30:	• Market Value of Assets (MVA)	$7,025,332	$7,681,553
	• Valuation Value of Assets (VVA)[2]	7,279,606	6,648,154
Funded status as of June 30:	• Unfunded Actuarial Accrued Liability on Market Value of Assets basis	$465,995	$(526,668)
	• Funded percentage on MVA basis	93.78%	107.36%
	• Unfunded Actuarial Accrued Liability on Valuation Value of Assets basis	$211,721	$506,731
	• Funded percentage on VVA basis	97.17%	92.92%
Key assumptions:	• Net investment return	7.00%	7.00%
	• Price inflation	2.50%	2.50%
	• Payroll growth increase	3.00%	3.00%
	• Cost of living adjustments		
	– Tiers with 3.00% COLA	2.75%	2.75%
	– Tiers with fixed 2% COLA	2.00%	2.00%
	– Tiers without COLA	0.00%	0.00%

[1] Includes inactive members with member contributions on deposit.
[2] Excludes non-valuation reserves.

Summary of Key Valuation Results (continued)

		June 30, 2022	June 30, 2021	Change From Prior Year
Demographic data as of June 30:	**Active Members:**			
	• Number of members	9,077	8,491	6.9%
	• Average age	44.5	45.0	-0.5
	• Average service	10.8	11.6	-0.8
	• Total projected compensation	$873,042,611	$817,636,092	6.8%
	• Average projected compensation	$96,182	$96,294	-0.1%
	Retired Members and Beneficiaries:			
	• Number of members:			
	• Service retired	6,067	5,830	4.1%
	• Disability retired	801	811	-1.2%
	• Beneficiaries	1,139	1,110	2.6%
	• Total	8,007	7,751	3.3%
	• Average age	71.1	70.9	0.2
	• Average monthly benefit	$3,653	$3,512	4.0%
	Inactive Vested Members:			
	• Number of members[1]	3,812	3,491	9.2%
	• Average age	45.7	46.1	-0.4
	Total Members:	20,896	19,733	5.9%

[1] Includes inactive members with member contributions on deposit.

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, termination, 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.

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] VCERA has a proven track record of adopting the Actuarially 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: 2013 – 2022

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
2013	8,068	2,249	5,888	8,137	1.01	0.73
2014	8,210	2,339	6,121	8,460	1.03	0.75
2015	8,299	2,441	6,338	8,779	1.06	0.76
2016	8,509	2,639	6,539	9,178	1.08	0.77
2017	8,636	2,809	6,766	9,575	1.11	0.78
2018	8,611	2,909	7,038	9,947	1.16	0.82
2019	8,696	3,041	7,280	10,321	1.19	0.84
2020	8,644	3,218	7,521	10,739	1.24	0.87
2021	8,491	3,491	7,751	11,242	1.32	0.91
2022	9,077	3,812	8,007	11,819	1.30	0.88

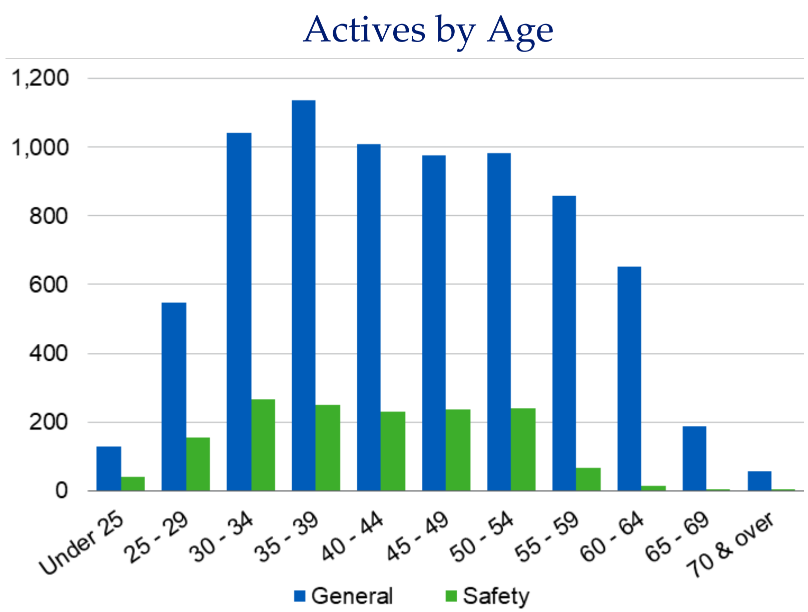
[1] Includes inactive members with member contributions on deposit.

Active Members

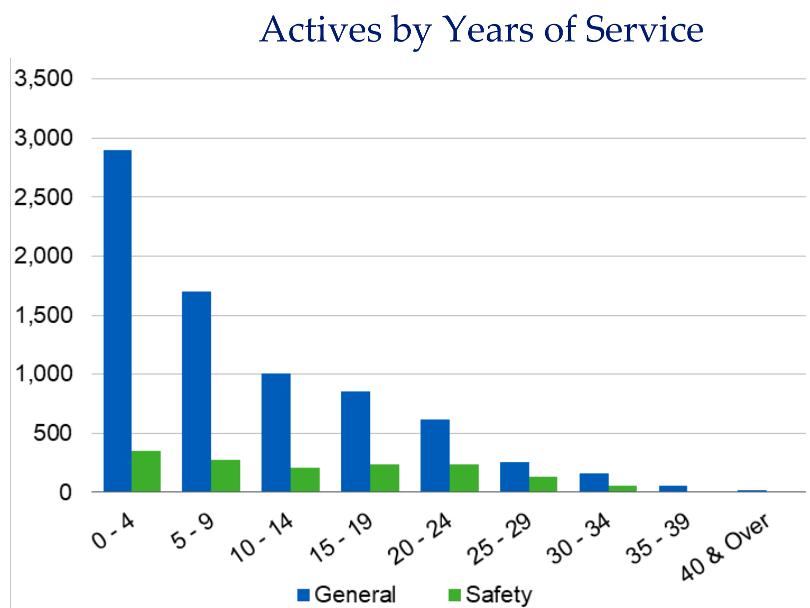
Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 9,077 active members with an average age of 44.5, average years of service of 10.8 years and average compensation of $96,182. The 8,491 active members in the prior valuation had an average age of 45.0, average service of 11.6 years and average compensation of $96,294.

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

Distribution of Active Members as of June 30, 2022



Average age	44.5
Prior year average age	45.0
Difference	(0.5)



Average years of service	10.8
Prior year average years of service	11.6
Difference	(0.8)

Inactive Members

In this year's valuation, there were 3,812 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 3,491 in the prior valuation.

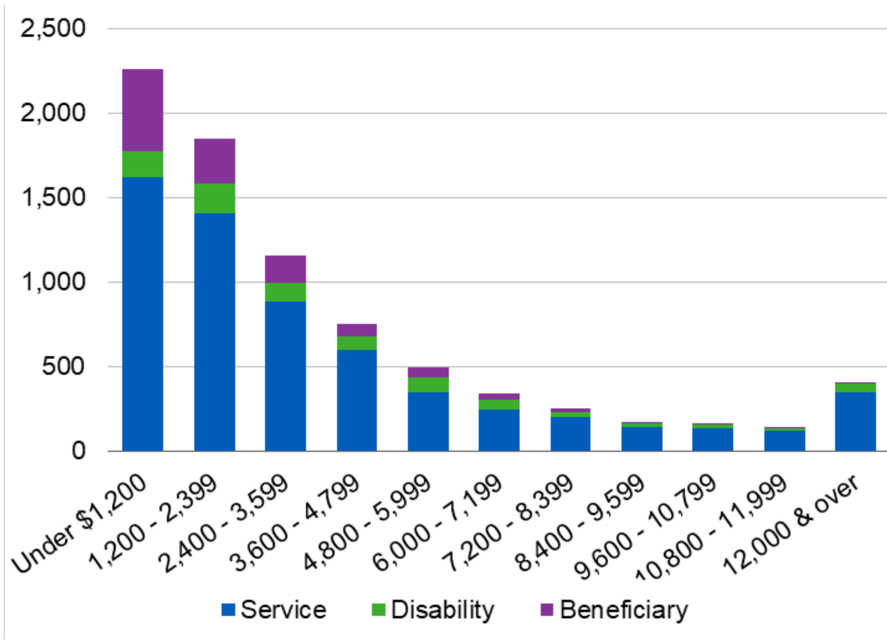
Retired Members and Beneficiaries

As of June 30, 2022, 6,868 retired members and 1,139 beneficiaries were receiving total monthly benefits of $29,249,724. For comparison, in the previous valuation, there were 6,641 retired members and 1,110 beneficiaries receiving total monthly benefits of $27,223,728. These monthly benefits exclude any benefits for vested fixed supplemental and non-vested supplemental benefit amounts.

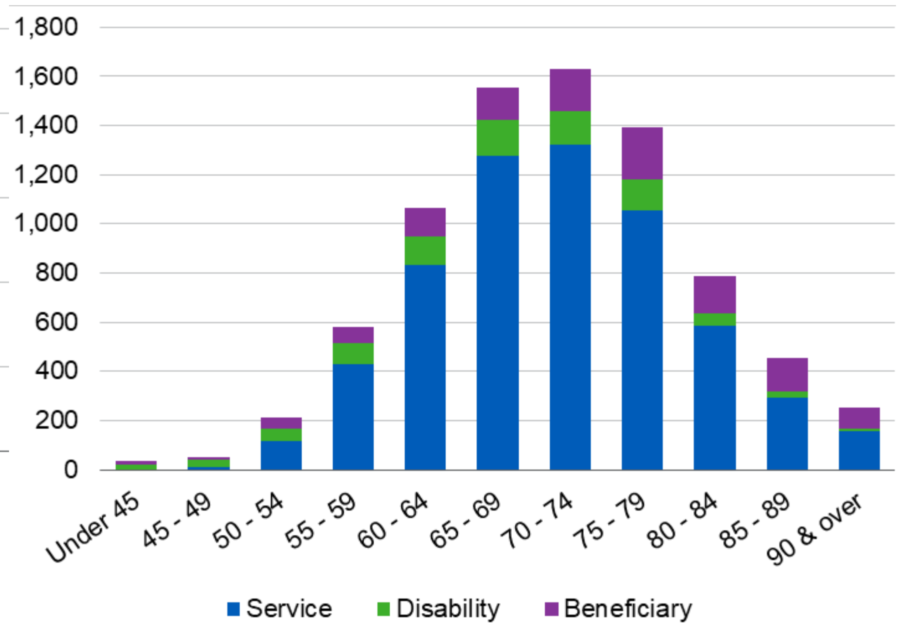
As of June 30, 2022, the average monthly benefit for retired members and beneficiaries is $3,653, compared to $3,512 in the previous valuation. The average age for retired members and beneficiaries is 71.1 in the current valuation, compared with 70.9 in the prior valuation.

Distribution of Retired Members and Beneficiaries as of June 30, 2022

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: 2013 – 2022

	Active Members			Retired Members and Beneficiaries		
Year Ended June 30	Count	Average Age	Average Service	Count	Average Age	Average Monthly Amount
2013	8,068	45.4	11.2	5,888	69.1	$2,862
2014	8,210	45.3	11.2	6,121	69.4	2,897
2015	8,299	45.2	11.2	6,338	69.6	2,936
2016	8,509	45.0	11.2	6,539	69.8	3,024
2017	8,636	45.0	11.2	6,766	70.2	3,108
2018	8,611	44.9	11.3	7,038	70.3	3,230
2019	8,696	44.9	11.3	7,280	70.5	3,329
2020	8,644	44.9	11.4	7,521	70.7	3,423
2021	8,491	45.0	11.6	7,751	70.9	3,512
2022	9,077	44.5	10.8	8,007	71.1	3,653

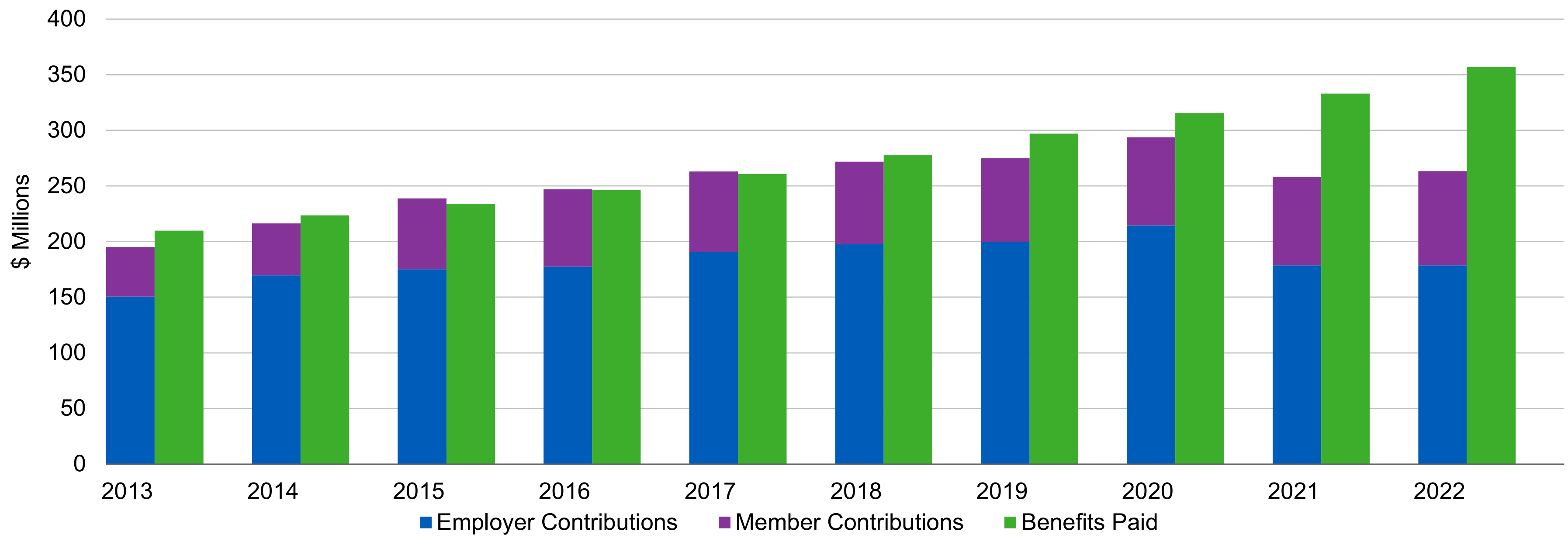
B. Financial Information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees and administrative expenses) 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, 2013 – 2022



Determination of Actuarial Value of Assets for Year Ended June 30, 2022

		Actual Return	Expected Return	Investment Gain/Loss	Percent Deferred	Unrecognized Amount[1]
1	**Market Value of Assets**					**$7,025,332,391**
2	Calculation of unrecognized return					
	a. Six months ended June 30, 2017	$351,030,738	$172,814,126	$178,216,612	0%	$0
	b. Six months ended December 31, 2017	399,470,558	185,992,710	213,477,848	0	0
	c. Six months ended June 30, 2018	38,736,481	200,860,519	(162,124,038)	10	(16,212,404)
	d. Six months ended December 31, 2018	(247,595,921)	201,992,652	(449,588,573)	20	(89,917,715)
	e. Six months ended June 30, 2019	608,522,342	192,294,765	416,227,577	30	124,868,273
	f. Six months ended December 31, 2019	363,251,754	207,517,685	155,734,069	40	62,293,628
	g. Six months ended June 30, 2020	(161,966,237)	220,290,552	(382,256,789)	50	(191,128,395)
	h. Six months ended December 31, 2020	963,486,000	213,744,479	749,741,521	60	449,844,913
	i. Six months ended June 30, 2021	877,898,342	247,317,215	630,581,127	70	441,406,789
	j. Six months ended December 31, 2021	443,525,133	277,610,478	165,914,655	80	132,731,724
	k. Six months ended June 30, 2022	(1,006,035,394)	291,989,759	(1,298,025,153)	90	(1,168,222,637)
	l. Total unrecognized return[2]					$(254,335,824)
3	**Actuarial Value of Assets 1 - 2l**					**$7,279,668,215**
4	Actuarial Value of Assets as a percentage of Market Value of Assets **3 / 1**					103.6%
5	Non-valuation reserves:					
	a. Non-vested Supplemental Benefit					$62,375
	b. Statutory Contingency					0
	c. Subtotal					$62,375
6	**Valuation Value of Assets 3 – 5c**					**$7,279,605,840**

Note: Results may be slightly off due to rounding

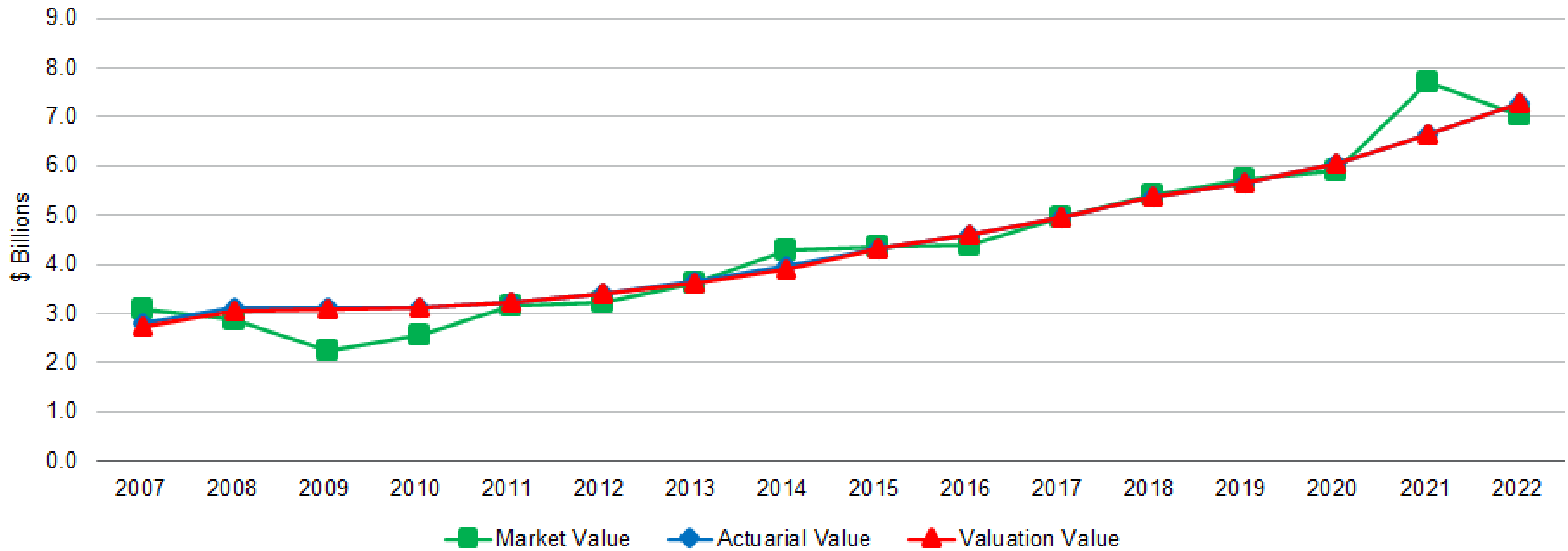
[1] Recognition at 10% per six-month period over 5 years.
[2] Deferred return as of June 30, 2022 recognized in each of the next five years:

a.	Amount recognized on June 30, 2023	$(18,546,717)
b.	Amount recognized on June 30, 2024	45,960,644
c.	Amount recognized on June 30, 2025	11,416,751
d.	Amount recognized on June 30, 2026	(163,363,987)
e.	Amount recognized on June 30, 2027	(129,802,515)
f.	Subtotal	$(254,335,824)

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, 2007 – 2022



Allocation of Valuation Value of Assets as of June 30, 2022

		Allocated Assets for Funding			
		General Tier 1	**General Tier 2**	**Safety**	**Total**
1	**Allocated Assets as of Beginning of Plan Year**	**$285,743,166**	**$3,320,845,352**	**$3,041,565,016**	**$6,648,153,534**
2	Member Contributions	367,301	55,002,826	26,735,945	82,106,072
3	Member Buybacks	95,963	1,335,976	380,107	1,812,046
4	Employer Pick-up Contributions Credited to Member Account	13,092	773,291	(5,712)	780,671
5	Employer Contributions	1,398,963	109,227,033	68,062,297	178,688,292
6	Refunds of Member Contributions and Death Benefits Paid	259,195	5,800,360	794,571	6,854,126
7	Retiree Benefit Payments Excluding Non-vested Supplemental Payments	81,806,787	126,355,464	142,079,261	350,241,512
8	Subtotal (Items 1 + 2 + 3 + 4 + 5 – 6 – 7)	$205,552,503	$3,355,028,654	$2,993,863,821	$6,554,444,978
9	Weighted Average Fund Balance: Item 1 + ½ of (Items 2, 3, 4, 5) – ½ of (Items 6, 7)	245,647,835	3,337,937,002	3,017,714,419	6,601,299,256
10	Earnings Allocated in Proportion to Item 9	26,984,718	366,676,495	331,499,649	725,160,862
11	**Valuation Value of Assets (Items 8 + 10)**	**$232,537,221**	**$3,721,705,149**	**$3,325,363,470**	**$7,279,605,840**

Note: Results may not total due to rounding.

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. For contribution requirements to remain stable, assumptions should approximate experience.

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 $238.6 million, which includes $263.1 million from investment gains, a gain of $2.9 million from contribution experience and $27.4 million in losses from all other sources. The net experience variation from individual sources other than investments and contributions was 0.4% 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, 2022

1	Net gain from investments[1]	$(263,070,000)
2	Net gain from contribution experience	(2,910,000)
3	Net loss from other experience[2]	27,374,000
4	**Net experience gain: 1 + 2 + 3**	**$(238,606,000)**

[1] Details on next page.
[2] 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 plan's investment policy. The rate of return on the Market Value of Assets was -7.37% for the year ended June 30, 2022.

For valuation purposes, the assumed rate of return on the Valuation Value of Assets is 7.00%. The actual rate of return on a valuation basis for the 2021-2022 plan year was 10.99%. Because the actual return for the year was greater than the assumed return, the plan experienced an actuarial gain during the year ended June 30, 2022 with regard to its investments.

Investment Experience for Year Ended June 30, 2022

		Market Value	Actuarial Value	Valuation Value
1	Net investment income	$(562,510,261)	$725,160,862	$725,160,862
2	Average value of assets	7,634,697,975	6,601,362,676	6,601,299,256
3	Rate of return: **1 ÷ 2**	(7.37%)	10.99%	10.99%
4	Assumed rate of return	7.00%	7.00%	7.00%
5	Expected investment income: **2 x 4**	534,428,858	462,095,387	462,090,948
6	**Actuarial gain/(loss): 1 - 5**	**$(1,096,939,119)**	**$263,065,475**	**$263,069,914**

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.

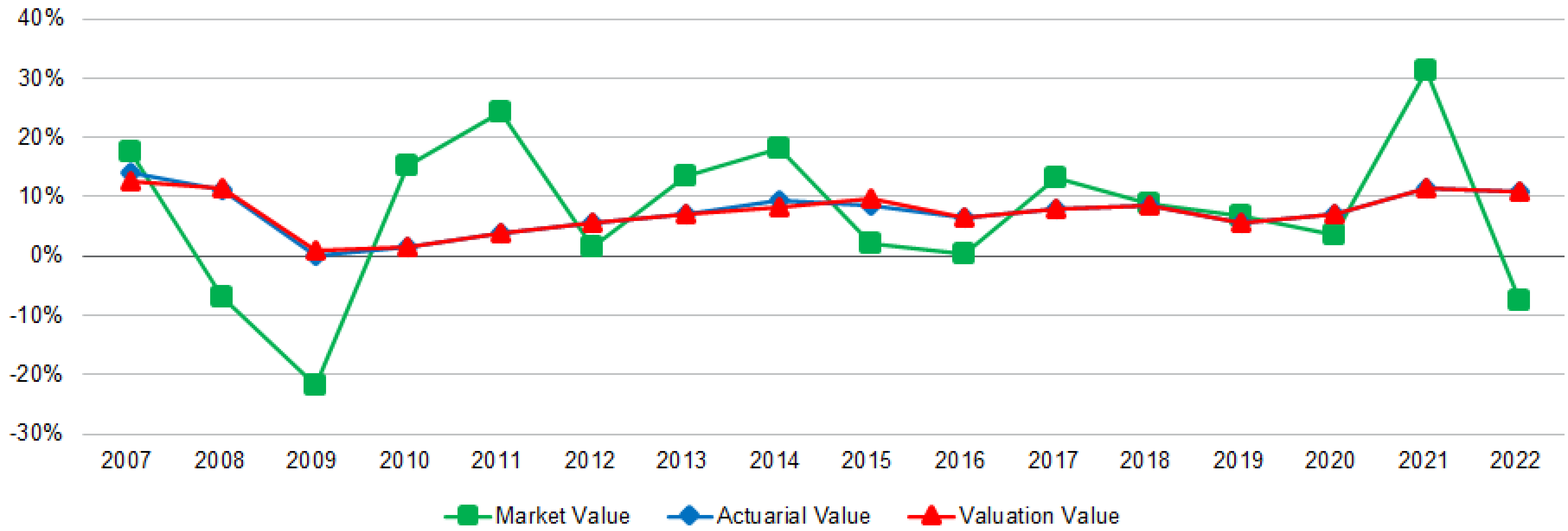
Investment Return – Market Value, Actuarial Value and Valuation Value: 2013 – 2022

	Market Value Investment Return[1]		Actuarial Value Investment Return[1]		Valuation Value Investment Return[1]	
Year Ended June 30	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**
2013	$432,694,392	13.51%	$237,282,497	6.97%	$237,282,497	7.00%
2014	654,535,161	18.06%	338,343,729	9.32%	294,307,214	8.13%
2015	84,826,216	1.98%	341,233,326	8.60%	384,442,119	9.82%
2016	21,265,100	0.49%	280,531,179	6.51%	280,531,179	6.52%
2017	575,001,597	13.10%	368,806,019	8.03%	368,806,019	8.04%
2018	438,207,040	8.83%	427,484,168	8.62%	427,484,169	8.62%
2019	360,926,420	6.70%	301,492,986	5.61%	301,492,986	5.61%
2020	201,285,517	3.52%	401,285,288	7.10%	401,285,287	7.10%
2021	1,841,384,342	31.33%	678,799,332	11.30%	678,799,332	11.30%
2022	(562,510,261)	(7.37%)	725,160,862	10.99%	725,160,862	10.99%
Most recent five-year geometric average return		7.90%		8.70%		8.70%
Most recent ten-year geometric average return		8.55%		8.29%		8.30%

[1] Net of administrative and investment expenses.

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, 2007 – 2022



Contributions

Contributions for the year ended June 30, 2022 totaled $263.4 million, compared to the projected amount of $260.6 million. This resulted in a gain of $2.9 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 loss from this other experience for the year ended June 30, 2022 amounted to $27.4 million, which is 0.4% 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, 2022 is $7.5 billion, an increase of $0.3 billion, or 4.7%, 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 actuarial assumptions or methods since the prior valuation.

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

Plan Provisions

There were no changes in plan provisions methods since the prior valuation.

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

E. Development of Unfunded Actuarial Accrued Liability

Development for Year Ended June 30, 2022

1	**Unfunded Actuarial Accrued Liability at beginning of year**		**$506,731,000**
2	Total Normal Cost at middle of year		171,528,000
3	Expected employer and member contributions		(260,574,000)
4	Interest		32,642,000
5	Expected Unfunded Actuarial Accrued Liability		$450,327,000
6	Changes due to:		
	a. Investment return greater than expected (after "smoothing")	$(263,070,000)	
	b. Actual contributions greater than expected	(2,910,000)	
	c. COLA increases higher than expected	61,890,000	
	d. Individual salary increases lower than expected	(304,000)	
	e. Other experience gains[1,2]	(34,212,000)	
	Total changes		$(238,606,000)
7	**Unfunded Actuarial Accrued Liability at end of year**		**$211,721,000**

Note: The sum of items 6c through 6e equals the "Net loss from other experience" shown in *Section 2, Subsection C*.

[1] Other differences in actual versus expected experience including (but not limited to) retirement, mortality, disability, termination and in-service redemption experience.
[2] Includes the impact of methodology refinements in our valuation programming which accounted for about half of the "Other experience gains."

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, 2022, the average recommended employer contribution is 18.23% of compensation.

Under the current funding policy, the Association's required contribution rate decreased as a percentage of pay. This was mainly the result of the investment return (after "smoothing") greater than the 7.00% return assumption.

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, 2022 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

		2022		2021	
	All Tiers Combined	**Amount ($ in '000s)**	**% of Projected Compensation**	**Amount ($ in '000s)**	**% of Projected Compensation**
1	Total Normal Cost	$180,302	20.65%	$171,528	20.98%
2	Expected member Normal Cost contributions	(91,577)	(10.49%)	(86,278)	(10.55%)
3	Employer Normal Cost: **(1) + (2)**	$88,725	10.16%	$85,250	10.43%
4	Actuarial Accrued Liability	7,491,327		7,154,885	
5	Valuation Value of Assets	7,279,606		6,648,154	
6	Unfunded Actuarial Accrued Liability (UAAL): **(4) - (5)**	$211,721		$506,731	
7	Payment on UAAL	$70,487	8.07%	$89,046	10.89%
8	Total average recommended employer contribution: **3 + 7**	$159,212	18.23%	$174,296	21.32%
9	Projected compensation	$873,043		$817,636	

Note: Contributions are assumed to be paid at the middle of the year.

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 of Average Recommended Employer Contribution Rate from June 30, 2021 to June 30, 2022

		Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
1	**Average Recommended Employer Contribution as of June 30, 2021**	**21.32%**	**$174,296**
2	Effect of investment return greater than expected (after "smoothing")	(2.68%)	$(23,398)
3	Effect of actual contributions greater than expected	(0.03%)	(262)
4	Effect of COLA increases higher than expected	0.63%	5,500
5	Effect of individual salary increases lower than expected	0.00%	0
6	Effect of amortizing prior year's UAAL over a larger than expected projected total payroll	(0.39%)	(3,405)
7	Effect of changes in demographics of members amongst tiers on Normal Cost	(0.26%)	(2,270)
8	Effect of other experience gains[2]	(0.36%)	8,751
9	Total change	(3.09%)	$(15,084)
10	**Average Recommended Employer Contribution as of June 30, 2022**	**18.23%**	**$159,212**

1 Based on projected compensation for each year.
2 Other differences in actual versus expected experience including (but not limited to) retirement, mortality, disability, termination and in-service redemption experience. Estimated annual dollar cost also reflects change in payroll from prior valuation.

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 Average Recommended Member Contribution Rate from June 30, 2021 to June 30, 2022

		Contribution Rate[1]	Estimated Annual Dollar Amount[2] ($ in '000s)
1	**Average Recommended Member Contribution as of June 30, 2021**	**10.55%**	**$86,278**
2	Effect of changes in member demographics amongst tiers[3]	(0.06%)	$5,299
3	Total change	(0.06%)	$5,299
4	**Average Recommended Member Contribution as of June 30, 2022**	**10.49%**	**$91,577**

[1] Average member contribution rates are after reflecting the impact of the cessation of member contribution after 30 years of service for non-PEPRA tiers.
[2] Based on projected compensation for each year.
[3] Estimated annual dollar cost also reflects change in payroll from prior valuation.

Recommended Employer Contribution Rate

	June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24				June 30, 2021 Actuarial Valuation Recommended Rates for FY 2022-23			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
General Tier 1 Members								
Normal Cost[2]	10.00%	3.13%	13.13%	$230	9.31%	2.93%	12.24%	$281
UAAL[3]	3.19%	6.32%	9.51%	167	6.03%	6.29%	12.32%	283
Total Contributions	**13.19%**	**9.45%**	**22.64%**	**$397**	**15.34%**	**9.22%**	**24.56%**	**$564**
General Tier 2 Members								
Normal Cost	7.72%	0.00%	7.72%	$15,248	7.82%	0.00%	7.82%	$15,862
UAAL[3]	3.19%	0.00%	3.19%	6,301	6.03%	0.00%	6.03%	12,241
Total Contributions	**10.91%**	**0.00%**	**10.91%**	**$21,549**	**13.85%**	**0.00%**	**13.85%**	**$28,103**
General PEPRA Tier 2 Members								
Normal Cost	7.73%	0.00%	7.73%	$9,970	7.77%	0.00%	7.77%	$7,416
UAAL[3]	3.19%	0.00%	3.19%	4,114	6.03%	0.00%	6.03%	5,757
Total Contributions	**10.92%**	**0.00%**	**10.92%**	**$14,084**	**13.80%**	**0.00%**	**13.80%**	**$13,173**
General Tier 2 Members w/ COLA								
Normal Cost[4]	7.72%	0.68%	8.40%	$15,050	7.82%	0.68%	8.50%	$16,613
UAAL[3,5]	3.19%	6.32%	9.51%	17,038	6.03%	6.29%	12.32%	24,074
Total Contributions	**10.91%**	**7.00%**	**17.91%**	**$32,088**	**13.85%**	**6.97%**	**20.82%**	**$40,687**
General PEPRA Tier 2 Members w/ COLA								
Normal Cost[4]	7.73%	0.60%	8.33%	$14,093	7.77%	0.68%	8.45%	$10,936
UAAL[3,5]	3.19%	6.32%	9.51%	16,090	6.03%	6.29%	12.32%	15,942
Total Contributions	**10.92%**	**6.92%**	**17.84%**	**$30,183**	**13.80%**	**6.97%**	**20.77%**	**$26,878**
All General Members[6]								
Normal Cost	7.73%	0.34%	8.07%	$54,591	7.81%	0.36%	8.17%	$51,108
UAAL	3.19%	3.27%	6.46%	43,710	6.03%	3.29%	9.32%	58,297
Total Contributions	**10.92%**	**3.61%**	**14.53%**	**$98,301**	**13.84%**	**3.65%**	**17.49%**	**$109,405**

Note: Applicable footnotes are shown on next page.

Recommended Employer Contribution Rate (continued)

	June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24				June 30, 2021 Actuarial Valuation Recommended Rates for FY 2022-23			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
Safety Members								
Normal Cost[7]	13.01%	5.10%	18.11%	$25,893	13.31%	5.20%	18.51%	$27,217
UAAL	38.87%	(25.24%)	13.63%	19,488	42.89%	(26.89%)	16.00%	23,526
Total Contributions	**51.88%**	**(20.14%)**	**31.74%**	**$45,381**	**56.20%**	**(21.69%)**	**34.51%**	**$50,743**
Safety PEPRA Members								
Normal Cost	11.05%	4.36%	15.41%	$8,241	11.00%	4.34%	15.34%	$6,925
UAAL	38.87%	(25.24%)	13.63%	7,289	42.89%	(26.89%)	16.00%	7,223
Total Contributions	**49.92%**	**(20.88%)**	**29.04%**	**$15,530**	**53.89%**	**(22.55%)**	**31.34%**	**$14,148**
All Safety Members[6]								
Normal Cost	12.48%	4.89%	17.37%	$34,134	12.77%	5.00%	17.77%	$34,142
UAAL	38.87%	(25.24%)	13.63%	26,777	42.89%	(26.89%)	16.00%	30,749
Total Contributions	**51.35%**	**(20.35%)**	**31.00%**	**$60,911**	**55.66%**	**(21.89%)**	**33.77%**	**$64,891**
All Categories Combined[6]								
Normal Cost	8.80%	1.36%	10.16%	$88,725	8.97%	1.46%	10.43%	$85,250
UAAL	11.22%	(3.15%)	8.07%	70,487	14.70%	(3.81%)	10.89%	89,046
Total Contributions	**20.02%**	**(1.79%)**	**18.23%**	**$159,212**	**23.67%**	**(2.35%)**	**21.32%**	**$174,296**

1 Based on projected compensation for each year shown on next page.
2 The total General Tier 1 employer rate has been adjusted by 0.46% and 0.31% for June 30, 2022 and June 30, 2021, respectively, to account for the cost associated with the cessation of member contributions after 30 years of service.
3 Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).
4 Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.
5 Includes 0.33% and 0.35% in COLA UAAL costs for June 30, 2022 and June 30, 2021, respectively, attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.
6 These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.
7 The total Safety employer rate has been adjusted by 1.42% and 1.80% for June 30, 2022 and June 30, 2021, respectively, to account for the cost associated with the cessation of member contributions after 30 years of service.

Recommended Employer Contribution Rate (continued)

The projected compensation that is used to estimate the annual dollar amount shown on the prior pages as of June 30, 2022 and June 30, 2021 are as follows:

	June 30, 2022 Projected Compensation ($ in '000s)	June 30, 2021 Projected Compensation ($ in '000s)
General Tier 1	$1,753	$2,298
General Tier 2	197,508	202,844
General PEPRA Tier 2	128,975	95,442
General Tier 2 w/ COLA	179,161	195,444
General PEPRA Tier 2 w/ COLA	169,188	129,424
Safety	142,978	147,039
Safety PEPRA	53,480	45,145
Total	**$873,043**	**$817,636**

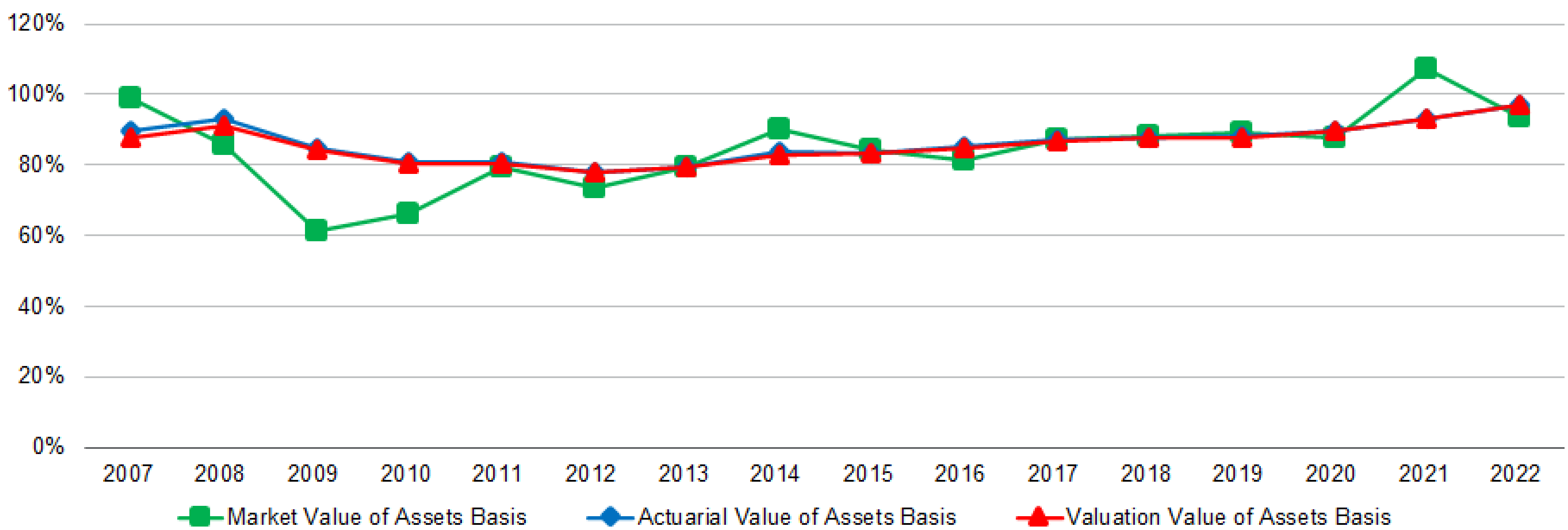
G. Funded Status

A commonly reported piece of information regarding the plan's financial status is the funded ratio. These ratios compare the Market, Actuarial and Valuation Value of Assets to the Actuarial Accrued Liability of the plan. Higher ratios indicate a relatively 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 causes.

The chart below depicts a history of the funded ratio for the plan. The chart on the next page shows the plan'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 plan's benefit obligations. As the chart below shows, the measures are different depending on whether the Market, Actuarial, or Valuation Value of Assets is used.

Funded Ratio for Years Ended June 30, 2007 – 2022



Schedule of Funding Progress for Years Ended June 30, 2013 – 2022

Actuarial Valuation Date as of June 30	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (%) (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Projected Covered Payroll (%) [(b) - (a)] / (c)
2013	$3,621,709,000	$4,575,063,000	$953,354,000	79.16%	$638,764,000	149.25%
2014	3,910,801,000	4,731,016,000	820,215,000	82.66%	648,257,000	126.53%
2015	4,302,330,000	5,178,157,000	875,827,000	83.09%	678,705,000	129.04%
2016	4,585,713,000	5,398,756,000	813,043,000	84.94%	706,000,000	115.16%
2017	4,959,070,000	5,703,396,000	744,326,000	86.95%	744,917,000	99.92%
2018	5,382,777,000	6,129,758,000	746,981,000	87.81%	760,815,000	98.18%
2019	5,664,526,000	6,439,388,000	774,862,000	87.97%	785,403,000	98.66%
2020	6,044,036,000	6,747,772,000	703,736,000	89.57%	803,381,000	87.60%
2021	6,648,154,000	7,154,885,000	506,731,000	92.92%	817,636,000	61.98%
2022	7,279,606,000	7,491,327,000	211,721,000	97.17%	873,043,000	24.25%

H. Actuarial Balance Sheet

An overview of the plan'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 plan 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 plan.

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 plan, 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

	Year Ended	
	June 30, 2022 ($ in '000s)	**June 30, 2021 ($ in '000s)**
Actuarial Present Value of Future Benefits		
• Present value of benefits for retired members and beneficiaries	$4,399,379	$4,073,549
• Present value of benefits for inactive vested members[1]	234,807	240,545
• Present value of benefits for active members	4,358,054	4,255,094
Total Actuarial Present Value of Future Benefits	**$8,992,240**	**$8,569,188**
Current and future assets		
• Total Valuation Value of Assets	$7,279,606	$6,648,154
• Present value of future contributions by members	759,225	703,203
• Present value of future employer contributions for:		
– Entry age Normal Cost	741,688	711,100
– Unfunded Actuarial Accrued Liability	211,721	506,731
Total of current and future assets	**$8,992,240**	**$8,569,188**

[1] Includes inactive members with member contributions on deposit.

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 8.0. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.0% of one year's payroll. Because actuarial gains and losses are amortized over 15 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 8.6, but is 6.1 for General compared to 17.1 for Safety. This means, for example, that assumption changes will have a greater impact on employer contribution rates for Safety than for General.

Volatility Ratios for Years Ended 2013 – 2022

Year Ended June 30	Asset Volatility Ratio			Liability Volatility Ratio		
	General	Safety	Total	General	Safety	Total
2013	4.3	9.7	5.7	5.3	12.7	7.2
2014	4.9	11.5	6.6	5.4	12.9	7.3
2015	4.8	11.4	6.4	5.6	13.8	7.6
2016	4.5	11.7	6.2	5.5	14.5	7.6
2017	4.8	12.7	6.7	5.5	14.6	7.7
2018	5.1	13.6	7.1	5.9	15.2	8.1
2019	5.2	14.1	7.3	5.9	15.5	8.2
2020	5.2	14.3	7.4	6.1	15.9	8.4
2021	6.7	18.3	9.4	6.4	16.4	8.8
2022	5.6	16.3	8.0	6.1	17.1	8.6

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.

This report does not contain a detailed analysis of the potential range of future measurements, but does include a concise discussion of some of the primary risks that may affect the plan's future financial condition. A more detailed assessment of the risks tailored to specific interests or concerns of the Board would provide the Board with a better understanding of the inherent risks in the plan that can inform both financial preparation and future decision making. This assessment would enable us to work with the Board to highlight and illustrate particular risks or potential future outcomes they may be interested in discussing and could include scenario testing, sensitivity testing, stress testing and stochastic modeling.

This section provides descriptions and basic assessments of the primary risks that are likely to have an ongoing influence on the plan's financial health, 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 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 change 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. As discussed in *Section 2, Subsection I*, *Volatility Ratios*, on page 39, a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.0% of one-year's payroll. Because actuarial gains and losses are amortized over 15 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 -7.37% to a high of 31.33%.

- 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. Effective with the June 30, 2021 valuation, the Board has adopted benefit weighted mortality tables with the 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).

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 basis has increased from 79.2% to 97.2%. This is primarily due to contributions made to amortize the UAAL (i.e., amortizing each layer of UAAL over 15 years as a level percentage of pay). For a more detailed history see *Section 2, Subsection G, Funded Status* starting on page 36.
- The geometric average investment return on the Valuation Value of Assets over the last 10 years was 8.30%. This includes a high of an 11.30% return and a low of 5.61%. The average over the last 5 years was 8.70%. For more details see the Investment Return table in *Section 2, Subsection C* on page 25.

- The primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. For example, the assumption changes in 2015 reduced the discount rate from 7.75% to 7.50% and updated mortality tables, adding $218 million in unfunded liability. The assumption changes in 2018 reduced the discount rate from 7.50% to 7.25% and again updated mortality tables, adding $149 million in unfunded liability. The assumption changes in 2021 reduced the discount rate from 7.25% to 7.00% and again updated mortality tables, adding $115 million in unfunded liability. For more details on the unfunded liability changes see *Section 3, Exhibit H, Table of Amortization Bases* starting on page 65.
- The plan's funding policy effectively deals with these unfunded liabilities over time. This can be seen most clearly in *Section 3, Exhibit I, Projection of UAAL Balances and Payments* provided on pages 69 and 70.

Maturity Measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.73 to 0.88. 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 15.

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. For the prior year, benefits paid were $94 million more than contributions received. 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. However, this plan is relatively well funded with a funded ratio of 97.2%. For more details on historical cash flows see the Comparison of Contributions with Benefits in *Section 2, Subsection B, Financial Information* on page 19.

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 39.

Section 3: Supplemental Information

Exhibit A: Table of Plan Coverage

Total Plan

Category	Year Ended June 30: 2022	Year Ended June 30: 2021	Change From Prior Year
Active members in valuation:			
• Number	9,077	8,491	6.9%
• Average age	44.5	45.0	-0.5
• Average years of service	10.8	11.6	-0.8
• Total projected compensation[1]	$873,042,611	$817,636,092	6.8%
• Average projected compensation	$96,182	$96,294	-0.1%
• Account balances	$777,642,396	$747,482,791	4.0%
• Total active vested members	5,986	5,962	0.4%
Inactive vested members:[2]			
• Number	3,812	3,491	9.2%
• Average age	45.7	46.1	-0.4
Retired members:			
• Number in pay status	6,067	5,830	4.1%
• Average age	71.2	71.0	0.2
• Average monthly benefit	$3,823	$3,684	3.8%
Disabled members:			
• Number in pay status	801	811	-1.2%
• Average age	67.5	67.1	0.4
• Average monthly benefit[3]	$4,347	$4,156	4.6%
Beneficiaries:			
• Number in pay status	1,139	1,110	2.6%
• Average age	73.6	73.2	0.4
• Average monthly benefit	$2,258	$2,139	5.6%

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General Tier 1

Category	Year Ended June 30 2022	Year Ended June 30 2021	Change From Prior Year
Active members in valuation:			
• Number	8	11	-27.3%
• Average age	68.7	66.2	2.5
• Average years of service	33.7	34.1	-0.4
• Total projected compensation[1]	$1,753,044	$2,298,244	-23.7%
• Average projected compensation	$219,130	$208,931	4.9%
• Account balances	$2,969,258	$3,781,957	-21.5%
• Total active vested members	8	11	-27.3%
Inactive vested members:[2]			
• Number	35	36	-2.8%
• Average age	48.3	47.8	0.5
Retired members:			
• Number in pay status	1,117	1,174	-4.9%
• Average age	78.6	78.1	0.5
• Average monthly benefit[3]	$4,944	$4,723	4.7%
Disabled members:			
• Number in pay status	67	73	-8.2%
• Average age	75.7	75.2	0.5
• Average monthly benefit[3]	$3,217	$3,071	4.8%
Beneficiaries:			
• Number in pay status	329	328	0.3%
• Average age	80.5	80.0	0.5
• Average monthly benefit[3]	$2,324	$2,201	5.6%

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General Tier 2

Category	Year Ended June 30: 2022	2021	Change From Prior Year
Active members in valuation:			
• Number	1,439	1,522	-5.5%
• Average age	51.7	51.5	0.2
• Average years of service	18.2	17.6	0.6
• Total projected compensation[1]	$197,507,386	$202,843,805	-2.6%
• Average projected compensation	$137,253	$133,275	3.0%
• Account balances	$192,349,163	$188,993,723	1.8%
• Total active vested members	1,413	1,493	-5.4%
Inactive vested members:[2]			
• Number	871	876	-0.6%
• Average age	52.8	52.4	0.4
Retired members:			
• Number in pay status	2,159	2,062	4.7%
• Average age	70.6	70.3	0.3
• Average monthly benefit[3]	$2,489	$2,340	6.4%
Disabled members:			
• Number in pay status	224	229	-2.2%
• Average age	68.9	68.2	0.7
• Average monthly benefit[3]	$1,594	$1,587	0.4%
Beneficiaries:			
• Number in pay status	313	308	1.6%
• Average age	73.2	72.8	0.4
• Average monthly benefit[3]	$1,074	$1,019	5.4%

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General Tier 2 w/ COLA

Category	Year Ended June 30 2022	Year Ended June 30 2021	Change From Prior Year
Active members in valuation:			
• Number	2,022	2,225	-9.1%
• Average age	51.1	50.5	0.6
• Average years of service	17.4	16.6	0.8
• Total projected compensation[1]	$179,161,361	$195,444,069	-8.3%
• Average projected compensation	$88,606	$87,840	0.9%
• Account balances	$229,794,749	$232,476,439	-1.2%
• Total active vested members	1,986	2,179	-8.9%
Inactive vested members:[2]			
• Number	1,058	1,055	0.3%
• Average age	49.1	48.6	0.5
Retired members:			
• Number in pay status	1,785	1,654	7.9%
• Average age	69.4	68.9	0.5
• Average monthly benefit[3]	$2,083	$1,986	4.9%
Disabled members:			
• Number in pay status	90	94	-4.3%
• Average age	64.6	64.2	0.4
• Average monthly benefit[3]	$1,639	$1,616	1.4%
Beneficiaries:			
• Number in pay status	145	139	4.3%
• Average age	69.0	68.5	0.5
• Average monthly benefit[3]	$1,125	$1,105	1.8%

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General PEPRA Tier 1

Category	Year Ended June 30 2022	Year Ended June 30 2021	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[1]	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	0	0	N/A
Inactive vested members:[2]			
• Number	2	2	0.0%
• Average age	47.0	46.0	1.0
Retired members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	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[3]	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[3]	N/A	N/A	N/A

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and "across the board" salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General PEPRA Tier 2

Category	Year Ended June 30 2022	Year Ended June 30 2021	Change From Prior Year
Active members in valuation:			
• Number	1,368	1,081	26.5%
• Average age	41.8	41.4	0.4
• Average years of service	3.7	3.6	0.1
• Total projected compensation[1]	$128,974,513	$95,441,725	35.1%
• Average projected compensation	$94,280	$88,290	6.8%
• Account balances	$32,193,738	$22,798,409	41.2%
• Total active vested members	480	330	45.5%
Inactive vested members:[2]			
• Number	476	375	26.9%
• Average age	41.6	41.6	0.0
Retired members:			
• Number in pay status	18	13	38.5%
• Average age	67.5	68.7	-1.2
• Average monthly benefit[3]	$936	$877	6.7%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	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[3]	N/A	N/A	N/A

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General PEPRA Tier 2 w/COLA

Category	Year Ended June 30 2022	Year Ended June 30 2021	Change From Prior Year
Active members in valuation:			
• Number	2,739	2,128	28.7%
• Average age	39.0	39.0	0.0
• Average years of service	3.5	3.8	-0.3
• Total projected compensation[1]	$169,188,462	$129,424,074	30.7%
• Average projected compensation	$61,770	$60,820	1.6%
• Account balances	$53,552,808	$43,725,592	22.5%
• Total active vested members	911	750	21.5%
Inactive vested members:[2]			
• Number	961	762	26.1%
• Average age	39.3	39.6	-0.3
Retired members:			
• Number in pay status	29	20	45.0%
• Average age	66.6	66.8	-0.2
• Average monthly benefit[3]	$703	$634	10.9%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	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[3]	N/A	N/A	N/A

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

Safety

Category	Year Ended June 30 2022	Year Ended June 30 2021	Change From Prior Year
Active members in valuation:			
• Number	952	1,030	-7.6%
• Average age	46.1	45.7	0.4
• Average years of service	19.8	19.3	0.5
• Total projected compensation[1]	$142,977,595	$147,039,021	-2.8%
• Average projected compensation	$150,187	$142,756	5.2%
• Account balances	$237,740,212	$233,529,852	1.8%
• Total active vested members	947	1,024	-7.5%
Inactive vested members:[2]			
• Number	279	286	-2.4%
• Average age	45.8	45.4	0.4
Retired members:			
• Number in pay status	956	904	5.8%
• Average age	67.2	67.3	-0.1
• Average monthly benefit[3]	$8,932	$8,623	3.6%
Disabled members:			
• Number in pay status	420	415	1.2%
• Average age	66.0	65.7	0.3
• Average monthly benefit[3]	$6,577	$6,340	3.7%
Beneficiaries:			
• Number in pay status	352	335	5.1%
• Average age	69.4	68.8	0.6
• Average monthly benefit[3]	$3,717	$3,538	5.1%

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

Safety PEPRA

Category	Year Ended June 30 2022	2021	Change From Prior Year
Active members in valuation:			
• Number	549	494	11.1%
• Average age	32.6	32.1	0.5
• Average years of service	4.5	4.0	0.5
• Total projected compensation[1]	$53,480,251	$45,145,154	18.5%
• Average projected compensation	$97,414	$91,387	6.6%
• Account balances	$29,042,468	$22,176,819	31.0%
• Total active vested members	241	175	37.7%
Inactive vested members:[2]			
• Number	130	99	31.3%
• Average age	32.4	32.4	0.0
Retired members:			
• Number in pay status	3	3	0.0%
• Average age	61.3	60.3	1.0
• Average monthly benefit[3]	$1,380	$1,341	2.9%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	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[3]	N/A	N/A	N/A

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit B: Members in Active Service as of June 30, 2022 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	168	168	—	—	—	—	—	—	—	—
	$53,108	$53,108	—	—	—	—	—	—	—	—
25 – 29	703	620	83	—	—	—	—	—	—	—
	$66,821	$64,469	$84,390	—	—	—	—	—	—	—
30 – 34	1,309	780	459	68	2	—	—	—	—	—
	$77,852	$69,696	$85,289	$118,785	$160,457	—	—	—	—	—
35 – 39	1,387	544	465	282	96	—	—	—	—	—
	$90,768	$76,472	$89,296	$112,725	$114,406	—	—	—	—	—
40 – 44	1,239	346	293	249	268	83	—	—	—	—
	$102,226	$81,201	$92,130	$115,654	$120,913	$124,895	—	—	—	—
45 – 49	1,210	271	206	189	233	251	60	—	—	—
	$107,097	$81,150	$91,389	$112,720	$118,391	$124,460	$144,011	—	—	—
50 – 54	1,224	215	174	163	200	235	162	74	1	—
	$114,345	$84,657	$91,085	$115,720	$114,217	$134,137	$136,909	$139,520	$176,856	—
55 – 59	925	169	122	121	155	162	95	82	18	1
	$107,654	$89,009	$94,327	$106,133	$109,332	$119,868	$130,219	$110,192	$125,089	$164,597
60 – 64	665	94	121	107	105	91	52	44	37	14
	$102,383	$89,764	$92,745	$103,744	$106,320	$104,684	$109,910	$106,507	$118,490	$132,021
65 – 69	191	31	41	29	21	24	19	17	5	4
	$104,266	$87,702	$91,533	$111,327	$103,186	$113,619	$107,735	$129,977	$117,887	$118,752
70 & over	56	5	17	8	9	7	3	2	4	1
	$99,253	$79,962	$86,391	$95,158	$112,268	$117,946	$109,415	$193,050	$77,913	$66,429
Total	**9,077**	**3,243**	**1,981**	**1,216**	**1,089**	**853**	**391**	**219**	**65**	**20**
	$96,182	**$73,927**	**$89,498**	**$112,469**	**$115,174**	**$123,828**	**$131,154**	**$121,654**	**$118,672**	**$127,717**

Exhibit B: Members in Active Service as of June 30, 2022 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 1

		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	1	—	—	—	—	—	1	—	—	—
	$350,887	—	—	—	—	—	$350,887	—	—	—
60 – 64	2	—	—	—	—	1	—	—	—	1
	$210,085	—	—	—	—	$263,500	—	—	—	$156,670
65 – 69	2	—	—	—	—	1	—	—	—	1
	$213,404	—	—	—	—	$289,429	—	—	—	$137,379
70 & over	3	—	—	—	—	1	—	1	—	1
	$185,060	—	—	—	—	$237,138	—	$251,612	—	$66,429
Total	**8**	**—**	**—**	**—**	**—**	**3**	**1**	**1**	—	**3**
	$219,130	**—**	**—**	**—**	**—**	**$263,356**	**$350,887**	**$251,612**	—	**$120,159**

Exhibit B: Members in Active Service as of June 30, 2022
by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 2

Age	Total	Years of Service 0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	27	2	16	9	—	—	—	—	—	—
	$115,561	$98,909	$110,810	$127,706	—	—	—	—	—	—
35 – 39	120	5	33	67	15	—	—	—	—	—
	$129,433	$165,120	$144,142	$123,674	$110,905	—	—	—	—	—
40 – 44	192	8	32	71	63	18	—	—	—	—
	$132,211	$132,022	$130,748	$137,674	$130,965	$117,704	—	—	—	—
45 – 49	249	16	19	63	80	60	11	—	—	—
	$137,124	$160,735	$140,220	$137,099	$142,972	$124,652	$123,068	—	—	—
50 – 54	327	13	22	70	84	88	35	15	—	—
	$139,590	$164,353	$127,066	$138,473	$141,428	$141,500	$137,268	$125,619	—	—
55 – 59	256	6	12	47	66	53	41	23	8	—
	$144,200	$170,676	$149,467	$139,877	$138,255	$155,219	$153,482	$122,002	$134,128	—
60 – 64	201	7	18	42	40	34	16	17	19	8
	$136,531	$169,779	$132,798	$128,670	$142,278	$124,913	$142,718	$135,107	$142,922	$153,226
65 – 69	52	1	1	15	6	9	9	9	1	1
	$141,762	$159,288	$99,957	$134,802	$136,849	$148,056	$125,039	$154,725	$211,123	$207,762
70 & over	15	1	2	4	3	2	1	1	1	—
	$130,110	$173,670	$132,098	$117,534	$156,812	$127,190	$93,394	$134,488	$90,955	—
Total	**1,439**	**59**	**155**	**388**	**357**	**264**	**113**	**65**	**29**	**9**
	$137,253	**$158,193**	**$133,686**	**$134,050**	**$138,206**	**$136,782**	**$141,178**	**$130,987**	**$141,056**	**$159,286**

Exhibit B: Members in Active Service as of June 30, 2022 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 2 w/COLA

		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	44	1	21	22	—	—	—	—	—	—
	$82,623	$136,578	$82,629	$80,164	—	—	—	—	—	—
35 – 39	229	11	56	126	36	—	—	—	—	—
	$89,600	$96,008	$88,703	$90,901	$84,482	—	—	—	—	—
40 – 44	301	8	41	129	92	31	—	—	—	—
	$92,165	$92,998	$88,456	$92,720	$90,702	$98,891	—	—	—	—
45 – 49	355	14	31	100	104	91	15	—	—	—
	$89,160	$84,364	$88,206	$90,551	$90,002	$87,485	$90,654	—	—	—
50 – 54	349	11	19	85	98	67	48	21	—	—
	$89,772	$69,405	$80,224	$93,078	$87,236	$96,583	$89,599	$86,201	—	—
55 – 59	366	11	21	72	81	91	40	43	7	—
	$86,732	$69,753	$90,328	$84,360	$83,610	$91,646	$89,383	$85,582	$91,203	—
60 – 64	287	2	23	64	65	53	33	25	17	5
	$86,162	$66,418	$84,226	$88,071	$84,192	$85,261	$89,605	$84,855	$87,444	$93,164
65 – 69	71	—	7	14	14	13	10	7	4	2
	$87,152	—	$89,889	$86,176	$90,170	$77,497	$92,162	$93,213	$94,577	$64,933
70 & over	20	—	2	4	6	4	1	—	3	—
	$81,163	—	$90,330	$72,781	$89,996	$83,526	$56,696	—	$73,566	—
Total	**2,022**	**58**	**221**	**616**	**496**	**350**	**147**	**96**	**31**	**7**
	$88,606	**$82,437**	**$87,022**	**$89,858**	**$87,384**	**$90,566**	**$89,600**	**$86,084**	**$87,870**	**$85,098**

Exhibit B: Members in Active Service as of June 30, 2022 by Age, Years of Service, and Average Projected Compensation (continued)

General PEPRA Tier 2

		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	27	27	—	—	—	—	—	—	—	—
	$64,133	$64,133	—	—	—	—	—	—	—	—
25 – 29	156	144	12	—	—	—	—	—	—	—
	$75,906	$76,671	$66,730	—	—	—	—	—	—	—
30 – 34	268	202	66	—	—	—	—	—	—	—
	$86,521	$85,703	$89,023	—	—	—	—	—	—	—
35 – 39	252	175	77	—	—	—	—	—	—	—
	$93,156	$93,347	$92,722	—	—	—	—	—	—	—
40 – 44	191	117	72	2	—	—	—	—	—	—
	$102,603	$104,194	$99,351	$126,649	—	—	—	—	—	—
45 – 49	128	70	58	—	—	—	—	—	—	—
	$99,060	$102,510	$94,897	—	—	—	—	—	—	—
50 – 54	124	69	55	—	—	—	—	—	—	—
	$101,538	$103,090	$99,591	—	—	—	—	—	—	—
55 – 59	116	71	45	—	—	—	—	—	—	—
	$106,662	$108,149	$104,316	—	—	—	—	—	—	—
60 – 64	70	34	36	—	—	—	—	—	—	—
	$109,113	$114,026	$104,472	—	—	—	—	—	—	—
65 – 69	29	13	16	—	—	—	—	—	—	—
	$112,822	$115,271	$110,832	—	—	—	—	—	—	—
70 & over	7	—	7	—	—	—	—	—	—	—
	$84,069	—	$84,069	—	—	—	—	—	—	—
Total	**1,368**	**922**	**444**	**2**	—	—	—	—	—	—
	$94,280	**$93,225**	**$96,324**	**$126,649**	—	—	—	—	—	—

Exhibit B: Members in Active Service as of June 30, 2022 by Age, Years of Service, and Average Projected Compensation (continued)

General PEPRA Tier 2 w/COLA

		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	100	100	—	—	—	—	—	—	—	—
	$42,176	$42,176	—	—	—	—	—	—	—	—
25 – 29	392	359	33	—	—	—	—	—	—	—
	$53,957	$53,394	$60,080	—	—	—	—	—	—	—
30 – 34	704	475	229	—	—	—	—	—	—	—
	$61,116	$58,481	$66,580	—	—	—	—	—	—	—
35 – 39	537	303	234	—	—	—	—	—	—	—
	$65,763	$61,420	$71,386	—	—	—	—	—	—	—
40 – 44	326	201	125	—	—	—	—	—	—	—
	$66,914	$63,175	$72,928	—	—	—	—	—	—	—
45 – 49	243	157	86	—	—	—	—	—	—	—
	$63,454	$59,418	$70,823	—	—	—	—	—	—	—
50 – 54	183	113	70	—	—	—	—	—	—	—
	$65,296	$61,598	$71,265	—	—	—	—	—	—	—
55 – 59	119	76	42	1	—	—	—	—	—	—
	$64,546	$62,584	$67,369	$95,187	—	—	—	—	—	—
60 – 64	92	49	42	1	—	—	—	—	—	—
	$62,965	$59,957	$66,547	$59,927	—	—	—	—	—	—
65 – 69	33	17	16	—	—	—	—	—	—	—
	$65,521	$62,409	$68,827	—	—	—	—	—	—	—
70 & over	10	4	6	—	—	—	—	—	—	—
	$66,146	$56,536	$72,553	—	—	—	—	—	—	—
Total	**2,739**	**1,854**	**883**	**2**	—	—	—	—	—	—
	$61,770	**$58,114**	**$69,411**	**$77,557**	—	—	—	—	—	—

Exhibit B: Members in Active Service as of June 30, 2022 by Age, Years of Service, and Average Projected Compensation (continued)

Safety

		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	53	2	13	36	2	—	—	—	—	—
	$141,641	$125,762	$145,011	$140,262	$160,457	—	—	—	—	—
35 – 39	157	7	17	88	45	—	—	—	—	—
	$136,332	$128,279	$136,404	$135,334	$139,511	—	—	—	—	—
40 – 44	207	4	9	47	113	34	—	—	—	—
	$143,397	$139,021	$147,463	$144,867	$139,905	$152,411	—	—	—	—
45 – 49	225	7	9	26	49	100	34	—	—	—
	$154,263	$156,471	$165,406	$138,912	$138,515	$157,992	$174,327	—	—	—
50 – 54	232	3	5	8	18	80	79	38	1	—
	$161,209	$157,456	$155,272	$157,193	$134,124	$157,488	$165,495	$174,473	$176,856	—
55 – 59	62	1	1	1	8	18	13	16	3	1
	$158,864	$298,683	$144,524	$98,762	$131,145	$158,454	$165,528	$159,351	$180,052	$164,597
60 – 64	12	2	1	—	—	3	3	2	1	—
	$158,366	$150,886	$176,692	—	—	$165,622	$158,298	$134,059	$182,046	—
65 – 69	3	—	—	—	1	1	—	1	—	—
	$115,164	—	—	—	$83,432	$97,463	—	$164,597	—	—
70 & over	1	—	—	—	—	—	1	—	—	—
	$178,155	—	—	—	—	—	$178,155	—	—	—
Total	**952**	**26**	**55**	**206**	**236**	**236**	**130**	**57**	**5**	**1**
	$150,187	**$148,988**	**$147,589**	**$139,493**	**$138,738**	**$156,893**	**$167,739**	**$168,637**	**$179,812**	**$164,597**

Exhibit B: Members in Active Service as of June 30, 2022 by Age, Years of Service, and Average Projected Compensation (continued)

Safety PEPRA

		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	41	41	—	—	—	—	—	—	—	—
	$72,509	$72,509	—	—	—	—	—	—	—	—
25 – 29	155	117	38	—	—	—	—	—	—	—
	$90,211	$83,434	$111,078	—	—	—	—	—	—	—
30 – 34	213	98	114	1	—	—	—	—	—	—
	$100,624	$88,633	$110,806	$115,001	—	—	—	—	—	—
35 – 39	92	43	48	1	—	—	—	—	—	—
	$104,901	$90,123	$117,417	$139,560	—	—	—	—	—	—
40 – 44	22	8	14	—	—	—	—	—	—	—
	$110,813	$106,334	$113,373	—	—	—	—	—	—	—
45 – 49	10	7	3	—	—	—	—	—	—	—
	$98,316	$91,299	$114,690	—	—	—	—	—	—	—
50 – 54	9	6	3	—	—	—	—	—	—	—
	$115,764	$125,859	$95,576	—	—	—	—	—	—	—
55 – 59	5	4	1	—	—	—	—	—	—	—
	$133,344	$129,395	$149,141	—	—	—	—	—	—	—
60 – 64	1	—	1	—	—	—	—	—	—	—
	$161,969	—	$161,969	—	—	—	—	—	—	—
65 – 69	1	—	1	—	—	—	—	—	—	—
	$149,141	—	$149,141	—	—	—	—	—	—	—
70 & over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**549**	**324**	**223**	**2**	**—**	**—**	**—**	**—**	**—**	**—**
	$97,414	**$86,600**	**$112,857**	**$127,281**	**—**	**—**	**—**	**—**	**—**	**—**

Exhibit C: Reconciliation of Member Data

	Active Members	Inactive Vested Members[1]	Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2021	**8,491**	**3,491**	**5,830**	**811**	**1,110**	**19,733**
• New members	1,322	137	0	0	75	1,534
• Terminations – with vested rights	(394)	394	0	0	0	0
• Contribution refunds	(86)	(60)	0	0	0	(146)
• Retirements	(273)	(102)	375	0	0	0
• New disabilities	(10)	(1)	(9)	20	0	0
• Return to work	43	(40)	(2)	(1)	0	0
• Died with or without beneficiary	(16)	(3)	(127)	(29)	(44)	(219)
• Data adjustments	0	(4)	0	0	(2)	(6)
Number as of June 30, 2022	**9,077**	**3,812**	**6,067**	**801**	**1,139**	**20,896**

[1] Includes inactive members with member contributions on deposit.

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

		Year Ended June 30, 2022		Year Ended June 30, 2021
Net assets at market value at the beginning of the year		**$7,681,553,297**		**$5,914,852,070**
Contribution income:				
• Employer contributions	$178,688,292		$178,662,058	
• Member contributions	84,698,789		79,620,088	
Net contribution income		$263,387,082		$258,282,146
Investment income:				
• Interest, dividends, asset appreciation and other income	$(518,289,941)		$1,877,496,542	
• Less investment and administrative fees	(41,285,688)		(33,062,291)	
• Less other expenses	(2,934,633)		(3,049,909)	
Net investment income		$(562,510,261)		$1,841,384,342
Total income available for benefits		**$(299,123,179)**		**$2,099,666,488**
Less benefit payments:				
• Benefits paid	$(350,243,601)		$(327,719,841)	
• Member refunds	(6,854,126)		(5,245,420)	
Net benefit payments		$(357,097,727)		$(332,965,261)
Change in net assets at market value		**$(656,220,906)**		**$1,766,701,227**
Net assets at market value at the end of the year		**$7,025,332,391**		**$7,681,553,297**

Note: Results may not total due to rounding.

Exhibit E: Summary Statement of Plan Assets

	June 30, 2022		June 30, 2021	
Cash equivalents		$138,439,567		$275,852,907
Cash collateral on loaned securities		107,023,385		122,750,670
Capital assets, net of accumulated depreciation and amortization		9,593,215		9,524,745
Accounts receivable:				
• Member and employer contributions	$3,545,026		$12,891,154	
• Accrued interest and dividends	3,891,979		3,743,128	
• Securities sold	5,411,584		27,566,501	
• All other	12,909		61,320	
Total accounts receivable		$12,861,498		$44,262,103
Investments:				
• Equities	$4,656,896,435		$5,202,179,654	
• Fixed income	1,166,300,685		1,215,259,665	
• Others	1,073,818,964		972,759,115	
Total investments at market value		$6,897,016,084		$7,390,198,434
Total assets		$7,164,933,749		$7,842,588,859
Liabilities:				
• Collateral held for loaned securities	$(107,023,385)		$(122,750,670)	
• Security purchases	(23,879,374)		(31,592,828)	
• Account payable	(6,980,666)		(6,661,322)	
• Others	(1,717,934)		(30,742)	
Total liabilities		$(139,601,359)		$(161,035,562)
Net assets at market value		**$7,025,332,391**		**$7,681,553,297**
Net assets at actuarial value		**$7,279,668,215**		**$6,648,217,998**
Net assets at valuation value		**$7,279,605,840**		**$6,648,153,534**

Note: Results may not total due to rounding.

Exhibit F: Summary of Reported Reserve Information

	June 30, 2022	June 30, 2021
Used in Development of Valuation Value of Assets:		
• Member contributions reserve	$888,173,867	$859,467,644
• Employer advance reserve	3,906,019,694	3,667,987,074
• Offset: Interest crediting shortfall tracking account	(1,193,831,910)	(1,326,329,846)
• Retiree reserve	3,510,987,095	3,280,460,923
• Supplemental death benefit reserve	18,010,323	17,393,382
• Vested fixed supplemental ($108.44) reserve	150,246,771	149,174,357
• Undistributed earnings	0	0
Subtotal: Valuation Value of Assets	$7,279,605,840	$6,648,153,534
Not Used in Development of Valuation Value of Assets:		
• Non-vested supplemental ($27.50) reserve	$62,375	$64,464
• Contingency reserve	0	0
Subtotal	$62,375	$64,464
Subtotal: Actuarial Value of Assets	$7,279,668,215	$6,648,217,998
• Market stabilization reserve	(254,335,824)	1,033,335,299
Total: Gross Market Value of Assets	**$7,025,332,391**	**$7,681,553,297**

Note: Results may not total due to rounding.

Exhibit G: Development of the Fund through June 30, 2022

Year Ended June 30	Employer Contributions	Member Contributions	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
2013	$150,687,842	$44,463,983	$432,694,392	$209,957,957	$3,627,505,467	$3,621,708,536	99.84%
2014	169,703,083	46,674,443	654,535,161	223,532,290	4,274,885,864	3,910,800,797	91.48%
2015	175,099,550	63,678,770	84,826,217	233,695,213	4,364,795,188	4,302,330,424	98.57%
2016	177,709,688	69,469,771	21,265,100	246,403,038	4,386,836,709	4,585,712,958	104.53%
2017	190,759,001	72,394,542	575,001,597	260,745,073	4,964,246,776	4,959,070,151	99.90%
2018	197,682,857	74,044,246	438,207,040	277,718,396	5,396,462,523	5,382,777,075	99.75%
2019	199,932,498	75,157,256	360,926,420	297,118,538	5,735,360,159	5,664,526,062	98.76%
2020	214,587,909	79,242,637	201,285,517	315,624,151	5,914,852,070	6,044,035,808	102.18%
2021	178,662,058	79,620,088	1,841,384,342	332,965,261	7,681,553,297	6,648,153,534	86.55%
2022	178,688,292	84,698,789	(562,510,261)	357,097,727	7,025,332,391	7,279,605,840	103.62%

Note: Results may not total due to rounding.

[1] On a market basis, net of investment fees, administrative expenses and other expenses.

Exhibit H: Table of Amortization Bases

General Tier 1

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial loss	June 30, 2006	$7,048	15	$565	2[1]	$299
Assumption change	June 30, 2006	41,538	15	3,325	2[1]	1,757
Actuarial gain	June 30, 2007	(19,901)	15	(3,001)	2[1]	(1,586)
Actuarial gain	June 30, 2008	(18,128)	15	(3,865)	2[1]	(2,043)
Actuarial loss	June 30, 2009	55,190	15	14,794	2	7,819
Assumption change	June 30, 2009	18,574	15	4,977	2	2,630
Actuarial loss	June 30, 2010	50,018	15	18,950	3	6,803
Actuarial loss	June 30, 2011	36,225	15	17,253	4	4,733
Actuarial loss	June 30, 2012	29,865	15	16,757	5	3,746
Demographic assumption change	June 30, 2012	38,104	20	31,904	10	3,905
Economic assumption change	June 30, 2012	19,517	20	16,335	10	1,999
Actuarial loss	June 30, 2013	31,670	15	20,149	6	3,823
Actuarial loss	June 30, 2014	16,119	15	12,118	10[1]	1,483
Actuarial loss	June 30, 2015	8,457	15	6,665	10[1]	816
Assumption change	June 30, 2015	47,959	20	44,138	13	4,382
Actuarial loss	June 30, 2016	45,451	15	36,796	9	4,915
Actuarial loss	June 30, 2017	53,640	15	45,806	10	5,606
Actuarial loss	June 30, 2018	51,584	15	45,979	11	5,208
Assumption change	June 30, 2018	3,972	20	3,855	16	328
Actuarial loss	June 30, 2019	80,777	15	74,760	12	7,900
Actuarial loss	June 30, 2020	71,845	15	68,552	13	6,805
Actuarial loss	June 30, 2021	51,026	15	49,908	14	4,681
Assumption change	June 30, 2021	(170)	20	(164)	19	(12)
Actuarial loss	June 30, 2022	78,621	15	78,621	15	7,003
Subtotal				**$605,177**		**$83,000**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit H: Table of Amortization Bases (continued)

General Tier 2

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial gain	June 30, 2006	$(9,108)	15	$(729)	2[1]	$(385)
Assumption change	June 30, 2006	19,085	15	1,528	2[1]	808
Plan provision change	June 30, 2006	14,731	15	1,177	2[1]	622
Actuarial gain	June 30, 2007	(39,508)	15	(5,958)	2[1]	(3,149)
Actuarial gain	June 30, 2008	(34,794)	15	(7,415)	2[1]	(3,919)
Actuarial loss	June 30, 2009	71,253	15	19,095	2	10,092
Assumption change	June 30, 2009	22,696	15	6,080	2	3,213
Actuarial loss	June 30, 2010	47,615	15	18,043	3	6,478
Actuarial gain	June 30, 2011	(6,949)	15	(3,315)	4	(909)
Actuarial gain	June 30, 2012	(18,106)	15	(10,159)	5	(2,271)
Demographic assumption change	June 30, 2012	29,420	20	24,616	10	3,013
Economic assumption change	June 30, 2012	32,874	20	27,536	10	3,370
Actuarial gain	June 30, 2013	(23,823)	15	(15,172)	6	(2,879)
Actuarial gain	June 30, 2014	(49,125)	15	(36,928)	10[1]	(4,520)
Actuarial gain	June 30, 2015	(62,406)	15	(49,282)	10[1]	(6,032)
Assumption change	June 30, 2015	50,090	20	46,109	13	4,577
Actuarial gain	June 30, 2016	(28,842)	15	(23,356)	9	(3,120)
Actuarial gain	June 30, 2017	(41,622)	15	(35,547)	10	(4,351)
Actuarial gain	June 30, 2018	(86,831)	15	(77,417)	11	(8,768)
Assumption change	June 30, 2018	111,232	20	107,928	16	9,169
Actuarial gain	June 30, 2019	(8,940)	15	(8,275)	12	(874)
Actuarial gain	June 30, 2020	(62,406)	15	(59,556)	13	(5,912)
Actuarial gain	June 30, 2021	(184,009)	15	(179,986)	14	(16,883)
Assumption change	June 30, 2021	89,334	20	88,888	19	6,691
Actuarial gain	June 30, 2022	(262,350)	15	(262,350)	15	(23,369)
Subtotal				**$(434,445)**		**$(39,308)**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit H: Table of Amortization Bases (continued)

Safety

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial loss	June 30, 2006	$3,418	15	$273	2[1]	$144
Assumption change	June 30, 2006	42,167	15	3,375	2[1]	1,784
Actuarial gain	June 30, 2007	(37,489)	15	(5,652)	2[1]	(2,987)
Actuarial gain	June 30, 2008	(22,443)	15	(4,784)	2[1]	(2,528)
Actuarial loss	June 30, 2009	78,157	15	20,948	2	11,071
Assumption change	June 30, 2009	49,982	15	13,398	2	7,081
Actuarial loss	June 30, 2010	108,448	15	41,099	3	14,755
Actuarial loss	June 30, 2011	8,879	15	4,232	4	1,161
Actuarial gain	June 30, 2012	(7,501)	15	(4,202)	5	(939)
Demographic assumption change	June 30, 2012	55,513	20	46,479	10	5,689
Economic assumption change	June 30, 2012	51,887	20	43,416	10	5,314
Actuarial loss	June 30, 2013	7,588	15	4,836	6	918
Actuarial gain	June 30, 2014	(54,478)	15	(40,950)	10[1]	(5,012)
Actuarial gain	June 30, 2015	(55,657)	15	(43,955)	10[1]	(5,380)
Assumption change	June 30, 2015	119,953	20	110,397	13	10,959
Actuarial gain	June 30, 2016	(17,062)	15	(13,818)	9	(1,846)
Actuarial gain	June 30, 2017	(9,288)	15	(7,927)	10	(970)
Actuarial gain	June 30, 2018	(29,088)	15	(25,927)	11	(2,937)
Assumption change	June 30, 2018	33,306	20	32,310	16	2,745
Actuarial loss	June 30, 2019	48,977	15	45,333	12	4,790
Actuarial gain	June 30, 2020	(26,527)	15	(25,317)	13	(2,513)
Actuarial gain	June 30, 2021	(125,962)	15	(123,204)	14	(11,557)
Assumption change	June 30, 2021	25,639	20	25,506	19	1,920
Actuarial gain	June 30, 2022	(54,877)	15	(54,877)	15	(4,888)
Subtotal				**$40,989**		**$26,774**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit H: Table of Amortization Bases (continued)

Total VCERA

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial loss	June 30, 2006	$1,358	15	$109	2[1]	$58
Assumption change	June 30, 2006	102,790	15	8,228	2[1]	4,349
Plan provision change	June 30, 2006	14,731	15	1,177	2[1]	622
Actuarial gain	June 30, 2007	(96,898)	15	(14,611)	2[1]	(7,722)
Actuarial gain	June 30, 2008	(75,365)	15	(16,064)	2[1]	(8,490)
Actuarial loss	June 30, 2009	204,600	15	54,837	2	28,982
Assumption change	June 30, 2009	91,252	15	24,455	2	12,924
Actuarial loss	June 30, 2010	206,081	15	78,092	3	28,036
Actuarial loss	June 30, 2011	38,155	15	18,170	4	4,985
Actuarial loss	June 30, 2012	4,258	15	2,396	5	536
Demographic assumption change	June 30, 2012	123,037	20	102,999	10	12,607
Economic assumption change	June 30, 2012	104,278	20	87,287	10	10,683
Actuarial loss	June 30, 2013	15,435	15	9,813	6	1,862
Actuarial gain	June 30, 2014	(87,484)	15	(65,760)	10[1]	(8,049)
Actuarial gain	June 30, 2015	(109,606)	15	(86,572)	10[1]	(10,596)
Assumption change	June 30, 2015	218,002	20	200,644	13	19,918
Actuarial gain	June 30, 2016	(453)	15	(378)	9	(51)
Actuarial loss	June 30, 2017	2,730	15	2,332	10	285
Actuarial gain	June 30, 2018	(64,335)	15	(57,365)	11	(6,497)
Assumption change	June 30, 2018	148,510	20	144,093	16	12,242
Actuarial loss	June 30, 2019	120,814	15	111,818	12	11,816
Actuarial gain	June 30, 2020	(17,088)	15	(16,321)	13	(1,620)
Actuarial gain	June 30, 2021	(258,945)	15	(253,282)	14	(23,759)
Assumption change	June 30, 2021	114,803	20	114,230	19	8,599
Actuarial gain	June 30, 2022	(238,606)	15	(238,606)	15	(21,254)
Total				**$211,721**		**$70,466**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit I: Projection of UAAL Balances and Payments

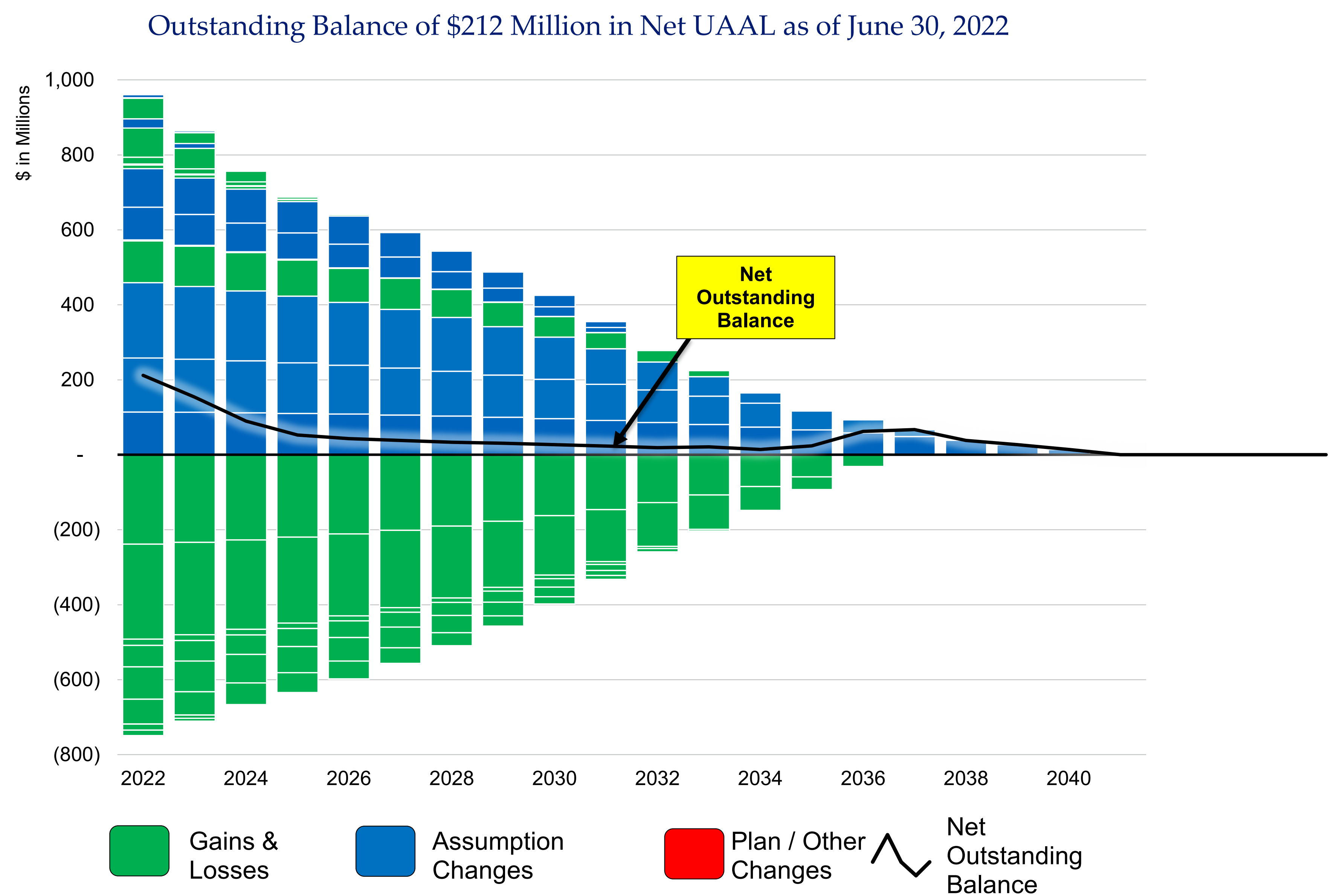


Exhibit I: Projection of UAAL Balances and Payments (continued)

Annual Payments Required to Amortize $212 Million in Net UAAL as of June 30, 2022

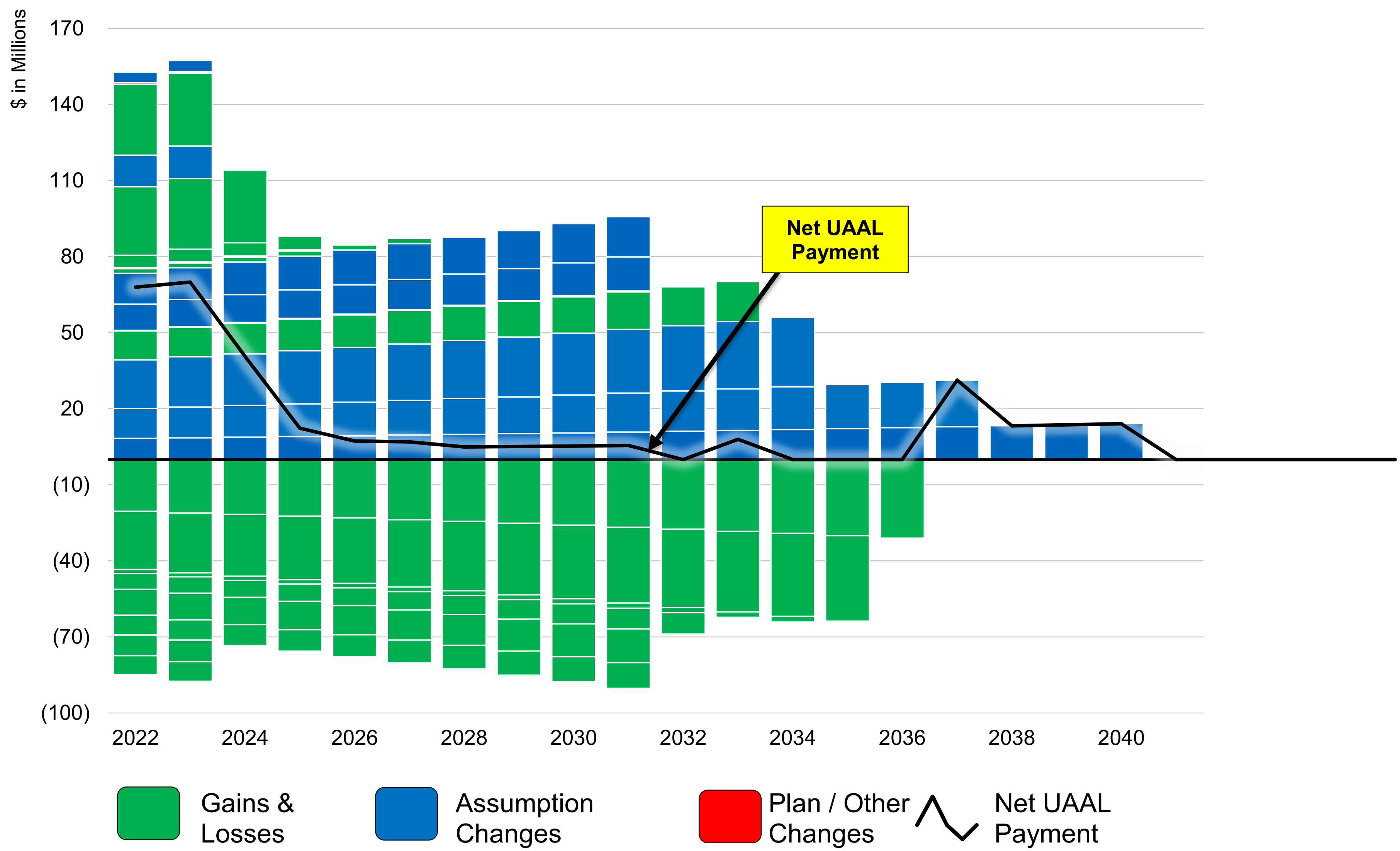


Exhibit J: Definition of Pension Terms

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, termination, 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.

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 and expenses 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 Fund'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 plan'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 UAAL.

Assumptions or Actuarial Assumptions:	The estimates upon which the cost of the Fund is calculated, including: Investment return - the rate of investment yield that the Fund 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; Termination 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 Fund 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 Fund 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 and expenses allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to 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.
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, 2017 through June 30, 2020 Actuarial Experience Study dated June 3, 2021. 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:	7.00%; net of investment and administrative expenses. Based on the Actuarial Experience Study reference above, expected investment expenses represent about 0.15% of the Actuarial Value of Assets.
Member Contribution Crediting Rate:	2.50% (actual increase is based on projected long term ten-year Treasury rate).
Consumer Price Index (CPI):	Increase of 2.50% per year.
Cost of Living Adjustments (COLA):	Retiree COLA increases of 2.75% are subject to a 3.00% maximum change per year for both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and non-PEPRA General Tier 2, SEIU members receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI that applies to future service after March 2003.
Payroll Growth:	Inflation of 2.50% per year plus “across the board” real salary increases of 0.50% per year, used to amortize the UAAL as a level percentage of payroll.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.50% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 2.50% per year from the valuation date.

Salary Increases:

The annual rate of compensation increase includes: inflation at 2.50%, plus “across the board” salary increases of 0.50% per year, plus the following merit and promotion increases:

Years of Service	Rate (%) General	Rate (%) Safety
Less than 1	7.00	9.00
1 – 2	5.25	6.25
2 – 3	4.00	4.75
3 – 4	3.50	4.50
4 – 5	3.00	4.25
5 – 6	2.75	4.00
6 – 7	2.50	2.75
7 – 8	2.25	1.75
8 – 9	2.00	1.50
9 – 10	1.75	1.25
10 – 11	1.50	1.20
11 – 12	1.40	1.15
12 – 13	1.30	1.10
13 – 14	1.20	1.05
14 – 15	1.10	1.00
15 – 16	1.00	1.00
16 – 17	0.95	1.00
17 – 18	0.90	1.00
18 – 19	0.85	1.00
19 – 20	0.80	1.00
20 & Over	0.75	1.00

Demographic Assumptions:	
Post-Retirement Mortality Rates:	*Healthy* • **General Members:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020. • **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-2020. *Disabled* • **General Members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020. • **Safety Members:** Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020. *All Beneficiaries* • Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020. The Pub-2010 mortality tables and adjustments as shown above 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 Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020. **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-2020.

	Rate (%)			
	General[1]		Safety[1]	
Age	Male	Female	Male	Female
20	0.04	0.01	0.04	0.02
25	0.02	0.01	0.03	0.02
30	0.03	0.01	0.04	0.02
35	0.04	0.02	0.04	0.03
40	0.06	0.03	0.05	0.04
45	0.09	0.05	0.07	0.06
50	0.13	0.08	0.10	0.08
55	0.19	0.11	0.15	0.11
60	0.28	0.17	0.23	0.14
65	0.41	0.27	0.35	0.20
70	0.61	0.44	0.66	0.39

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

[1] 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 Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2020, weighted one-third male and two-thirds 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-2020, weighted 80% male and 20% female.

Disability Incidence:

	Rate (%)	
Age	**General**	**Safety**
20	0.01	0.03
25	0.01	0.06
30	0.02	0.24
35	0.04	0.38
40	0.08	0.52
45	0.12	0.84
50	0.19	1.12
55	0.24	2.52
60	0.31	5.86
65	0.41	0.00
70	0.45	0.00

30% of General disabilities are assumed to be service connected (duty) disabilities and the other 70% 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:

	Rate (%)	
Years of Service	**General**	**Safety**
Less than 1	13.50	10.00
1 – 2	9.50	5.50
2 – 3	8.50	5.25
3 – 4	6.75	4.50
4 – 5	5.50	4.25
5 – 6	5.00	2.50
6 – 7	4.00	2.25
7 – 8	3.50	2.00
8 – 9	3.50	1.80
9 – 10	3.50	1.60
10 – 11	3.50	1.50
11 – 12	3.25	1.40
12 – 13	3.25	1.20
13 – 14	3.00	1.10
14 – 15	2.75	1.00
15 – 16	2.75	0.95
16 – 17	2.50	0.85
17 – 18	2.50	0.75
18 – 19	2.00	0.50
19 – 20	1.75	0.50
20 & Over	1.75	0.50

The greater of a refund of member contributions and a deferred annuity is valued when a member terminates.

No termination is assumed after a member is first assumed to retire.

Retirement Rates:

Age	General Tier 1 and 2: Less than 30 Years of Service	General Tier 1 and 2: 30 or More Years of Service	Safety Non-PEPRA: Less than 30 Years of Service	Safety Non-PEPRA: 30 or More Years of Service	General PEPRA Tier 1 and 2	Safety PEPRA
Under 50	0.00	50.00	1.50	1.50	0.00	0.00
50	2.00	2.00	2.00	2.00	0.00	4.00
51	2.25	2.25	1.75	1.75	0.00	1.75
52	2.75	2.75	2.25	2.25	1.50	3.25
53	3.00	3.00	3.25	3.25	1.50	5.50
54	3.25	4.00	15.00	20.00	2.00	16.00
55	4.50	5.00	20.00	37.00	4.00	20.00
56	5.25	6.00	20.00	25.00	4.75	20.00
57	5.50	7.00	22.00	30.00	5.25	20.00
58	6.00	9.00	22.00	33.00	5.50	18.00
59	8.00	9.50	22.00	35.00	6.50	25.00
60	10.50	14.00	35.00	35.00	9.00	30.00
61	13.00	20.00	35.00	45.00	11.00	30.00
62	22.00	30.00	35.00	45.00	20.00	35.00
63	18.00	25.00	35.00	45.00	18.00	35.00
64	18.00	25.00	35.00	45.00	16.00	35.00
65	30.00	45.00	100.00	100.00	20.00	100.00
66	35.00	50.00	100.00	100.00	30.00	100.00
67	35.00	47.50	100.00	100.00	35.00	100.00
68	27.50	47.50	100.00	100.00	25.00	100.00
69	25.00	25.00	100.00	100.00	35.00	100.00
70	25.00	25.00	100.00	100.00	55.00	100.00
71	25.00	25.00	100.00	100.00	55.00	100.00
72	25.00	25.00	100.00	100.00	55.00	100.00
73	25.00	25.00	100.00	100.00	55.00	100.00
74	25.00	25.00	100.00	100.00	55.00	100.00
75	100.00	100.00	100.00	100.00	100.00	100.00

Retirement Age and Benefit for Deferred Vested Members:	Future current and future deferred vested members, retirement age assumptions are as follows: **General Retirement Age** Reciprocal members: 60 Other members: 60 **Safety Retirement Age** Reciprocal members: 55 Other members: 52 Future deferred vested members who terminate with less than five years of service and are not vested are assumed to retire at age 70 for both General and Safety if they decide to leave their contributions on deposit. 45% of future General and 60% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 3.75% and 4.00% compensation increases are assumed per annum for General and Safety, respectively.
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 VCERA 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 55% 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.
In-Service Redemptions:	The following assumptions for in-service redemptions pay as a percentage of final average compensation are used: General Tier 1: 8.00% General Tier 2: 3.50% Safety: 6.50% General PEPRA: 0.00% Safety PEPRA: 0.00% For determining the cost of the basic benefit (i.e., non-COLA component), the cost of this pay element is currently recognized in the valuation as an employer only cost and does not affect member contribution rates.

Section 4: Actuarial Valuation Basis

Average Entry Age for Member Contribution Rates:	For non-PEPRA members hired after November 1974 who are not contributing fifty percent of Normal Cost, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively.
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 ten 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 annually over a five-year period.
Valuation Value of Assets:	Actuarial Value of Assets, reduced by the value of the non-vested supplemental benefit reserve and statutory contingency reserve.

Amortization Policy:	The UAAL as of June 30, 2011 shall continue to be amortized over separate 15-year period amortization layers based on the valuations during which each separate layer was previously established. 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 15 years. Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period of 20 years. Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis: • With the exception noted below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years. • 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. The UAAL will be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation. The UAAL will 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 VVA exceeds the AAL, so that the total of all UAAL amortization layers becomes negative), any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL will be amortized as the first of a new series of amortization layers, using the above amortization periods. If the surplus exceeds 20% of the AAL per Section 7522.52 of the Government Code, then the amount of surplus in excess of 20% of the AAL (and any subsequent surpluses in excess of that amount) will be amortized over an "open" amortization period of 30 years, but only if the other conditions of Section 7522.52 have also been met. If those conditions are not met, then the surplus will not be amortized and the full Normal Cost will be contributed. These amortization policy components will apply separately to each of VCERA's UAAL cost groups. Basic UAAL contribution rates have been calculated on a combined basis for all General Tiers. COLA UAAL contribution rates have been calculated on a combined basis for all General Tiers that have a COLA. In April 2020, the Board directed Segal to adjust the remaining amortization periods for certain amortization layers in order to minimize the contribution rate tail volatility associated with the UAAL layers that were first established in 2006, 2007 and 2008, and in 2014 and 2015. Effective with the 2020 actuarial valuation the remaining amortization periods for the 2006, 2007, and 2008 UAAL amortization layers were set to 4 years and those for the 2014 and 2015 UAAL actuarial gain/loss amortization layers were set to 12 years.

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 expressed 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 as a level 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 at the annual rate of 3.00% (i.e., 2.50% inflation plus 0.50% "across the board" salary increase). The amortization policy is described on the previous page. The recommended employer contributions shown in *Section 2, Subsection F* are calculated based on a 50/50 sharing of Normal Cost for non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers. The employer contributions shown in *Section 4, Exhibit 4* are calculated under the prior method (i.e., without 50/50 sharing of Normal Cost for non-PEPRA tiers).

Member Contributions:	The member contribution rates for all members are provided in *Section 4, Exhibit 3*, which are calculated based on a 50/50 sharing of Normal Cost. Member contributions accumulate with interest at the lesser of the assumed investment earning rate or the rate on ten-year U.S. Treasury notes. Any difference between the assumed investment earning rate and the actual interest crediting rate will be credited to the County Advance reserve. Please note that in calculating the basic member rate, we follow the Board's past practice and have not included any in-service pay redemptions that may potentially increase a member's final average compensation and hence retirement benefit. The member rates provided in the report are the full rate before reflecting any employer pickup. General Tier 2 members eligible for the fixed 2% cost-of-living benefit contribute a negotiated 2.63% of compensation per year towards the cost of that benefit that is reflected in this report. **Non-PEPRA Members (Prior Methodology)** The member contributions shown in *Section 4, Exhibit 5* are calculated under the prior method (i.e., without 50/50 sharing of Normal Cost for non-PEPRA tiers). The basic member contribution rate is determined so that the accumulation of a member's basic contributions made in a given year until a certain age will be sufficient to fund an annuity at that age that is equal to 1/120 of Final Average Compensation for General members and 1/100 of Final Average Compensation for Safety members. That age is 55 for General Tier 1 members, 60 for General Tier 2 members and 50 for Safety members. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to their basic contributions, General Tier 1 and Safety members pay one-half of the total Normal Cost necessary to fund their cost-of-living benefits. **PEPRA Members** Pursuant to Section 7522.30(a) of the Government Code, members under PEPRA tiers are required to contribute at least 50% of the Normal Cost. 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 the requirements of Section 7522.30(e). The only exception to this is that we have also shown the PEPRA Tier 2 with COLA contribution rates including the member COLA contribution rate of 2.63% of compensation based on current bargaining agreements. Also of note is that based on our discussions with VCERA, we have used the discretion made available by AB1380 to not round the PEPRA member's contribution rates to the nearest one quarter of one percent as was previously required by PEPRA.
Tier 2 COLA Procedures	This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier 2 COLA Benefit".

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 $245,000 for 2022. 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. Non-PEPRA benefits 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. However, it is anticipated that PEPRA members will not be limited in the future due to the PEPRA compensation limit applied in the determination of their benefit. Actual limitations will result in actuarial 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 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
Membership Eligibility:	All regular employees of the County of Ventura or contracting district, scheduled to work 64 or more hours biweekly, are eligible to become a member of the plan subject to classification below:
General Tier 1	All General members with membership dates before June 30, 1979, plus Deputy Sheriff trainees and certain executive management with membership dates before January 1, 2013.
General Tier 2	All General members with membership dates on or after June 30, 1979 and before January 1, 2013, except as noted above for General Tier 1.
General PEPRA Tier 1	Deputy Sheriff trainees with membership dates on or after January 1, 2013 and before April 17, 2014.
General PEPRA Tier 2	All General members with membership dates on or after January 1, 2013, except as noted above for General PEPRA Tier 1.
Safety	All Safety members with membership dates before January 1, 2013.
Safety PEPRA	All Safety members with membership dates on or after January 1, 2013.
Final Compensation for Benefit Determination:	
General Tier 1 and Safety	Highest consecutive twelve months of compensation earnable (§31462.1) (FAS1).
General Tier 2	Highest consecutive thirty-six months of compensation earnable (§31462) (FAS3).
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	Highest consecutive thirty-six months of pensionable compensation (§7522.10(c), §7522.32 and §7522.34) (FAS3).
Compensation Limit:	
General Tier 1, General Tier 2 and Safety	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 as of July 1, 2022 is $305,000. The limit is indexed for inflation on an annual basis.
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	Pensionable Compensation is limited to $134,974 for 2022 ($161,969, 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	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years regardless of age (§31672).
Safety	Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years regardless of age (§31663.25).
General PEPRA	Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).
Safety PEPRA	Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).

Benefit Formula:

	Retirement Age	Benefit Formula
General Tier 1 (§31676.11)	**Retirement Age**	**Benefit Formula**
	50	1.24% x (FAS1 – $1,400) x Yrs
	55	1.67% x (FAS1 – $1,400) x Yrs
	60	2.18% x (FAS1 – $1,400) x Yrs
	62	2.35% x (FAS1 – $1,400) x Yrs
	65 and over	2.61% x (FAS1 – $1,400) x Yrs
General Tier 2 (§31676.1)	**Retirement Age**	**Benefit Formula**
	50	1.18% x (FAS3 – $1,400) x Yrs
	55	1.49% x (FAS3 – $1,400) x Yrs
	60	1.92% x (FAS3 – $1,400) x Yrs
	62	2.09% x (FAS3 – $1,400) x Yrs
	65 and over	2.43% x (FAS3 – $1,400) x Yrs
General PEPRA Tier 1 and General PEPRA Tier 2 (§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

Benefit Formula (continued)		
Safety (§31664)	**Retirement Age**	**Benefit Formula**
	50	2.00% x FAS1 x Yrs
	55 and over	2.62% x FAS1 x Yrs
Safety PEPRA (§7522.25(d))	**Retirement Age**	**Benefit Formula**
	50	2.00% x FAS3 x Yrs
	55	2.50% x FAS3 x Yrs
	57 and over	2.70% x FAS3 x Yrs
Maximum Benefit:		
General Tier 1, General Tier 2 and Safety	100% of Highest Average Compensation (§31676.1, §31664.11, §31664).	
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	There is no final compensation limit on the maximum retirement benefit.	
Ordinary Disability:		
General		
Eligibility	Five years of service (§31720).	
Benefit	1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but the total benefit cannot be more than one-third of Final Compensation (§31727). For all members, 100% of the Service Retirement benefit will be paid, if greater.	
Safety		
Eligibility	Five years of service (§31720).	
Benefit	1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but the total benefit cannot be more than one-third of Final Compensation (§31727.2). For all members, 100% of the Service Retirement benefit will be paid, if greater.	
Line-of-Duty 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 member contributions with interest, plus one month's compensation for each year of service, to a maximum of six months' compensation (§31781).
Line-of-Duty Death	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787). An additional lump sum payment of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).
Vested Members	
Eligibility	Five years of service.
Basic benefit	60% of the greater of Service Retirement or Ordinary Disability Retirement benefit payable to surviving eligible spouse or eligible children (§31765.1, §31781.1), in lieu of the basic lump sum benefit above (§31781). An additional lump sum payment of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).
Death After Retirement:	
All Members	
Service Retirement or Ordinary 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 one year prior to the effective retirement date 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, §31785.1).
Line-of-Duty Disability	Unless another option was selected at retirement, 100% of member's unmodified allowance continued to eligible spouse (§31786). An eligible spouse is a surviving spouse who was married to the member one year prior to the effective retirement date or at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31786.1).
Additional Death Benefit	A lump sum benefit of $5,000 lump sum benefit payable to member's beneficiary (§31789.3).
Withdrawal Benefits:	
Less than Five Years of Service	Refund of accumulated member contributions with interest (§31628). A member may also elect to leave contributions on deposit in the retirement fund (§31629.5).
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.

Section 4: Actuarial Valuation Basis

Post-retirement Cost-of-Living Benefits:	
General Tier 1, Safety, General PEPRA Tier 1 and Safety PEPRA	Future changes based on changes to the Consumer Price Index to a maximum of 3% per year, excess "banked" (§31870.1).
General Tier 2 and General PEPRA Tier 2	Members represented by SEIU receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI that applies to future service after March, 2003. This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier II COLA Benefit".
Supplemental Benefit:	A supplemental benefit in the amount of $108.44 per month is paid to retirees and their survivors.
Member Contributions:	Please refer to *Section 4, Exhibit 3* for the specific rates.
General Tier 1, Safety and Safety PEPRA	Provide for 50% of total Normal Cost.
General Tier 2 and General PEPRA Tier 2	Provide for 50% of total basic Normal Cost. In addition, for General Tier 2 with COLA members, the current member COLA contribution rate of 2.63% of compensation has been reflected.
Other Information:	For Non-PEPRA members hired after November 1974, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively. Safety Non-PEPRA members with 30 or more years of service are exempt from paying member contributions. The same applies for Non-General PEPRA members hired on or before March 7, 1973.
Plan Provisions Not Valued:	The Board of Retirement has approved a non-vested supplemental benefit. This benefit is funded from Undistributed Excess Earnings, paid from a reserve that is not included in the Valuation Value of Assets and is subject at all times to the availability of funds. The non-vested supplemental benefit of $27.50 per month paid to retirees and their survivors terminated upon issuance of the June 2019 payment. This was due to the depletion of the funds in this reserve.
Changed Plan Provisions:	There have been no changes in plan provisions since the last valuation.

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

50/50 Sharing of Normal Cost for Non-PEPRA Tiers

	Basic		COLA		Total	
	First $350	**Over $350**	**First $350**	**Over $350**	**First $350**	**Over $350**
General Tier 1	6.45%	9.68%	2.05%	3.07%	8.50%	12.75%
General Tier 2	5.21%	7.82%	0.00%	0.00%	5.21%	7.82%
General Tier 2 w/ COLA[1]	5.21%	7.82%	2.63%	2.63%	7.84%	10.45%
Safety	11.99%	11.99%	4.70%	4.70%	16.69%	16.69%

[1] General Tier 2 members with COLA are required to pay COLA contributions of 2.63% of compensation based on current bargaining agreements.

Exhibit 3: Member Contribution Rates (continued)

Member Contribution Rates for PEPRA Members

	Basic	COLA	Total
General Tier 2	7.73%	0.00%	7.73%
General Tier 2 w/ COLA[1]	7.73%	2.63%	10.36%
Safety	11.05%	4.36%	15.41%

[1] General Tier 2 members with COLA are required to pay COLA contributions of 2.63% of compensation based on current bargaining agreements.

Exhibit 4: Employer Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

	June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24				June 30, 2021 Actuarial Valuation Recommended Rates for FY 2022-23			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in ‘000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in ‘000s)
General Tier 1 Members								
Normal Cost	11.47%	3.36%	14.83%	$260	10.27%	2.96%	13.23%	$304
UAAL[2]	3.19%	6.32%	9.51%	167	6.03%	6.29%	12.32%	283
Total Contributions	**14.66%**	**9.68%**	**24.34%**	**$427**	**16.30%**	**9.25%**	**25.55%**	**$587**
General Tier 2 Members								
Normal Cost	8.79%	0.00%	8.79%	$17,361	8.99%	0.00%	8.99%	$18,236
UAAL[2]	3.19%	0.00%	3.19%	6,301	6.03%	0.00%	6.03%	12,241
Total Contributions	**11.98%**	**0.00%**	**11.98%**	**$23,662**	**15.02%**	**0.00%**	**15.02%**	**$30,477**
General PEPRA Tier 2 Members								
Normal Cost	7.73%	0.00%	7.73%	$9,970	7.77%	0.00%	7.77%	$7,416
UAAL[2]	3.19%	0.00%	3.19%	4,114	6.03%	0.00%	6.03%	5,757
Total Contributions	**10.92%**	**0.00%**	**10.92%**	**$14,084**	**13.80%**	**0.00%**	**13.80%**	**$13,173**
General Tier 2 Members w/ COLA								
Normal Cost[3]	8.79%	0.68%	9.47%	$16,967	8.99%	0.68%	9.67%	$18,899
UAAL[2, 4]	3.19%	6.32%	9.51%	17,038	6.03%	6.29%	12.32%	24,074
Total Contributions	**11.98%**	**7.00%**	**18.98%**	**$34,005**	**15.02%**	**6.97%**	**21.99%**	**$42,973**
General PEPRA Tier 2 Members w/ COLA								
Normal Cost[3]	7.73%	0.60%	8.33%	$14,093	7.77%	0.68%	8.45%	$10,936
UAAL[2, 4]	3.19%	6.32%	9.51%	16,090	6.03%	6.29%	12.32%	15,942
Total Contributions	**10.92%**	**6.92%**	**17.84%**	**$30,183**	**13.80%**	**6.97%**	**20.77%**	**$26,878**
All General Members[5]								
Normal Cost	8.33%	0.34%	8.67%	$58,651	8.56%	0.36%	8.92%	$55,791
UAAL	3.19%	3.27%	6.46%	43,710	6.03%	3.29%	9.32%	58,297
Total Contributions	**11.52%**	**3.61%**	**15.13%**	**$102,361**	**14.59%**	**3.65%**	**18.24%**	**$114,088**

Note: Applicable footnotes are shown on next page.

Exhibit 4: Employer Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

	June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24				June 30, 2021 Actuarial Valuation Recommended Rates for FY 2022-23			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
Safety Members								
Normal Cost	15.17%	4.48%	19.65%	$28,095	15.42%	4.61%	20.03%	$29,452
UAAL	38.87%	(25.24%)	13.63%	19,488	42.89%	(26.89%)	16.00%	23,526
Total Contributions	**54.04%**	**(20.76%)**	**33.28%**	**$47,583**	**58.31%**	**(22.28%)**	**36.03%**	**$52,978**
Safety PEPRA Members								
Normal Cost	11.05%	4.36%	15.41%	$8,241	11.00%	4.34%	15.34%	$6,925
UAAL	38.87%	(25.24%)	13.63%	7,289	42.89%	(26.89%)	16.00%	7,223
Total Contributions	**49.92%**	**(20.88%)**	**29.04%**	**$15,530**	**53.89%**	**(22.55%)**	**31.34%**	**$14,148**
All Safety Members[5]								
Normal Cost	14.05%	4.45%	18.50%	$36,336	14.38%	4.55%	18.93%	$36,377
UAAL	38.87%	(25.24%)	13.63%	26,777	42.89%	(26.89%)	16.00%	30,749
Total Contributions	**52.92%**	**(20.79%)**	**32.13%**	**$63,113**	**57.27%**	**(22.34%)**	**34.93%**	**$67,126**
All Categories Combined[5]								
Normal Cost	9.62%	1.26%	10.88%	$94,987	9.93%	1.34%	11.27%	$92,168
UAAL	11.22%	(3.15%)	8.07%	70,487	14.70%	(3.81%)	10.89%	89,046
Total Contributions	**20.84%**	**(1.89%)**	**18.95%**	**$165,474**	**24.63%**	**(2.47%)**	**22.16%**	**$181,214**

1 Based on projected compensation for each year shown on page 35.
2 Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).
3 Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.
4 Includes 0.33% and 0.35% in COLA UAAL costs for June 30, 2022 and June 30, 2021, respectively, attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.
5 These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

General Tier 1

	Basic		COLA		Total	
Entry Age	First $350	Over $350	First $350	Over $350	First $350	Over $350
16	3.76%	5.64%	1.32%	1.99%	5.08%	7.63%
17	3.83%	5.74%	1.35%	2.03%	5.18%	7.77%
18	3.90%	5.86%	1.38%	2.07%	5.28%	7.93%
19	3.98%	5.97%	1.41%	2.11%	5.39%	8.08%
20	4.06%	6.08%	1.43%	2.15%	5.49%	8.23%
21	4.13%	6.20%	1.46%	2.19%	5.59%	8.39%
22	4.21%	6.32%	1.49%	2.23%	5.70%	8.55%
23	4.29%	6.44%	1.52%	2.28%	5.81%	8.72%
24	4.38%	6.57%	1.54%	2.32%	5.92%	8.89%
25	4.46%	6.69%	1.57%	2.36%	6.03%	9.05%
26	4.55%	6.82%	1.60%	2.41%	6.15%	9.23%
27	4.63%	6.95%	1.64%	2.46%	6.27%	9.41%
28	4.72%	7.09%	1.67%	2.50%	6.39%	9.59%
29	4.82%	7.22%	1.70%	2.55%	6.52%	9.77%
30	4.91%	7.36%	1.73%	2.60%	6.64%	9.96%
31	5.01%	7.51%	1.76%	2.65%	6.77%	10.16%
32	5.10%	7.66%	1.80%	2.70%	6.90%	10.36%
33	5.21%	7.81%	1.84%	2.76%	7.05%	10.57%
34	5.31%	7.96%	1.87%	2.81%	7.18%	10.77%
35	5.41%	8.12%	1.92%	2.87%	7.33%	10.99%
36	5.52%	8.28%	1.95%	2.92%	7.47%	11.20%
37	5.63%	8.44%	1.98%	2.98%	7.61%	11.42%
38	5.73%	8.60%	2.03%	3.04%	7.76%	11.64%

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

General Tier 1 (continued)

	Basic		COLA		Total	
Entry Age	**First $350**	**Over $350**	**First $350**	**Over $350**	**First $350**	**Over $350**
39	5.84%	8.76%	2.06%	3.09%	7.90%	11.85%
40	5.95%	8.92%	2.10%	3.15%	8.05%	12.07%
41	6.05%	9.08%	2.14%	3.21%	8.19%	12.29%
42	6.16%	9.24%	2.17%	3.26%	8.33%	12.50%
43	6.26%	9.40%	2.22%	3.32%	8.48%	12.72%
44	6.37%	9.56%	2.25%	3.37%	8.62%	12.93%
45	6.47%	9.70%	2.28%	3.43%	8.75%	13.13%
46	6.56%	9.83%	2.31%	3.47%	8.87%	13.30%
47	6.64%	9.95%	2.34%	3.52%	8.98%	13.47%
48	6.71%	10.06%	2.36%	3.55%	9.07%	13.61%
49	6.77%	10.16%	2.40%	3.59%	9.17%	13.75%
50	6.83%	10.25%	2.42%	3.62%	9.25%	13.87%
51	6.88%	10.32%	2.42%	3.64%	9.30%	13.96%
52	6.91%	10.36%	2.44%	3.66%	9.35%	14.02%
53	6.88%	10.33%	2.44%	3.65%	9.32%	13.98%
54 & Over	6.79%	10.19%	2.40%	3.60%	9.19%	13.79%

Interest: 7.00% per annum
COLA: 2.75%
Mortality: See *Section 4, Exhibit 1*
Salary Increase: Inflation (2.50%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor: 35.32%

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 35. These rates are determined before any pickups by the employer.

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

General Tier 2

	Basic		COLA		Total	
Entry Age	**First $350**	**Over $350**	**First $350**	**Over $350**	**First $350**	**Over $350**
16	3.12%	4.68%	0.00%	0.00%	3.12%	4.68%
17	3.18%	4.77%	0.00%	0.00%	3.18%	4.77%
18	3.24%	4.86%	0.00%	0.00%	3.24%	4.86%
19	3.30%	4.96%	0.00%	0.00%	3.30%	4.96%
20	3.37%	5.05%	0.00%	0.00%	3.37%	5.05%
21	3.43%	5.15%	0.00%	0.00%	3.43%	5.15%
22	3.50%	5.25%	0.00%	0.00%	3.50%	5.25%
23	3.57%	5.35%	0.00%	0.00%	3.57%	5.35%
24	3.64%	5.46%	0.00%	0.00%	3.64%	5.46%
25	3.71%	5.56%	0.00%	0.00%	3.71%	5.56%
26	3.78%	5.67%	0.00%	0.00%	3.78%	5.67%
27	3.85%	5.78%	0.00%	0.00%	3.85%	5.78%
28	3.93%	5.89%	0.00%	0.00%	3.93%	5.89%
29	4.00%	6.00%	0.00%	0.00%	4.00%	6.00%
30	4.08%	6.12%	0.00%	0.00%	4.08%	6.12%
31	4.16%	6.23%	0.00%	0.00%	4.16%	6.23%
32	4.24%	6.35%	0.00%	0.00%	4.24%	6.35%
33	4.32%	6.48%	0.00%	0.00%	4.32%	6.48%
34	4.40%	6.60%	0.00%	0.00%	4.40%	6.60%
35	4.49%	6.73%	0.00%	0.00%	4.49%	6.73%
36	4.58%	6.86%	0.00%	0.00%	4.58%	6.86%
37	4.67%	7.00%	0.00%	0.00%	4.67%	7.00%
38	4.76%	7.14%	0.00%	0.00%	4.76%	7.14%
39	4.85%	7.28%	0.00%	0.00%	4.85%	7.28%
40	4.94%	7.42%	0.00%	0.00%	4.94%	7.42%

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

General Tier 2 (continued)

	Basic		COLA		Total	
Entry Age	**First $350**	**Over $350**	**First $350**	**Over $350**	**First $350**	**Over $350**
41	5.04%	7.56%	0.00%	0.00%	5.04%	7.56%
42	5.13%	7.70%	0.00%	0.00%	5.13%	7.70%
43	5.23%	7.84%	0.00%	0.00%	5.23%	7.84%
44	5.32%	7.98%	0.00%	0.00%	5.32%	7.98%
45	5.41%	8.12%	0.00%	0.00%	5.41%	8.12%
46	5.50%	8.26%	0.00%	0.00%	5.50%	8.26%
47	5.59%	8.39%	0.00%	0.00%	5.59%	8.39%
48	5.68%	8.52%	0.00%	0.00%	5.68%	8.52%
49	5.76%	8.65%	0.00%	0.00%	5.76%	8.65%
50	5.84%	8.76%	0.00%	0.00%	5.84%	8.76%
51	5.90%	8.86%	0.00%	0.00%	5.90%	8.86%
52	5.96%	8.94%	0.00%	0.00%	5.96%	8.94%
53	6.01%	9.02%	0.00%	0.00%	6.01%	9.02%
54	6.06%	9.08%	0.00%	0.00%	6.06%	9.08%
55	6.08%	9.12%	0.00%	0.00%	6.08%	9.12%
56	6.08%	9.12%	0.00%	0.00%	6.08%	9.12%
57	6.03%	9.05%	0.00%	0.00%	6.03%	9.05%
58	6.23%	9.34%	0.00%	0.00%	6.23%	9.34%
59 & Over	6.44%	9.66%	0.00%	0.00%	6.44%	9.66%

Interest: 7.00% per annum
COLA: Members represented by SEIU contribute a negotiated 2.63% for a fixed 2% COLA pursuant to Government Code 31627.
Mortality: See *Section 4, Exhibit 1*
Salary Increase: Inflation (2.50%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit 1*)

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 35. These rates are determined before any pickups by the employer.

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

Safety			
Entry Age	Basic	COLA	Total
16	7.96%	4.46%	12.42%
17	8.10%	4.53%	12.63%
18	8.24%	4.61%	12.85%
19	8.39%	4.69%	13.08%
20	8.53%	4.77%	13.30%
21	8.68%	4.85%	13.53%
22	8.83%	4.94%	13.77%
23	8.98%	5.02%	14.00%
24	9.14%	5.11%	14.25%
25	9.30%	5.20%	14.50%
26	9.46%	5.29%	14.75%
27	9.63%	5.39%	15.02%
28	9.80%	5.48%	15.28%
29	9.97%	5.58%	15.55%
30	10.15%	5.68%	15.83%
31	10.33%	5.78%	16.11%
32	10.52%	5.89%	16.41%
33	10.72%	6.00%	16.72%
34	10.92%	6.11%	17.03%
35	11.13%	6.23%	17.36%
36	11.35%	6.35%	17.70%

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

Safety (continued)

Entry Age	Basic	COLA	Total
37	11.57%	6.47%	18.04%
38	11.80%	6.60%	18.40%
39	12.04%	6.73%	18.77%
40	12.29%	6.87%	19.16%
41	12.54%	7.01%	19.55%
42	12.79%	7.15%	19.94%
43	12.95%	7.24%	20.19%
44	12.99%	7.27%	20.26%
45	13.02%	7.28%	20.30%
46	13.04%	7.30%	20.34%
47	13.07%	7.31%	20.38%
48	12.99%	7.27%	20.26%
49 & Over	12.70%	7.10%	19.80%

Interest:	7.00% per annum
COLA:	2.75%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	55.94%

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 27. These rates are determined before any pickups by the employer.

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Ventura County Employees' Retirement Association

Governmental Accounting Standards Board Statement No. 67 (GAS 67) Actuarial Valuation

As of June 30, 2022

Segal

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December 20, 2022

Board of Retirement
Ventura County Employees' Retirement Association
1190 S. Victoria Avenue, Suite 200
Ventura, CA 93003-6572

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statement No. 67 (GAS 67) Actuarial Valuation as of June 30, 2022. 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 VCERA in preparing items related to the pension plan in their financial report. The census and financial information on which our calculations were based was prepared by VCERA. 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 directed 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 Plan.

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

JY/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 No. 67 (GAS 67) as of June 30, 2022. This valuation is based on:

- The benefit provisions of VCERA, 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 VCERA;
- The assets of the Plan as of June 30, 2022, provided by VCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2022 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2022 valuation.

General observations on GAS 67 actuarial valuation

1. It is important to note that 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 VCERA uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on generally the same basis as VCERA'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. It is our understanding that VCERA terminated the non-vested supplemental ($27.50) reserve after the June 2019 payment due to the depletion of that Reserve. Any remaining amount in that Reserve is available to pay retroactive benefits, if any. Note that we have included the Reserve amount in the Plan's Fiduciary Net Position but have not included any corresponding liability amount in the TPL.

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) calculated on a market value basis.

Highlights of the valuation

1. For this report, the reporting dates for the Plan are June 30, 2022 and 2021. The NPLs measured as of June 30, 2022 and 2021 have been determined by rolling forward the TPL as of June 30, 2021 and 2020, respectively. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement dates. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected.
2. The NPL increased from $(505) million as of June 30, 2021 to $438 million as of June 30, 2022 primarily due to the -7.25% return on the market value of assets during 2021/2022 (that was less than the assumed return of 7.00%). Changes in these values during the last two fiscal years ending June 30, 2022 and June 30, 2021 can be found in *Section 2, Schedules of changes in Net Pension Liability* on page 19.
3. The discount rate used to determine the TPL and NPL as of June 30, 2022 was 7.00% following the same assumption used by VCERA in the funding valuation as of the same date. The detailed derivation of the discount rate of 7.00% used in calculation of the TPL and NPL as of June 30, 2022 can be found in *Section 3, Appendix A.* Various other information that is required to be disclosed can be found throughout *Section 2*.
4. *Section 3* contains two schedules that the American Institute of Certified Public Accountants (AICPA) recommends be prepared by cost sharing pension plans. These two schedules contain summary information related to GAS 68 and are based on many of the results that will be shown in a separate GAS 68 report. The first schedule shows the method used for allocating the NPL along with the NPL amounts allocated amongst all of the employers in VCERA. The second schedule is a summary that shows the allocated NPL, deferred outflows and inflows of resources and pension expense by employer. Further information regarding GAS 68 including additional information that employers will need to disclose will be provided in a separate report that is anticipated to be completed during the first quarter of 2023.
5. 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 non-PEPRA members and pensionable compensation for PEPRA members. In response, the Board adopted a Resolution, which detailed the implementation of certain aspects of the Alameda decision including reclassifying certain pay items so that they are no longer included in compensation earnable, including standby and call-back pay. However, the Board has delayed certain exclusions including flexible benefit credits. As discussed with VCERA staff, the effect of the Alameda Decision will be reflected as gains and losses as issues are settled and corrections are made to the membership data provided for each

valuation. Our understanding is that the June 30, 2021 membership data (used in the roll forward to determine the TPL as of June 30, 2022) provided reflected some of the reclassifications of the pay codes that have been adopted by the Board for active members, including standby and call-back pay. Any additional changes in the membership data after June 30, 2021 as a result of the Alameda Decision will be reflected in future valuations once they are known. In addition, any additional impact on the Plan's Fiduciary Net Position related to recovery of benefits and/or refunds of member contributions previously paid in conjunction with these pay items has not been reflected in this valuation but will be reflected in future valuations once it is known.

6. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2022. 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 does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2022. 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, 2022	June 30, 2021
Disclosure elements for plan year ending June 30:	• Service cost[1]	$165,663,753	$152,049,281
	• Total Pension Liability	7,463,430,523	7,177,087,693
	• Plan's Fiduciary Net Position	7,025,332,391	7,681,553,297
	• Net Pension Liability	438,098,132	(504,465,604)
Schedule of contributions for plan year ending June 30:	• Actuarially determined contributions[2]	$178,667,231	$178,628,118
	• Actual contributions	178,667,231	178,628,118
	• Contribution deficiency / (excess)	0	0
Demographic data for plan year ending June 30:[3]	• Number of retired members and beneficiaries	8,007	7,751
	• Number of inactive vested members[4]	3,812	3,491
	• Number of active members	9,077	8,491
Key assumptions as of June 30:	• Investment rate of return	7.00%	7.00%
	• Inflation rate	2.50%	2.50%
	• Projected salary increases[5]	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%
	• Cost of living adjustments		
	– Tiers with 3.00% COLA	2.75%	2.75%
	– Tiers with fixed 2% COLA	2.00%	2.00%
	– Tiers without COLA	0.00%	0.00%

[1] The service cost is based on the previous year's valuation, meaning the 2022 and 2021 values are based on the valuations as of June 30, 2021 and June 30, 2020, respectively. The 2022 service cost has been calculated using the assumptions shown in the 2021 column and the 2021 service cost has been calculated using the assumptions used in the June 30, 2020 valuation. The key assumptions as of June 30, 2020 are as follows:

Key assumptions as of June 30, 2020:

Investment rate of return	7.25%
Inflation rate	2.75%
Projected salary increases*	General: 3.75% to 10.25% and Safety: 3.95% to 11.75%
Cost of living adjustments:	Tiers with 3.00% COLA: 2.75%, Tiers with fixed 2% COLA: 2.00% and Tiers without COLA: 0.00%

* Includes inflation at 2.75% plus real across-the-board salary increases of 0.50% plus merit and promotion increases.

[2] Actuarially Determined Contributions exclude employer paid member contributions.

[3] Data as of June 30, 2021 is used in the measurement of the TPL as of June 30, 2022.

[4] Includes inactive members with member contributions on deposit.

[5] Includes inflation at 2.50% plus real across-the-board salary increases of 0.50% plus merit and promotion 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 provisions.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by VCERA. 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	This valuation is based on the market value of assets as of the measurement date, as provided by VCERA.
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 VCERA 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 VCERA 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 VCERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to VCERA.

Section 2: GAS 67 Information

General information about the pension plan

Plan Description

Plan administration. The Ventura County Employees' Retirement Association (VCERA) was established by the County of Ventura in 1947. VCERA is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et seq.) and the California Public Employees' Pension Reform Act of 2013 or "PEPRA" (California Government Code Section 7522 et seq.). VCERA is a cost-sharing multiple employer public employee retirement system whose main function is to provide service retirement, disability, death and survivor benefits to the safety and general members employed by the County of Ventura. VCERA also provides retirement benefits to the employee members of the Ventura County Courts, Air Pollution Control District, the Ventura Regional Sanitation District and VCERA.

The management of VCERA is vested with the VCERA Board of Retirement. The Board consists of nine members and three alternates. The County Treasurer is elected by the general public and a member of the Board of Retirement by law. Four members and one alternate, one of whom may be a County Supervisor, are appointed by the Board of Supervisors. Two members are elected by the general membership; one member and one alternate are elected by the safety membership, one member and one alternate 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, 2022, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	8,007
Inactive vested members entitled to but not yet receiving benefits[1]	3,812
Active members	9,077
Total	**20,896**

Note: Data as of June 30, 2022 is not used in the measurement of the TPL as of June 30, 2022.

[1] Includes inactive members with member contributions on deposit.

Section 2: GAS 67 Information

Benefits provided. VCERA provides service retirement, disability, death and survivor benefits to eligible employees. All permanent employees of the County of Ventura or contracting district who work a regular schedule of 64 or more hours per bi-weekly pay period become members of VCERA upon appointment. There are separate retirement plans for safety and general member employees. Safety membership is extended to those involved in active law enforcement, fire suppression, and probation. The table below indicates all existing VCERA membership tiers:

Membership Tier	Retirement Eligibility
Tier 1 - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 1 - Safety Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 20 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 2 - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 2 COLA - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 5[1] - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.
Tier 6[2] - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.
Tier 7[3] - Safety PEPRA Members hired on or after January 1, 2013	Age 50 and five years of service credit. Age 70, regardless of service credit.
Tier 8[2] COLA - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.

[1] These are also referred to as PEPRA Tier 1.

[2] These are also referred to as PEPRA Tier 2.

[3] These are also referred to as Safety PEPRA.

Section 2: GAS 67 Information

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 1 and Tier 2 are calculated pursuant to the provisions of California Government Code Sections 31676.11 and 31676.1, respectively. The monthly allowance is equal to 1/90th of the first $350 of final compensation, plus 1/60th of the excess final compensation times years of accrued retirement service credit times age factor from either Section 31676.11 (Tier 1) or 31676.1 (Tier 2). General member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provisions of California Government Code Section 7522.20(a). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.20(a).

Safety member benefits are calculated pursuant to the provisions of California Government Code Section 31664. The monthly allowance is equal to 1/50th of final compensation times years of accrued retirement service credit times age factor from Section 31664. For those Safety members first hired on or after January 1, 2013, benefits are calculated pursuant to the provisions of California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.25(d).

For members with membership dates before January 1, 2013, the maximum monthly retirement allowance is 100% of final compensation. There is no 100% of final average compensation limit on the maximum monthly retirement allowance benefit for members with membership dates on or after January 1, 2013. However, the maximum amount of compensation earnable that can be considered for purposes of retirement contributions and benefit calculations for 2022 for members hired on or after July 1, 1996 but before January 1, 2013 is $305,000. For members hired on or after January 1, 2013 who are enrolled in Social Security, the maximum amount of pensionable compensation that can be considered for purposes of retirement contributions and benefit calculations for 2022 is $134,974 ($161,969 for those not 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.[1]

Final average compensation consists of the highest 12 consecutive months for Legacy Safety and Tier 1 General members. The final average compensation consists of the highest 36 consecutive months for all other tiers.

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. An eligible surviving spouse is one married to the member one year prior to the effective retirement date or at least two years prior to the date of death and 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

[1] Members and employers do not pay contributions on compensation in excess of the pensionable compensation caps.

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 or named beneficiary having an insurable interest in the life of the member.

VCERA provides an annual cost-of-living adjustment (COLA) benefit to Safety and Tier 1 General member retirees. The COLA, based upon the change in the December-to-December Consumer Price Index for the Los Angeles-Long Beach-Anaheim Area, is capped at 3.0%. Certain Tier 2 and all Tier 8 General member retirees receive a fixed 2% COLA that applies to future service after March 2003 pursuant to collective bargaining agreements.

The employers 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 VCERA's actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2022 for 2021/2022 (based on the June 30, 2020 valuation) was 22.22% of compensation.

Members are required to make contributions to VCERA up to the requisite limits, regardless of the retirement plan or tier.[1] The average member contribution rate as of June 30, 2022 for 2021/2022 (based on the June 30, 2020 valuation) was 9.91% of compensation.

[1] Safety Legacy members with 30 or more years of service are exempt from paying member contributions. The same applies for General Legacy members hired on or before March 7, 1973.

Net Pension Liability

The components of the Net Pension Liability were as follows:

Measurement Date	June 30, 2022	June 30, 2021
Total Pension Liability	$7,463,430,523	$7,177,087,693
Plan's Fiduciary Net Position	(7,025,332,391)	(7,681,553,297)
Net Pension Liability	**$438,098,132**	**$(504,465,604)**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	94.13%	107.03%

The Net Pension Liability (NPL) was measured as of June 30, 2022 and 2021. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2021 and 2020, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of June 30, 2022 and 2021 are the same as those used in the VCERA actuarial valuations as of June 30, 2022 and 2021. The TPL and the Plan's Fiduciary Net Position include liabilities and assets held for the non-vested supplemental ($27.50) reserve.[1]

Actuarial assumptions. The TPLs as of June 30, 2022 and 2021 were determined by actuarial valuations as of June 30, 2021 and 2020, respectively. The actuarial assumptions used were based on the results of an experience study for the period from July 1, 2017 through June 30, 2020 and they are the same assumptions used in the June 30, 2022 and 2021 funding valuations for VCERA. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

[1] It is our understanding that the VCERA has terminated the non-vested supplemental reserve after the June 2019 payment due to the depletion of that Reserve.

Section 2: GAS 67 Information

Investment rate of return:	7.00%, net of pension plan investment expense, including inflation
Inflation rate:	2.50%
Real across-the-board salary increase:	0.50%
Projected salary increases:	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%, varying by service, including inflation and real across-the-board salary increase
Cost of living adjustments (COLA):	Retiree COLA increases of 2.75% per year for both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and non-PEPRA General Tier 2, members represented by SEIU receive a fixed 2% COLA that applies to future service after March 2003. For both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety members that have COLA banks, we assume they receive 3.0% COLA increases until their COLA banks are exhausted and 2.75% thereafter. For both PEPRA and non-PEPRA General Tier 2 members represented by SEIU, the fixed 2% COLA increase is not subject to changes in the CPI.
Other assumptions:	See analysis of actuarial experience during the period July 1, 2017 through June 30, 2020

The Entry Age Actuarial Cost Method used in VCERA'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 VCERA'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.

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments[1] was determined in 2021 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 tables. This information was used in the derivation of the long-term expected investment rate of return assumption in the June 30, 2022 and 2021 actuarial valuations. This information will change every three years based on the actuarial experience study.

June 30, 2022

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Large Cap Equity	27.69%	5.39%
Small Cap Equity	3.96%	6.58%
Developed International Equity	16.04%	6.39%
Emerging Market Equity	4.31%	8.60%
Core Bonds	5.00%	0.83%
Treasuries	2.00%	0.00%
Real Estate	8.00%	5.01%
Private Equity	16.00%	10.00%
Private Debt/Credit Strategies	6.00%	5.02%
Infrastructure	4.00%	5.89%
Natural Resources	2.00%	11.24%
Absolute Return Fixed Income	5.00%	2.17%
Total	**100.00%**	**6.06%**

[1] Note that the investment return assumption for funding purposes is developed net of both investment and administrative expenses; however, the same investment return assumption is used for financial reporting purposes, where it is considered gross of administrative expenses.

Discount rate. The discount rate used to measure the TPL was 7.00% as of June 30, 2022 and 2021. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both June 30, 2022 and 2021.

Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL as of June 30, 2022, calculated using the discount rate of 7.00%, as well as what the NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability as of June 30, 2022	$1,424,915,740	$438,098,132	$(377,163,465)

Schedule of changes in Net Pension Liability – Last two fiscal years

Measurement Date	June 30, 2022	June 30, 2021
Total Pension Liability		
• Service cost	$165,663,753	$152,049,281
• Interest	501,494,181	487,569,069
• Change of benefit terms	0	0
• Differences between expected and actual experience	(23,717,377)	8,880,010
• Changes of assumptions	0	122,030,630
• Benefit payments, including refunds of member contributions	(357,097,727)	(332,965,261)
Net change in Total Pension Liability	**$286,342,830**	**$437,563,729**
Total Pension Liability – beginning	**7,177,087,693**	**6,739,523,964**
Total Pension Liability – ending	**$7,463,430,523**	**$7,177,087,693**
Plan's Fiduciary Net Position		
• Contributions – employer[1]	$178,667,231	$178,628,118
• Contributions – employee[1]	84,719,851	79,654,028
• Net investment income	(553,406,546)	1,849,957,596
• Benefit payments, including refunds of member contributions	(357,097,727)	(332,965,261)
• Administrative expense	(6,169,082)	(5,523,345)
• Other expense	(2,934,633)	(3,049,909)
Net change in Plan's Fiduciary Net Position	**$(656,220,906)**	**$1,766,701,227**
Plan's Fiduciary Net Position – beginning	**7,681,553,297**	**5,914,852,070**
Plan's Fiduciary Net Position – ending	**$7,025,332,391**	**$7,681,553,297**
Net Pension Liability – ending	**$438,098,132**	**$(504,465,604)**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	**94.13%**	**107.03%**
Covered payroll[2]	**$836,840,000**	**$785,121,000**
Net Pension Liability as percentage of covered payroll	**52.35%**	**(64.25%)**

Notes to Schedule:

Benefit changes: None

[1] See footnote 2 on the following page.

[2] Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of employer contributions – Last ten fiscal years

Year Ended June 30	Actuarially Determined Contributions[1,2]	Contributions in Relation to the Actuarially Determined Contributions[1,2]	Contribution Deficiency / (Excess)	Covered Payroll[3]	Contributions as a Percentage of Covered Payroll
2013	$142,370,000	$142,370,000	$0	$632,146,000	22.52%
2014	161,247,000	161,247,000	0	642,779,000	25.09%
2015	173,269,000	173,269,000	0	665,086,000	26.05%
2016	177,830,000	177,830,000	0	688,233,000	25.84%
2017	190,712,000	190,712,000	0	716,033,000	26.63%
2018	197,638,000	197,638,000	0	736,994,000	26.82%
2019	199,890,664	199,890,664	0	754,657,000	26.49%
2020	214,553,123	214,553,123	0	768,619,000	27.91%
2021	178,628,118	178,628,118	0	785,121,000	22.75%
2022	178,667,231	178,667,231	0	836,840,000	21.35%

See accompanying notes to this schedule on the next page.

[1] All “Actuarially Determined Contributions” through June 30, 2014 were determined as the “Annual Required Contribution” under GAS 25 and 27.

[2] Actuarially Determined Contributions exclude employer paid member contributions.

[3] Covered payroll represents payroll on which contributions to the pension plan are based.

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 actuarial accrued liability
Remaining amortization period:	15 years for UAAL as of June 30, 2004. Any changes in UAAL after June 30, 2004 are separately amortized over a 15-year closed period effective with that valuation. Effective June 30, 2012, any changes in UAAL due to actuarial gains or losses or due to plan amendments (with the exception of a change due to retirement incentives) will be amortized over a 15-year closed period effective with that valuation (up to a 5-year closed period for retirement incentives). Any change in UAAL due to changes in actuarial assumptions or methods will be amortized over a 20-year closed period effective with that valuation.
Asset valuation method:	Market value of assets less unrecognized returns in each of the last ten semi-annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on market value and are recognized over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-vested supplemental ($27.50) reserve and statutory contingency reserve.

Section 2: GAS 67 Information

Actuarial assumptions:	
Valuation Date:	**June 30, 2020 Valuation (used for the year ended June 30, 2022 ADC)**
Investment rate of return:	7.25%, net of pension plan administration and investment expenses, including inflation
Inflation rate:	2.75%
Real across-the-board salary increase:	0.50%
Projected salary increases:	General: 3.75% to 10.25% and Safety: 3.95% to 11.75%, varying by service, including inflation and real across-the-board salary increase
Cost of living adjustments (COLA):	Retiree COLA increases of 2.75% per year for both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and non-PEPRA General Tier 2, members represented by SEIU receive a fixed 2% COLA that applies to future service after March 2003. For both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety members that have COLA banks, we assume they receive 3.0% COLA increases until their COLA banks are exhausted and 2.75% thereafter. For both PEPRA and non-PEPRA General Tier 2 members represented by SEIU, the fixed 2% COLA increase is not subject to changes in the CPI.
Other assumptions:	Same as those used in the June 30, 2020 funding actuarial valuation

Section 3: Appendices

Appendix A: Projection of Plan's Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2022 ($ 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)
2021	$7,682	$263	$357	$9	-$553	$7,025
2022	7,025	233	400	8	485	7,335
2023	7,335	228	402	9	507	7,660
2024	7,660	189	422	9	527	7,944
2025	7,944	156	443	9	545	8,193
2026	8,193	166	464	10	562	8,447
2027	8,447	162	486	10	579	8,692
2028	8,692	157	507	10	595	8,927
2029	8,927	153	528	11	611	9,152
2030	9,152	150	549	11	625	9,367
2046	10,795	54	847	13	726	10,716
2047	10,716	50	859	13	720	10,615
2048	10,615	47	870	13	712	10,491
2049	10,491	43	880	12	703	10,345
2050	10,345	40	887	12	693	10,178
2095	106	2	30	0 *	6	83
2096	83	1	23	0 *	5	66
2097	66	1	18	0 *	4	54
2098	54	1	13	0 *	3	45
2099	45	1	10	0 *	3	39
2100	39	1	7	0 *	3	35
2128	146	0 *	0 *	0 *	10	156
2129	156					
2129 Discounted Value:	0 **					

* Less than $1 million, when rounded.

** $156 million when discounted with interest at the rate of 7.00% per annum is less than $1 million as of June 30, 2022.

Appendix A: Projection of Plan's Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2022 (continued)

Notes:

(1) Amounts may not total exactly due to rounding.

(2) Amounts shown in the year beginning July 1, 2021 row are actual amounts, based on the unaudited financial statements provided by VCERA.

(3) Various years have been omitted from this table.

(4) Column (a): Except for the "discounted value" shown for 2129, 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 rates applied to closed group projected payroll (based on covered active members as of June 30, 2021), plus employer contributions to the unfunded actuarial accrued liability. 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, 2021. The projected benefit payments reflect the cost of living increase assumptions used in June 30, 2022 valuation report.

(7) Column (d): Projected administrative expenses are calculated as approximately 0.12% of the projected beginning Plan's Fiduciary Net Position amount. The 0.12% portion was based on the actual fiscal year 2021/2022 administrative and other expenses (unaudited) as a percentage of the actual beginning Plan's Fiduciary Net Position as of July 1, 2021. 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 7.00% per annum.

(9) As illustrated in this appendix, 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 7.00% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2022 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: Determination of proportionate share

July 1, 2021 to June 30, 2022

Actual Compensation by Employer and Tier

Employer ID	Employer	General Tier 1 and 2	General Tier 1 and 2 %	Safety Tier	Safety Tier %	Total Compensation	Total %
01	County of Ventura	$603,184,285	93.569%	$192,201,096	100.000%	$795,385,381	95.046%
10	Ventura County Courts	30,045,976	4.661%	0	0.000%	30,045,976	3.590%
11	Ventura County Air Pollution Control District	4,424,161	0.686%	0	0.000%	4,424,161	0.529%
22	Ventura Regional Sanitation District	6,984,077	1.083%	0	0.000%	6,984,077	0.835%
	Total	**$644,638,499**	**100.000%**	**$192,201,096**	**100.000%**	**$836,839,595**	**100.000%**

Allocation of June 30, 2022 Net Pension Liability (NPL)

Employer ID	Employer	General Tier 1 and 2	General Tier 1 and 2 %	Safety Tier	Safety Tier %	Total NPL	Employer Allocation Percentage
01	County of Ventura	$272,921,425	93.569%	$146,420,013	100.000%	$419,341,438	95.719%
10	Ventura County Courts	13,594,835	4.661%	0	0.000%	13,594,835	3.103%
11	Ventura County Air Pollution Control District	2,001,790	0.686%	0	0.000%	2,001,790	0.457%
22	Ventura Regional Sanitation District	3,160,069	1.083%	0	0.000%	3,160,069	0.721%
	Total	**$291,678,119**	**100.000%**	**$146,420,013**	**100.000%**	**$438,098,132**	**100.000%**

Appendix B: Determination of proportionate share (continued)

Notes to Schedule:

Actual July 1, 2021 through June 30, 2022 compensation information was provided by VCERA. Results may not total due to rounding.

The Net Pension Liability (NPL) for each tier is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position. The TPL for each tier is obtained from internal valuation results based on the actual participants in each tier. The Plan's Fiduciary Net Position for each tier was determined by adjusting each tier's internally tracked valuation value of assets (which is used to determine employer contribution rates by tier) by the ratio of the total VCERA Plan's Fiduciary Net Position to total VCERA valuation value of assets. Based on this methodology, any non-valuation reserves (such as the $27.50 non-vested supplemental reserve) are allocated amongst the tiers based on each tier's valuation value of assets.

The Safety Tier only has one employer (County of Ventura), so all of the NPL for that tier is allocated to the County.

For the two other tiers that have multiple employers, the NPL is allocated based on the actual compensation for each employer in the tier during the period ending on the measurement date within the tier.

a. Calculate ratio of employer's compensation to the total compensation for the tier.
b. This ratio is multiplied by the NPL for the tier to determine the employer's proportionate share of the NPL for the tier.
c. If the employer is in several tiers, the employer's total allocated NPL is the sum of its allocated NPL from each tier.
d. In this allocation, General Tier 1 and 2 were treated as one tier (combined) consistent with the determination of the Basic UAAL rate in the actuarial valuation.

Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

For purposes of the above results, the reporting date for the employer under GAS 68 is June 30, 2023. The reporting date and measurement date for the plan under GAS 67 are June 30, 2022. Consistent with the provisions of GAS 68 the assets and liabilities measured as of June 30, 2022 are not adjusted or “rolled forward” to June 30, 2023 for employer reporting under GAS 68. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

Appendix C: Pension amounts by employer as of June 30, 2022

Deferred Outflows of Resources	County of Ventura	Ventura County Courts	Ventura County Air Pollution Control District
Differences Between Expected and Actual Experience	$16,703,182	$541,509	$79,735
Net Excess of Projected Over Actual Earnings on Pension Plan Investments (If Any)	97,655,977	3,165,957	466,176
Changes of Assumptions	83,039,864	2,692,110	396,403
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	4,585,691	2,038,753	743,090
Total Deferred Outflows of Resources	**$201,984,714**	**$8,438,329**	**$1,685,404**
Deferred Inflows of Resources			
Differences Between Expected and Actual Experience	$18,241,836	$591,391	$87,080
Net Excess of Actual Over Projected Earnings on Pension Plan Investments (If Any)	0	0	0
Changes of Assumptions	0	0	0
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	3,274,260	3,319,106	694,946
Total Deferred Inflows of Resources	**$21,516,096**	**$3,910,497**	**$782,026**
Net Pension Liability			
Net Pension Liability as of June 30, 2021	**$(489,858,966)**	**$(11,479,162)**	**$(999,434)**
Net Pension Liability as of June 30, 2022	**$419,341,438**	**$13,594,835**	**$2,001,790**
Pension Expense			
Proportionate Share of Allocable Plan Pension Expense	$66,049,191	$2,141,281	$315,295
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	(2,669)	(20,617)	(3,803)
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	**$66,046,522**	**$2,120,664**	**$311,492**

Appendix C: Pension amounts by employer as of June 30, 2022 (continued)

Deferred Outflows of Resources	Ventura Regional Sanitation District	Total for All Empoyers
Differences Between Expected and Actual Experience	$125,872	$17,450,298
Net Excess of Projected Over Actual Earnings on Pension Plan Investments (If Any)	735,915	102,024,025
Changes of Assumptions	625,771	86,754,148
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	492,417	7,859,951
Total Deferred Outflows of Resources	**$1,979,975**	**$214,088,422**
Deferred Inflows of Resources		
Differences Between Expected and Actual Experience	$137,467	$19,057,774
Net Excess of Projected Over Actual Earnings on Pension Plan Investments (If Any)	0	0
Changes of Assumptions	0	0
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	571,639	7,859,951
Total Deferred Inflows of Resources	**$709,106**	**$26,917,725**
Net Pension Liability		
Net Pension Liability as of June 30, 2021	**$(2,128,042)**	**$(504,465,604)**
Net Pension Liability as of June 30, 2022	**$3,160,069**	**$438,098,132**
Pension Expense		
Proportionate Share of Allocable Plan Pension Expense	$497,732	$69,003,499
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	27,089	0
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	**$524,821**	**$69,003,499**

Appendix C: Pension amounts by employer as of June 30, 2022 (continued)

Amounts shown in this appendix, excluding the differences between employer contributions and proportionate share of contributions, were allocated by employer based on the Employer Allocation Percentage calculated in Appendix B.

In determining the pension expense:

- Any differences between projected and actual investment earnings on pension plan investments are recognized over a period of five years beginning with the year in which they occur.
- Differences between expected and actual experience and between employer contributions and proportionate share of contributions are recognized over the average of the expected remaining service lives of all employees that are provided with pensions through VCERA determined as of June 30, 2021 (the beginning of the measurement period ending June 30, 2022) and is 5.09 years.

The average of the expected remaining service lives of all employees was determined by:

- Calculating each active employee's expected remaining service life as the present value of $1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

Appendix D: 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.

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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January 13, 2023

Ms. Linda Webb
Retirement Administrator
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

Re: Ventura County Employees' Retirement Association
Cost-of-Living Adjustments (COLA) as of April 1, 2023

Dear Linda:

We have determined the cost-of-living adjustments for the Association in accordance with Section 31870.1, as provided in the enclosed exhibit.

The cost-of-living factor to be used by the Association on April 1, 2023 is determined by comparing the December CPI for the Los Angeles-Long Beach-Anaheim Area (with 1982-84 as the base period), as published by the Bureau of Labor Statistics, in each of the past two years. The ratio of the past two December indices, 312.601 in 2022 and 297.925 in 2021, is 1.0493. The County Law section cited above indicates that the resulting percentage change of 4.93% should be rounded to the nearest one-half percent, which is 5.0%. Please note the above cost-of-living adjustment calculated using established procedures for VCERA may result in adjustments different from those calculated using alternative procedures by other systems.

The actual cost-of-living adjustment is dependent on tier.[1] The CPI adjustment to be applied on April 1, 2023 is provided in Column (4) of the enclosed exhibit. The COLA bank on April 1, 2023 is provided in Column (5).

Please give us a call if you have any questions.

Sincerely,

Molly Calcagno, ASA, MAAA, EA
Actuary

bts/hy
Enclosure

[1] General Tier 2 members in certain bargaining units receive a fixed 2% COLA, not subject to changes in the CPI that applies to future service after March 2003. All other General Tier 2 members do not receive a COLA.

Ventura County Employees' Retirement Association
Cost-Of-Living Adjustment
As of April 1, 2023

Retirement Date			(1) April 1, 2022 Accumulated Carry-over	(2) CPI Change*	(3) CPI Rounded**	(4) CPI Used***	(5) April 1, 2023 Accumulated Carry-over****
All Tier 1 and Safety Section 31870.1 Maximum Annual COLA			3.0%				
On or Before 4/1/1975			52.5%	4.93%	5.0%	3.0%	54.5%
04/02/1975	to	04/01/1976	45.0%	4.93%	5.0%	3.0%	47.0%
04/02/1976	to	04/01/1977	37.5%	4.93%	5.0%	3.0%	39.5%
04/02/1977	to	04/01/1978	34.0%	4.93%	5.0%	3.0%	36.0%
04/02/1978	to	04/01/1979	30.0%	4.93%	5.0%	3.0%	32.0%
04/02/1979	to	04/01/1980	25.5%	4.93%	5.0%	3.0%	27.5%
04/02/1980	to	04/01/1981	17.5%	4.93%	5.0%	3.0%	19.5%
04/02/1981	to	04/01/1982	5.0%	4.93%	5.0%	3.0%	7.0%
04/02/1982	to	04/01/2022	3.5%	4.93%	5.0%	3.0%	5.5%
04/02/2022	to	04/01/2023		4.93%	5.0%	3.0%	2.0%

* Based on ratio of December 2022 CPI to December 2021 CPI for the Los Angeles - Long Beach - Anaheim Area.
** Based on CPI change rounded to nearest one-half percent.
*** These are the cost-of-living adjustment factors to be applied on April 1, 2023.
**** These are the carry-over of the cost-of-living adjustments that have not been used on April 1, 2023.

January 23, 2023

Board of Retirement
Ventura County Employees' Retirement Association
1190 S. Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: RECONSIDERATION OF CIRCUMSTANCES TO ENABLE BOARD TO HOLD MEETINGS VIA TELECONFERENCE UNDER THE PROVISIONS OF GOVERNMENT CODE SECTION 54953, SUBDIVISION (E), OF THE RALPH M. BROWN ACT DUE TO STATE OF EMERGENCY AND CONSIDER AUTHORIZATION FOR CONTINUED REMOTE TELECONFERENCE MEETINGS

Dear Board Members:

Executive Summary

At the October 4, 2021, Board Meeting, your Board adopted an initial Resolution under the provisions of Government Code section 54953(e), making findings that enable continued meetings via abbreviated teleconferencing provisions under the Brown Act during proclaimed state of emergency. Your Board has continued to hold its meetings in this manner upon making findings, every 30 days, that the local County health officer has continued to recommend measures to promote social distancing. On September 21, 2021, Dr. Levin, Ventura County's Health Officer, issued a memorandum to the Ventura County Board of Supervisors recommending that physical/social distancing measures continue to be practiced throughout Ventura communities to minimize the spread of COVID-19. On November 15, 2021, Dr. Levin issued a similar memorandum to the Ventura County Board of Supervisors, recommending that legislative bodies in Ventura County continue to meet via teleconference. These recommendations remain in effect. The current authorization adopted by your Board, dated January 9, 2023, expires on February 8, 2023. Pursuant to the current authorization, the Board room is open so that those Trustees who wish to attend and participate in person may do so, and those who are not yet comfortable with in-person meetings, may attend remotely. Currently, the Board is able to meet remotely under the previously approved 30-day Teleconferencing period, however it is recommended that the Board approve a new 30-day teleconferencing period, so that any Special meetings or Finance Committee meetings can continue to meet remotely during this time, even though this new 30-day period would not cover the combined Disability & Business meeting on February 27, 2023. Therefore, the Board would also need to approve a new 30-day period as the first order of business at that combined meeting, in order to meet remotely at that upcoming meeting. Public Health Order Information is accessible on the Ventura County Recovers website at: Public Health Order Information – Ventura County Recovers and indicates these social distancing recommendations remain active. At recent meetings, your Board has indicated support for continued hybrid (virtual or in-person) attendance by Board members as well as for other meeting attendees.

Background:

Pursuant to the provisions of AB 361, signed into law by the Governor on September 16, 2021, as urgency legislation, and made applicable starting October 1, 2021, by subsequent Executive Order issued September 20, 2021, legislative bodies may conduct public meetings under abbreviated teleconference provisions only if specified findings are made the first time the body meets under the AB 361 teleconferencing rules, and then every 30 days thereafter. At the October 4, 2021, Board Meeting, your Board adopted an initial Resolution under the provisions of AB 361, making findings that enable continued meetings via abbreviated teleconferencing provisions under the Brown Act during proclaimed state of emergency. (See Govt. Code § 54953(e).)

As set forth in the Resolution and in accordance with AB 361, as codified in Government Code section 54953, meetings may continue to be held via teleconference upon reconsideration of the circumstances of the emergency and the making of findings every 30 days after initial adoption. Your Board has made the required findings and has authorized continuation of meetings under the abbreviated teleconference requirements at least every 30-days since the initial action on October 4, 2021. Note that the legislation that authorizes abbreviated teleconference procedures remains in effect until January 1, 2024, and then sunsets by its own terms.

The abbreviated teleconference provisions enable members of legislative bodies to attend meetings virtually, from any location, without having to follow the formal teleconferencing requirements for each location. As a reminder, legislative bodies under the Brown Act are required to hold their meetings in public and within the boundaries of the legislative body's jurisdiction, so that all interested persons are permitted to attend and participate. The Brown Act allows for meetings to occur via teleconferencing subject to certain requirements including, but not limited to, the following: (1) the legislative body must notice each teleconference location of each member that will be participating in the public meeting; (2) that each teleconference location be accessible to the public; (3) that members of the public be allowed to address the legislative body at each teleconference location; (4) that the legislative body post an agenda at each teleconference location, and; (5) that at least a quorum of the legislative body participate from locations within the boundaries of the local agency's jurisdiction.

On Monday, October 17, 2022, Governor Gavin Newsom announced that the COVID-19 State of Emergency will end on February 28, 2023. See: https://www.gov.ca.gov/2022/10/17/governor-newsom-to-end-the-covid-19-state-of-emergency/. As set forth in the previous memorandum from General Counsel, AB 2449 becomes effective January 1, 2023, and provides alternative teleconference options that may be invoked on a limited basis once the state of emergency teleconference procedures are no longer available for the COVID-19 pandemic.

<u>Action Required for Conduct of Meetings Via Abbreviated Brown Act Requirements for Teleconferencing</u>

Under the authority of Government Code section 54953(e)(3), your Board, and its legislative bodies (e.g., Finance Committee) may continue to conduct its meetings via teleconference if the state of emergency remains active or state or local officials have imposed or recommended measures to promote social distancing (both of which are satisfied here), and the Board reconsiders the circumstances of the state of emergency and, by majority vote, makes findings that:

a. The state of emergency continues to directly impact the ability of the members to meet safely in person; or
b. State or local officials continue to impose or recommend measures to promote social distancing

On September 21, 2021, Dr. Levin, Ventura County's Health Officer, issued a memorandum to the Ventura County Board of Supervisors recommending that physical/social distancing measures continue to be practiced throughout Ventura communities to minimize the spread of COVID-19, "including at meetings of the Board of Supervisors and meetings of other legislative bodies of the County of Ventura." Dr. Levin issued another memorandum, dated November 15, 2021, wherein he recommends continued physical/social distancing as well as continuation of remote meetings of the Board of Supervisors and other legislative bodies that conduct public meetings in the County. A copy of this November 15, 2021, Memorandum accompanies this board letter and remains in effect. This recommendation provides a basis for your Board to find that local officials continue to recommend social distancing, and to invoke the abbreviated teleconference provisions for an additional 30 days.

The Board has recently authorized hybrid attendance whereby your Board, staff, presenters, parties, members, participating employers, and the public may choose to attend either in-person or remotely to support individual health/safety choices.

If this resolution authorizing remote teleconferencing is not continued and any Board members wish to continue attending from a remote location, a notice of public hearing would need to be posted at each remote location and members of the public would need to have the ability to attend in-person at any such remote location to participate in the meeting. Note, however, that there are legislative bills pending that would authorize remote attendance at public meetings as an ongoing measure: (1) AB 1944 (Lee and Garcia) would require the agenda to identify members of the legislative body who are participating in the meeting remotely and under specified conditions would permit remote participation without posting the address of the remote location or making the remote location accessible to the public; (2) AB 2449 (Blanca Rubio) would authorize use of teleconferencing without noticing and making available to the public teleconferencing locations if a quorum participates in person, but board members would have to participate using both audio and video technology.

If the Board wishes to continue to authorize remote teleconference meetings for an additional 30-day period, expiring February 22, 2023, it must take the Optional Action indicated below. Staff will continue to include on your Board's agenda the option to consider renewing its findings every 30 days during the time the State of Emergency remains active, unless otherwise directed.

I will be pleased to answer any questions at the January 23, 2022, Business meeting.

OPTION FOR CONTINUED AUTHORIZATION FOR REMOTE TELECONFERENCE MEETINGS FOR ADDITIONAL 30 DAYS, TO ALLOW FOR BOARD MEMBERS TO ATTEND MEETINGS EITHER VIRTUALLY OR IN-PERSON:

> **APPROVE AND ADOPT FINDINGS THAT THE VENTURA COUNTY HEALTH OFFICER/MEDICAL DIRECTOR RECOMMENDS PHYSICAL/SOCIAL DISTANCING AND CONTINUED REMOTE MEETINGS OF LEGISLATIVE BODIES, AND;**
>
> **AUTHORIZE REMOTE TELECONFERENCE MEETINGS OF VCERA'S LEGISLATIVE BODIES FOR THE PERIOD OF JANUARY 23, 2023, THROUGH FEBRUARY 22, 2023, PURSUANT TO GOVERNMENT CODE SECTION 54953, SUBDIVISION (E)(3).**

Sincerely,

Linda Webb

Linda Webb
Retirement Administrator

VENTURA COUNTY
PUBLIC HEALTH

A Department of Ventura County Health Care Agency

Rigoberto Vargas, MPH
Director

Robert Levin, MD
Health Officer/Medical Director

To: Board of Supervisors
County Executive Office
Clerk of the Board

From: Dr. Robert Levin, Ventura County Health Officer Robert Levin, MD.

Date: November 15, 2021

Re: Recommendation regarding Social Distancing and Continued Remote Meetings of Legislative Bodies

I continue to recommend that physical/social distancing measures be practiced throughout our Ventura County communities to minimize the spread of COVID-19, including at meetings of the Board of Supervisors and meetings of other legislative bodies in the County of Ventura.

The California Department of Public Health ("CDPH") and the Centers for Disease Control and Prevention ("CDC") caution that the Delta variant of COVID-19, currently the dominant strain of COVID-19 in the country, is more transmissible than prior variants of the virus, may cause more severe illness, and that even fully vaccinated individuals can spread the virus to others resulting in rapid and alarming rates of COVID-19 cases and hospitalizations (https://www.cdc.gov/coronavirus/2019-ncov/variants/delta-variant.html). While the Delta variant is the currently circulating variant, the Delta-2 variant, its likely successor, is 10 to 15% more transmissible. Current case and hospitalization rates have remained stubbornly higher than they were in the days leading up to the most recent surge. In some counties in our state, these rates are starting to climb again. We are facing the winter holidays and the opportunities these holidays present to promote transmission of COVID-19 infection. The winter season and its associated cold weather drives people indoors and provides another opportunity to spread the highly transmissible COVID-19 virus. Associated with these events last year our county experienced a surge in COVID-19 cases.

Whether vaccinated or not, positive individuals are contracting the Delta variant and infecting others in our communities. Social distancing and masking are crucial mitigation measures to prevent the disease's spread. Remote meetings of legislative bodies in the County, including but not limited to the Board of Supervisors are a recommended form of social distancing that allows for the participation of the community, county staff, presenters, and legislative body members in a safe environment, with no risk of contagion. It is recommended that legislative bodies in the County continue to implement 100% remote meetings. Just as it is likely that the current County order requiring the use of face coverings indoors will be in place beyond the first of the year, though driven by good intentions, lifting the remote meetings policy at this time would be premature.

If you have any questions regarding this recommendation, please do not hesitate to contact me.

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 23, 2023

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: ANNUAL REVIEW OF EDUCATION & TRAVEL POLICY

Dear Board Members:

The Trustee Communications Policy is scheduled to be reviewed every year. It was last reviewed January 3, 2022.

Staff is proposing the following updates to the policy:

<u>Meals & Beverages</u>

- Added "(Per Diem)" to the Per Day column header;
- Updated the low and high cost per diem amounts from \$60/\$71 to \$64/\$74 to match the latest IRS amounts (per Notice 2022-44 which was effective 10/1/22.)

<u>Tips</u>

- Changed maximum gratuity for meals to 18% to better align with current common practice.

<u>RECOMMENDATION</u>: APPROVE PROPOSED CHANGES TO THE EDUCATION & TRAVEL POLICY.

Staff will be happy to answer any questions at the January 23, 2023, Board meeting.

Sincerely,

Linda Webb

Linda Webb
Retirement Administrator

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

EDUCATION AND TRAVEL POLICY

INTRODUCTION

Recognizing its fiduciary responsibility to plan participants, and its responsibility to meet statutory education requirements, it is the desire of the Board of Retirement (Board) to encourage members of the Board, and its staff, to enhance their knowledge of the financial and benefit aspects of the retirement system by attending educational meetings, conferences and seminars. Attendance at such functions is essential to ensure that Board members and staff are able to carry out their fiduciary responsibilities.

PURPOSE

The purpose of this policy is to align travel by Board members and staff in connection with educational conferences and administrative meetings with the Mission, Vision, and Values of VCERA. The Board recognizes that travel associated with education and administrative meetings on VCERA's behalf is a component of building a knowledge base and operational understanding of Board members given their fiduciary responsibilities. Such education will equip them to discharge their fiduciary duties for the sole benefit of the VCERA membership. To ensure reimbursement for travel is allowed for only those expenses deemed reasonable and necessary for the proper administration of the Plan, this policy will be administered in a manner that may be overseen by the Board and understood by VCERA members and other stakeholders as reasonable, cost effective, and value driven.

COMPLIANCE WITH STATE LAW

In compliance with Section 31522.8 of the California Government Code, all Board members shall receive a minimum of 24 hours of trustee education within the first two years of assuming office, and for every subsequent two- year period the Board member continues to hold membership on the Board. Of the required 24 hours, 2 hours must be training in general ethics principles and ethics laws, and 2 hours must be training and education on sexual harassment prevention.[1] Further, the Board will maintain a record of Board member compliance with the policy. This policy and an annual report on Board member compliance shall be placed on the Internet Web site.

ON-SITE DUE DILIGENCE

Regular on-site due diligence evaluations shall be scheduled with VCERA's investment managers (within North America) every three years and shall be conducted by VCERA's

[1] Training in sexual harassment prevention must be completed within a new trustee's first 6 months.

investment consultants and, when deemed by the Board to be necessary, by trustees and/or staff. For managers outside of North America, the frequency shall be every four years and whenever possible in conjunction with an educational opportunity to maximize the value of the overseas trip. More frequent evaluations shall be conducted if there have been material organizational changes, significant underperformance of the investment or for any other reason deemed appropriate by the Board.

On-site due diligence evaluations may include up to two Trustees if deemed necessary by the Board, and may include the Chief Investment Officer (CIO), Administrator and/or the Administrator's designee. The Administrator shall, in consultation with the CIO and Investment Consultant, agendize a proposed schedule for all on-site due diligence trips to be conducted in the upcoming year. The Board Chair shall, with Board consent, designate the Trustee(s) to participate in each on-site evaluation if the Board determines that trustee participation is necessary for the particular due diligence visit. In advance of each due diligence trip, the CIO shall submit the travel cost estimates to the Board for approval for such visits. Every effort shall be made to rotate due diligence responsibilities so no single Trustee, or pair of Trustees, is conducting a majority of due diligence visits on VCERA's behalf. The Trustee(s) and CIO, Administrator, or designee, shall be responsible for providing a written/oral report to the Board no later than the second subsequent regular Board meeting summarizing their findings and recommendations, if any.

LIMITATION ON MEETING FOR BUSINESS PURPOSES

Travel by multiple Board members shall be conducted in such a manner as to not violate the provisions of the Brown Act (Government Code Section 54950 et. Seq.). Board member attendance at educational meetings, conferences, seminars and related social events is not a violation of the Brown Act.

TRAVEL AUTHORIZATION

Approval for travel by a Board or staff member to an educational meeting, conference, seminar or on-site due diligence visit, whether in person or virtual, shall be made in an open meeting of the Board, except for attendance at the Spring and Fall State Association of County Retirement Systems (SACRS) or specific conferences listed below for which authorization by the Board will not be required. Additionally, the Retirement Administrator may approve Board or staff travel for one-day meetings held within the State. The Administrator may also approve an overnight stay by a staff member if it is determined to be in the best interest of the Association in terms of economy and efficiency. In the event a Board member or CIO wishes to conduct an on-site due diligence visit of a VCERA investment manager or consultant, or attend a one-day seminar without prior Board approval, the Administrator is authorized to reimburse travel expenses up to $400.00 upon submission of a verified claim.

Although State law may permit gifts of travel to the System, if a third party offers to pay for some or all of the travel expenses associated with a particular conference, seminar or meeting, the Board shall decline the offer. However, the Board may consider authorizing attendance at the particular conference, seminar or meeting at VCERA's expense if such attendance would be beneficial to VCERA. The Retirement Administrator may accept fee waivers for training conferences or seminars on behalf of staff members, if offered by governmental trade organizations. If the Board has approved a staff member's membership on an investment managers advisory board or committee, and the cost of related travel is included in the fees paid to such investment managers, the cost of such travel is not a gift, and VCERA need not pay additional for it.

The following conferences are budgeted annually for specific staff, and may be authorized by the Retirement Administrator without Board approval, so long as the cost does not exceed the amount approved by the Board in that year's administrative budget.

- Retirement Administrator: CALAPRS Administrators' Institute
- General Counsel: National Association of Public Pension Attorneys (NAPPA)
- Chief Financial Officer: Public Pension Financial Forum (P2F2)
- Chief Technology Officer: Public Retirement Information Systems Management (PRISM)
- Chief Investment Officer: International Limited Partners' Association (ILPA)

ANNUAL TRAVEL BUDGET

The Retirement Administrator shall include in the annual budget to be approved by the Board sufficient funding to allow each member of the Board, and staff, to attend the Spring and Fall SACRS conferences. Additionally, funds will be budgeted, based upon the information available on scheduled conferences and input from individual Board members during the budget preparation process, to allow each Board member and executive staff to attend up to three additional conferences, educational meetings, seminars and site visits each fiscal year. This limitation shall not apply to on-site visits that are made with the consent of the Board, including in connection with the retention of a new manager, nor shall it apply to any conference, educational meeting, seminar or site visit where the cost to the Association can reasonably be expected to be $500 or less.

Travel expenses of Board members and staff shall be considered an administration cost, where permissible by law, or investment cost, and may not be paid by any third party without the express written authorization of the Board.

RECOMMENDED PUBLIC RETIREMENT SYSTEM MEETINGS

It is the intention of the Board to establish a standard whereby attendance at educational meetings, conferences and seminars will be approved only if the agenda for the event contains an average of five (5) hours of substantive educational content per day. This standard would not apply to meetings with investment managers, consultants, short seminars, etc., which would not be expected to last for five hours.

The Board establishes the following as recommended educational meetings, conferences and seminars that qualify as trustee and/or staff education.

1. State Association of County Retirement Systems (SACRS), including meetings of SACRS Board or Committees, on which a member of the Board or staff participates. The Board recognizes the importance of having its Trustees actively

participate as members of the SACRS Board or its committees. Therefore, attendance at such meetings shall not count towards the three conferences, educational meetings, seminars, or site visits limitation set forth above, even if such cost exceeds $500.00.

2. Public Pension Investment Management Program (SACRS/Berkeley). (Attendance shall not count towards the three-conference limit.)
3. California Association of Public Retirement Systems (CALAPRS) Annual General Assembly, trustee and staff roundtables, Advanced Board Leadership Institute, Administrators' Institute and the Principles of Pension Management for Trustees course. (Attendance shall not count towards the three-conference limit.)
4. Programs sponsored by the Institute for Fiduciary Education (IFE).
5. NCPERS Annual Conference.
6. Pension Funds and Money Management, and Alternative Investments and Real Estate; The Wharton School, University of Pennsylvania.
7. Programs sponsored by the National Association of Police Officers (NAPO).
8. Client conferences sponsored by investment managers, asset custodians and consultants with whom the Retirement System has a current professional relationship. (Attendance shall not count towards the three-conference limit.)
9. National Association of Public Pension Attorneys (NAPPA) Conference.
10. California Retirement County Employees Association (CRCEA).
11. Nossaman LLC Annual Fiduciary Forum. (Attendance shall not count towards the three-conference limit.)
12. Council of Institutional Investors (CII)
13. Institutional Limited Partners Association (ILPA)

Board members may request approval to attend the recommended, or any other multi-day educational meetings, seminars and conferences by submitting a written request to the Retirement Administrator, along with the conference agenda, for inclusion on the next Board agenda. The request should confirm the training meets the average 5-hour-per-day standard, and indicate the number of hours of educational hours the training provides. Requests approved by the Board qualify as Board member education. Educational seminars sponsored by the state or national public pension fund organizations and seminars sponsored by accredited academic institutions shall be deemed to meet Board member education requirements.

APPROPRIATE TOPICS

Appropriate topics for Board member education, may include, but are not limited to, the following:

1. Fiduciary responsibilities.
2. Ethics.
3. Pension fund investments and investment program management.
4. Actuarial matters.
5. Pension funding.
6. Benefits administration.
7. Disability evaluation.
8. Fair hearings.

9. Pension fund governance.
10. New Board member orientation.
11. Sexual Harassment Prevention

TRAVEL ARRANGEMENTS

It is the preference of the Board to have travel arrangements made through VCERA staff. This would include processing of registrations, hotel accommodations and transportation. However, a Board member may arrange his/her own transportation, but if the traveler selects a more expensive mode of travel, the traveler shall claim only the cost that would have been incurred had the lower cost option been utilized and shall provide documentation of the lower cost option. Except as provided under “Air Transportation” for lengthy flight time travel, trustees who upgrade to business or first class must provide documentation of the price of coach/economy on a date that is at least 4 weeks prior to the date of travel, preferably on the date the trustee books the upgraded travel.

VCERA staff will not make travel arrangements for, or reimbursement to a Board or staff member for any costs associated with the attendance of a spouse or traveling companion to any function.

TRAVEL COSTS

It is the policy of the Board that travel to educational meetings, conferences, seminars, and due diligence visits be achieved in the least expensive practical manner possible in order to reduce costs to the retirement system. When weighing the options or air transportation vs driving a personal or rented vehicle, comparison of total anticipated costs should be considered (ex: parking, mileage, shuttle costs, etc.) and the least expensive option should be favored whenever practical to do so. If the traveler chooses a materially higher cost transportation mode for personal reasons, reimbursement will be limited to the lower cost option.

Reimbursement or payment for travel related expenses may not be made in certain instances. For travel to meetings within the State of California, lodging and other eligible travel related expenses will be paid for the evening prior to the start of the meeting only if the meeting starts at or prior to 9:30 a.m. Lodging for the night of the last day of the conference will not be paid by the Retirement System.

For travel outside of the State of California, lodging and other travel related expenses will be paid by VCERA for the evening prior to the day the meetings starts. Lodging will not be paid by VCERA for the evening of the final day of the meeting unless the substantive portion of the meeting ends after 2:00 p.m. or it can be demonstrated that a reduction in airfare can be achieved by staying over for an additional day which will more than offset the cost for an additional night’s lodging and other travel related costs that would be incurred.

In order to avoid unnecessary costs to the Retirement System, Board members should immediately notify VCERA’s Chief Financial Officer of the cancellation or other changes in their travel plans.

Travel related costs which will be paid or reimbursed to a Board or staff member include the following:

Air Transportation

Every attempt should be made to make air travel reservations in advance to take advantage of available discounts. Airfare will be paid for coach/economy passage only (or the lowest fare that allows a carry-on bag), with the exceptions listed below:

Flight Time	Seating level allowable
Exceeds 4 hours	1 level above coach/economy
Exceeds 8 hours	Business class, with Board approval.

Hotel Accommodations

Payment for lodging will be at the single occupancy rate, plus applicable room tax. Any lodging costs in excess of the single occupancy room rate will be the responsibility of the Board or staff member.

Meals & Beverages

Reimbursement for the cost of meals and beverages for the Board and staff members while on travel will be made at the rates as shown in the following table. No meal allowance will be paid for any meal that is provided by the host, at the conference, or included with the price of airfare or other mode of transportation, unless for medical dietary restrictions.

	Within California (Receipts Required)	Out-of-State (Receipts Required)	High-Cost Areas (HCA)*	Per Day (Per Diem) (No Receipts Required)
Breakfast	$19.50	$22.50	25.00	$64~~0~~.00 $74~~1~~.00 (HCA*) 75% of above for first & last days of travel
Lunch	$19.50	$22.50	25.00	
Dinner	$38.00	$43.00	49.00	

*as designated by the current federal General Services Administration Special Per Diem Rates publication.

Exceptions: 1) for on-site due diligence evaluations, the amounts indicated on the table above are increased by 15%, and; 2) For VCERA trustee/staff group meals while attending a conference, reimbursement for the total eligible meal/beverage cost may be made to the person paying a combined bill, not to exceed an amount equal to the maximum allowable meal cost multiplied by the number of attendees.

Tips

The gratuity for meals may not exceed 18~~5~~% of the charge, rounded up to the nearest dollar, unless the establishment adds it to the bill. Other tips may be reimbursed for other legitimate services such as maid service, portage, and parking valet service paid in the scope of the traveler's duty, not to exceed $10 per day. Tips for taxis or ride share service shall not exceed 15% of the fare, rounded up to the nearest dollar.

Rental Car

Every attempt should be made to utilize public transportation, ride share (Uber, Lyft), airport and hotel shuttle services which are reimbursable expenses. A rental car may be used if cost effective. The retirement system will not be responsible for any loss or damage resulting from the use of a rental car.

Parking

Reasonable automobile parking expenses are reimbursable.

Mileage

Retirement Board members and staff will be reimbursed for the use of their own automobile at the current mileage rate authorized by the Internal Revenue Service.

Non-Reimbursable Expenses

Expenditures, which are not substantive to VCERA business will not be reimbursed by VCERA, such as:

A. Any expenses related to alcohol and tobacco;
B. Internet usage fees (unless the internet is used for VCERA business);
C. Any expenses related to entertainment and recreational activities.

Documentation of Expenses and Submission of Reimbursement Claims

All requests for reimbursement of travel costs shall be supported by detailed receipts or other documentation. Agendas from the training may be attached to the travel claims, along with notations of the sessions attended with the associated hours recorded on the face of the claim. All travel claims shall be submitted to the Retirement Administrator or VCERA's Chief Financial Officer no later than the 60th calendar day after the expense is incurred by the Board or staff member. (A sample claim form is attached to this policy.) A signed travel claim constitutes certification that the claimed expenses were incurred for the approved purpose.

REPORTING

Retirement Board members shall, no later than the 2nd subsequent Board meeting, provide a brief report on meetings or conferences attended on behalf of VCERA. The Retirement Administrator shall, no later than the second month of the calendar year, report on annual Board member compliance and post said report on the VCERA Web site.

POLICY REVIEW

In order to keep the provisions of this policy current, the Board will review this policy on an annual basis at a minimum.

POLICY HISTORY

The Board last reviewed and approved this policy on January 23, 202~~2~~3. The Board previously approved this policy on January 3, 2022, December 13, 2021, June 18, 2018, June 19, 2017, May 2, 2016, June 15, 2015, February 23, 2015, June 2, 2014, June 17, 2013, January 28, 2013, July 2, 2012, June 20, 2011, June 21, 2010, June 15, 2009, September 15, 2008, April 16, 2007, May 1, 2006, October 17, 2005, April 19, 2004, April 21, 2003, May 6, 2002, April 16, 2001, and April 17, 2000. The Board originally adopted this policy on July 6, 1998.

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

EDUCATION AND TRAVEL POLICY

INTRODUCTION

Recognizing its fiduciary responsibility to plan participants, and its responsibility to meet statutory education requirements, it is the desire of the Board of Retirement (Board) to encourage members of the Board, and its staff, to enhance their knowledge of the financial and benefit aspects of the retirement system by attending educational meetings, conferences and seminars. Attendance at such functions is essential to ensure that Board members and staff are able to carry out their fiduciary responsibilities.

PURPOSE

The purpose of this policy is to align travel by Board members and staff in connection with educational conferences and administrative meetings with the Mission, Vision, and Values of VCERA. The Board recognizes that travel associated with education and administrative meetings on VCERA's behalf is a component of building a knowledge base and operational understanding of Board members given their fiduciary responsibilities. Such education will equip them to discharge their fiduciary duties for the sole benefit of the VCERA membership. To ensure reimbursement for travel is allowed for only those expenses deemed reasonable and necessary for the proper administration of the Plan, this policy will be administered in a manner that may be overseen by the Board and understood by VCERA members and other stakeholders as reasonable, cost effective, and value driven.

COMPLIANCE WITH STATE LAW

In compliance with Section 31522.8 of the California Government Code, all Board members shall receive a minimum of 24 hours of trustee education within the first two years of assuming office, and for every subsequent two- year period the Board member continues to hold membership on the Board. Of the required 24 hours, 2 hours must be training in general ethics principles and ethics laws, and 2 hours must be training and education on sexual harassment prevention.[1] Further, the Board will maintain a record of Board member compliance with the policy. This policy and an annual report on Board member compliance shall be placed on the Internet Web site.

ON-SITE DUE DILIGENCE

Regular on-site due diligence evaluations shall be scheduled with VCERA's investment managers (within North America) every three years and shall be conducted by VCERA's

[1] Training in sexual harassment prevention must be completed within a new trustee's first 6 months.

investment consultants and, when deemed by the Board to be necessary, by trustees and/or staff. For managers outside of North America, the frequency shall be every four years and whenever possible in conjunction with an educational opportunity to maximize the value of the overseas trip. More frequent evaluations shall be conducted if there have been material organizational changes, significant underperformance of the investment or for any other reason deemed appropriate by the Board.

On-site due diligence evaluations may include up to two Trustees if deemed necessary by the Board, and may include the Chief Investment Officer (CIO), Administrator and/or the Administrator's designee. The Administrator shall, in consultation with the CIO and Investment Consultant, agendize a proposed schedule for all on-site due diligence trips to be conducted in the upcoming year. The Board Chair shall, with Board consent, designate the Trustee(s) to participate in each on-site evaluation if the Board determines that trustee participation is necessary for the particular due diligence visit. In advance of each due diligence trip, the CIO shall submit the travel cost estimates to the Board for approval for such visits. Every effort shall be made to rotate due diligence responsibilities so no single Trustee, or pair of Trustees, is conducting a majority of due diligence visits on VCERA's behalf. The Trustee(s) and CIO, Administrator, or designee, shall be responsible for providing a written/oral report to the Board no later than the second subsequent regular Board meeting summarizing their findings and recommendations, if any.

LIMITATION ON MEETING FOR BUSINESS PURPOSES

Travel by multiple Board members shall be conducted in such a manner as to not violate the provisions of the Brown Act (Government Code Section 54950 et. Seq.). Board member attendance at educational meetings, conferences, seminars and related social events is not a violation of the Brown Act.

TRAVEL AUTHORIZATION

Approval for travel by a Board or staff member to an educational meeting, conference, seminar or on-site due diligence visit, whether in person or virtual, shall be made in an open meeting of the Board, except for attendance at the Spring and Fall State Association of County Retirement Systems (SACRS) or specific conferences listed below for which authorization by the Board will not be required. Additionally, the Retirement Administrator may approve Board or staff travel for one-day meetings held within the State. The Administrator may also approve an overnight stay by a staff member if it is determined to be in the best interest of the Association in terms of economy and efficiency. In the event a Board member or CIO wishes to conduct an on-site due diligence visit of a VCERA investment manager or consultant, or attend a one-day seminar without prior Board approval, the Administrator is authorized to reimburse travel expenses up to $400.00 upon submission of a verified claim.

Although State law may permit gifts of travel to the System, if a third party offers to pay for some or all of the travel expenses associated with a particular conference, seminar or meeting, the Board shall decline the offer. However, the Board may consider authorizing attendance at the particular conference, seminar or meeting at VCERA's expense if such attendance would be beneficial to VCERA. The Retirement Administrator may accept fee waivers for training conferences or seminars on behalf of staff members, if offered by governmental trade organizations. If the Board has approved a staff member's membership on an investment managers advisory board or committee, and the cost of related travel is included in the fees paid to such investment managers, the cost of such travel is not a gift, and VCERA need not pay additional for it.

The following conferences are budgeted annually for specific staff, and may be authorized by the Retirement Administrator without Board approval, so long as the cost does not exceed the amount approved by the Board in that year's administrative budget.

- Retirement Administrator: CALAPRS Administrators' Institute
- General Counsel: National Association of Public Pension Attorneys (NAPPA)
- Chief Financial Officer: Public Pension Financial Forum (P2F2)
- Chief Technology Officer: Public Retirement Information Systems Management (PRISM)
- Chief Investment Officer: International Limited Partners' Association (ILPA)

ANNUAL TRAVEL BUDGET

The Retirement Administrator shall include in the annual budget to be approved by the Board sufficient funding to allow each member of the Board, and staff, to attend the Spring and Fall SACRS conferences. Additionally, funds will be budgeted, based upon the information available on scheduled conferences and input from individual Board members during the budget preparation process, to allow each Board member and executive staff to attend up to three additional conferences, educational meetings, seminars and site visits each fiscal year. This limitation shall not apply to on-site visits that are made with the consent of the Board, including in connection with the retention of a new manager, nor shall it apply to any conference, educational meeting, seminar or site visit where the cost to the Association can reasonably be expected to be $500 or less.

Travel expenses of Board members and staff shall be considered an administration cost, where permissible by law, or investment cost, and may not be paid by any third party without the express written authorization of the Board.

RECOMMENDED PUBLIC RETIREMENT SYSTEM MEETINGS

It is the intention of the Board to establish a standard whereby attendance at educational meetings, conferences and seminars will be approved only if the agenda for the event contains an average of five (5) hours of substantive educational content per day. This standard would not apply to meetings with investment managers, consultants, short seminars, etc., which would not be expected to last for five hours.

The Board establishes the following as recommended educational meetings, conferences and seminars that qualify as trustee and/or staff education.

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participate as members of the SACRS Board or its committees. Therefore, attendance at such meetings shall not count towards the three conferences, educational meetings, seminars, or site visits limitation set forth above, even if such cost exceeds $500.00.

2. Public Pension Investment Management Program (SACRS/Berkeley). (Attendance shall not count towards the three-conference limit.)
3. California Association of Public Retirement Systems (CALAPRS) Annual General Assembly, trustee and staff roundtables, Advanced Board Leadership Institute, Administrators' Institute and the Principles of Pension Management for Trustees course. (Attendance shall not count towards the three-conference limit.)
4. Programs sponsored by the Institute for Fiduciary Education (IFE).
5. NCPERS Annual Conference.
6. Pension Funds and Money Management, and Alternative Investments and Real Estate; The Wharton School, University of Pennsylvania.
7. Programs sponsored by the National Association of Police Officers (NAPO).
8. Client conferences sponsored by investment managers, asset custodians and consultants with whom the Retirement System has a current professional relationship. (Attendance shall not count towards the three-conference limit.)
9. National Association of Public Pension Attorneys (NAPPA) Conference.
10. California Retirement County Employees Association (CRCEA).
11. Nossaman LLC Annual Fiduciary Forum. (Attendance shall not count towards the three-conference limit.)
12. Council of Institutional Investors (CII)
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Board members may request approval to attend the recommended, or any other multi-day educational meetings, seminars and conferences by submitting a written request to the Retirement Administrator, along with the conference agenda, for inclusion on the next Board agenda. The request should confirm the training meets the average 5-hour-per-day standard, and indicate the number of hours of educational hours the training provides. Requests approved by the Board qualify as Board member education. Educational seminars sponsored by the state or national public pension fund organizations and seminars sponsored by accredited academic institutions shall be deemed to meet Board member education requirements.

APPROPRIATE TOPICS

Appropriate topics for Board member education, may include, but are not limited to, the following:

1. Fiduciary responsibilities.
2. Ethics.
3. Pension fund investments and investment program management.
4. Actuarial matters.
5. Pension funding.
6. Benefits administration.
7. Disability evaluation.
8. Fair hearings.

9. Pension fund governance.
10. New Board member orientation.
11. Sexual Harassment Prevention.

TRAVEL ARRANGEMENTS

It is the preference of the Board to have travel arrangements made through VCERA staff. This would include processing of registrations, hotel accommodations and transportation. However, a Board member may arrange his/her own transportation, but if the traveler selects a more expensive mode of travel, the traveler shall claim only the cost that would have been incurred had the lower cost option been utilized and shall provide documentation of the lower cost option. Except as provided under "Air Transportation" for lengthy flight time travel, trustees who upgrade to business or first class must provide documentation of the price of coach/economy on a date that is at least 4 weeks prior to the date of travel, preferably on the date the trustee books the upgraded travel.

VCERA staff will not make travel arrangements for, or reimbursement to a Board or staff member for any costs associated with the attendance of a spouse or traveling companion to any function.

TRAVEL COSTS

It is the policy of the Board that travel to educational meetings, conferences, seminars, and due diligence visits be achieved in the least expensive practical manner possible in order to reduce costs to the retirement system. When weighing the options or air transportation vs driving a personal or rented vehicle, comparison of total anticipated costs should be considered (ex: parking, mileage, shuttle costs, etc.) and the least expensive option should be favored whenever practical to do so. If the traveler chooses a materially higher cost transportation mode for personal reasons, reimbursement will be limited to the lower cost option.

Reimbursement or payment for travel related expenses may not be made in certain instances. For travel to meetings within the State of California, lodging and other eligible travel related expenses will be paid for the evening prior to the start of the meeting only if the meeting starts at or prior to 9:30 a.m. Lodging for the night of the last day of the conference will not be paid by the Retirement System.

For travel outside of the State of California, lodging and other travel related expenses will be paid by VCERA for the evening prior to the day the meetings starts. Lodging will not be paid by VCERA for the evening of the final day of the meeting unless the substantive portion of the meeting ends after 2:00 p.m. or it can be demonstrated that a reduction in airfare can be achieved by staying over for an additional day which will more than offset the cost for an additional night's lodging and other travel related costs that would be incurred.

In order to avoid unnecessary costs to the Retirement System, Board members should immediately notify VCERA's Chief Financial Officer of the cancellation or other changes in their travel plans.

Travel related costs which will be paid or reimbursed to a Board or staff member include the following:

Air Transportation

Every attempt should be made to make air travel reservations in advance to take advantage of available discounts. Airfare will be paid for coach/economy passage only (or the lowest fare that allows a carry-on bag), with the exceptions listed below:

Flight Time	Seating level allowable
Exceeds 4 hours	1 level above coach/economy
Exceeds 8 hours	Business class, with Board approval.

Hotel Accommodations

Payment for lodging will be at the single occupancy rate, plus applicable room tax. Any lodging costs in excess of the single occupancy room rate will be the responsibility of the Board or staff member.

Meals & Beverages

Reimbursement for the cost of meals and beverages for the Board and staff members while on travel will be made at the rates as shown in the following table. No meal allowance will be paid for any meal that is provided by the host, at the conference, or included with the price of airfare or other mode of transportation, unless for medical dietary restrictions.

	Within California (Receipts Required)	Out-of-State (Receipts Required)	High-Cost Areas (HCA)*	Per Day (Per Diem) (No Receipts Required)
Breakfast	$19.50	$22.50	25.00	$64.00 $74.00 (HCA*) 75% of above for first & last days of travel
Lunch	$19.50	$22.50	25.00	
Dinner	$38.00	$43.00	49.00	

*as designated by the current federal General Services Administration Special Per Diem Rates publication.

Exceptions: 1) for on-site due diligence evaluations, the amounts indicated on the table above are increased by 15%, and; 2) For VCERA trustee/staff group meals while attending a conference, reimbursement for the total eligible meal/beverage cost may be made to the person paying a combined bill, not to exceed an amount equal to the maximum allowable meal cost multiplied by the number of attendees.

Tips

The gratuity for meals may not exceed 18% of the charge, rounded up to the nearest dollar, unless the establishment adds it to the bill. Other tips may be reimbursed for other legitimate services such as maid service, portage, and parking valet service paid in the scope of the traveler’s duty, not to exceed $10 per day. Tips for taxis or ride share service shall not exceed 15% of the fare, rounded up to the nearest dollar.

Rental Car

Every attempt should be made to utilize public transportation, ride share (Uber, Lyft), airport and hotel shuttle services which are reimbursable expenses. A rental car may be used if cost effective. The retirement system will not be responsible for any loss or damage resulting from the use of a rental car.

Parking

Reasonable automobile parking expenses are reimbursable.

Mileage

Retirement Board members and staff will be reimbursed for the use of their own automobile at the current mileage rate authorized by the Internal Revenue Service.

Non-Reimbursable Expenses

Expenditures, which are not substantive to VCERA business will not be reimbursed by VCERA, such as:

A. Any expenses related to alcohol and tobacco;
B. Internet usage fees (unless the internet is used for VCERA business);
C. Any expenses related to entertainment and recreational activities.

Documentation of Expenses and Submission of Reimbursement Claims

All requests for reimbursement of travel costs shall be supported by detailed receipts or other documentation. Agendas from the training may be attached to the travel claims, along with notations of the sessions attended with the associated hours recorded on the face of the claim. All travel claims shall be submitted to the Retirement Administrator or VCERA's Chief Financial Officer no later than the 60th calendar day after the expense is incurred by the Board or staff member. (A sample claim form is attached to this policy.) A signed travel claim constitutes certification that the claimed expenses were incurred for the approved purpose.

REPORTING

Retirement Board members shall, no later than the 2nd subsequent Board meeting, provide a brief report on meetings or conferences attended on behalf of VCERA. The Retirement Administrator shall, no later than the second month of the calendar year, report on annual Board member compliance and post said report on the VCERA Web site.

POLICY REVIEW

In order to keep the provisions of this policy current, the Board will review this policy on an annual basis at a minimum.

POLICY HISTORY

The Board last reviewed and approved this policy on January 23, 2023. The Board previously approved this policy on January 3, 2022, December 13, 2021, June 18, 2018, June 19, 2017, May 2, 2016, June 15, 2015, February 23, 2015, June 2, 2014, June 17, 2013, January 28, 2013, July 2, 2012, June 20, 2011, June 21, 2010, June 15, 2009, September 15, 2008, April 16, 2007, May 1, 2006, October 17, 2005, April 19, 2004, April 21, 2003, May 6, 2002, April 16, 2001, and April 17, 2000. The Board originally adopted this policy on July 6, 1998.

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 23, 2023

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: ANNUAL APPOINTMENT OF AD HOC PERSONNEL REVIEW COMMITTEE FOR 2023

Dear Board Members:

The Senior Managers' Performance Evaluation Policy requires that an ad hoc Personnel Review Committee be established at the beginning of each year. The chief responsibility is to manage the formal evaluation of the Retirement Administrator, the General Counsel and the Chief Investment Officer. Members of the last year's committee were Trustee Grass, Trustee Hoag and Trustee Joe.

Staff recommends the Board authorize the Chair to appoint three (3) trustees to serve on this committee and to designate a Chair.

Staff would be happy to answer any questions you may have at the January 23, 2023, Business Meeting.

Sincerely,

Linda Webb
Retirement Administrator

January 23, 2023

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: CONSIDERATION AND POSSIBLE ACTION TO AMEND SECTION 813 OF THE VCERA MANAGEMENT EMPLOYEES' RESOLUTION

Dear Board Members:

In May 2022, the Board of Retirement adopted amendments to the VCERA Management Employees' Resolution, effective April 18, 2022. The primary purpose for the amendments was to align the Annual Leave provisions with amendments adopted by the County for the County Management Resolution. However, one additional amendment that was proposed by a trustee was to Section 813 for "Clarification of process for retention of excess leave accruals upon transferring from a County position into VCERA Management position; also insertion of Government Code reference." The intended purpose was to align Section 813 with the addition of subdivision (b)(2) to Government Code section 31522.10, effective January 1, 2018. The adopted change:

> Sec. 813 **RETENTION OF EXCESS ACCRUALS**: If employees covered by this Resolution retain annual leave that they accrued as County employees, and they are not deemed to have terminated employment from the County under Labor Code section 227.3 as a result of becoming VCERA employees, then all leave balances accrued by them shall be transferred from the County to VCERA, including full payment to VCERA by the County on those balances to the extent not already a financial obligation of VCERA, as provided in Government Code section 31522.10(b)(2).~~.~~

Government Code section 31522.10(b)(2) reads:

> *"(2) Any leave balance accrued by a county employee prior to his or her appointment as a retirement system employee pursuant to this chapter shall be transferred from the county to the retirement system. The county shall pay to the retirement system at the time that the leave is transferred an amount equal to the value of the accrued leave at that time based on the compensation paid to the employee by the county immediately before the transfer."*

In retrospect, Sec. 813 should have been further revised to remove the previous language, "and they were not deemed to have terminated employment from the County under Labor Code section 227.3 as a result of becoming VCERA employees." This phrase was included in the

original VCERA Management Resolution, prior to the time subdivision (b)(2) was added to the code, and became superseded upon the effective date of the statutory amendment.
Staff recommends further revision to the Section as reflected below:

> Sec. 813 **RETENTION OF EXCESS ACCRUALS**: If employees covered by this Resolution retain an annual leave balance that they accrued as County employees "prior to appointment as retirement system employees,"~~, and they are not deemed to have terminated employment from the County under Labor Code section 227.3 as a result of becoming VCERA employees,~~ then all leave balances accrued by them shall be transferred from the County to VCERA, including full payment to VCERA by the County on those balances to the extent not already a financial obligation of VCERA, as provided in Government Code section 31522.10(b)(2).~~.~~

VCERA's new COO is the first VCERA senior management staff member to "transfer" from the county to the retirement system, and recently the County did not transfer her accrued leave to VCERA, as they are reading Sec. 813 as Ms. Herron being deemed to have terminated employment from the County. However, Government Code section 31522.10(b)(2) is mandatory and supersedes any contrary language in Sec. 813. . The proposed amendment to Sec. 813 is necessary for clarification to ensure that Ms. Herron and any future senior management employees could transfer leave, if applicable, as the County would deem them "terminated."

Therefore, staff recommends clarification to Sec. 813, effective as of 1/1/2018, which was the effective date of the amendment to Government Code section 31522.10 that added subdivision (b)(2). Again, regardless of the wording of this section to date, the Government Code provision governs, and thus the transfer of accrued leave in such a scenario is required.

RECOMMENDATION: ADOPT PROPOSED AMENDMENT TO SECTION 813 OF THE VCERA MANAGEMENT EMPLOYEES' RESOLUTION, EFFECTIVE JANUARY 1, 2018.

Staff will be happy to answer any questions at the January 23, 2023, Board meeting.

Sincerely,

Linda Webb
Retirement Administrator

January 1, 2023

To: SACRS Trustees & SACRS Administrators/CEO's
From: Dan McAllister, SACRS Immediate Past President, Nominating Committee Chair
SACRS Nominating Committee
Re: SACRS Board of Director Elections 2023-2024 - Elections Notice

SACRS BOD 2023-2024 election process will begin January 1, 2023. Please provide this election notice to your Board of Trustees and Voting Delegates.

DEADLINE	DESCRIPTION
March 1, 2023	Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations no later than noon on March 1 of each calendar year regardless of whether March 1 is a Business Day. Each candidate may run for only one office. Write-in candidates for the final ballot, and nominations from the floor on the day of the election, shall not be accepted.
March 25, 2023	The Nominating Committee will report a final ballot to each regular member County Retirement System prior to March 25
May 13, 2023	Nomination Committee to conduct elections during the SACRS Business Meeting at the Spring Conference
May 15, 2023	Board of Directors take office for 1 year

Per SACRS Bylaws, Article VIII, Section 1. Board of Director and Section 2. Elections of Directors:

Section 1. Board of Directors. The Board shall consist of the officers of SACRS as described in Article VI, Section 1, the immediate Past President, and two (2) regular members

> ***A. Immediate Past President.*** *The immediate Past President, while he or she is a regular member of SACRS, shall also be a member of the Board. In the event the immediate Past President is unable to serve on the Board, the most recent Past President who qualifies shall serve as a member of the Board.*
> ***B. Two (2) Regular Members****. Two (2) regular members shall also be members of the Board with full voting rights.*

Section 2. Elections of Directors*. Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations no later than noon on March 1 of each calendar year regardless of whether March 1 is a Business Day. Each candidate may run for only one office. Write-in candidates for the final ballot, and nominations from the floor on the day of the election, shall not be accepted.*

The Nominating Committee will report its suggested slate, along with a list of the names of all members who had been nominated, to each regular member County Retirement System prior to March 25.
The Administrator of each regular member County Retirement System shall be responsible for communicating the Nominating Committee's suggested slate to each trustee and placing the election of SACRS Directors on

his or her board agenda. The Administrator shall acknowledge the completion of these responsibilities with the Nominating Committee.

Director elections shall take place during the first regular meeting of each calendar year. The election shall be conducted by an open roll call vote, and shall conform to Article V, Sections 6 and 7 of these Bylaws.

Newly elected Directors shall assume their duties at the conclusion of the meeting at which they are elected, with the exception of the office of Treasurer. The incumbent Treasurer shall co-serve with the newly elected Treasurer through the completion of the current fiscal year.

The elections will be held at the SACRS Spring Conference May 9-12, 2023. Elections will be held during the Annual Business meeting on Friday, May 12, 2023, in San Diego at Paradise Point Hotel and Resort.

If you have any questions, please contact Dan McAllister, Dan.McAllister@sdcounty.ca.gov

Thank you for your prompt attention to this timely matter.

Sincerely,

Dan McAllister

Dan McAllister, San Diego CERA Trustee & San Diego County Treasurer Tax Collector
SACRS Nominating Committee Chair

CC: SACRS Board of Directors
SACRS Nominating Committee Members
Sulema H. Peterson, SACRS Executive Director

SACRS Nomination Submission Form
SACRS Board of Directors Elections 2023-2024

All interested candidates must complete this form and submit along with a letter of intent. **Both the form and the letter of intent must be submitted no later than March 1, 2023.** Please submit to the Nominating Committee Chair at Dan.McAllister@sdcounty.ca.gov AND to SACRS at sulema@sacrs.org. If you have any questions, please feel free to contact Sulema Peterson at SACRS at (916) 701-5158.

Name of Candidate	Name:
Candidate Contact Information (Please include – Phone Number, Email Address and Mailing Address)	Mailing Address: Email Address: Phone:
Name of Retirement System Candidate Currently Serves On	System Name:
List Your Current Position on Retirement Board (Chair, Alternate, Retiree, General Elected, Etc)	○ Chair ○ Alternate ○ **General Elected** ○ Retiree ○ Other ___________
Applying for SACRS Board of Directors Position (select only one)	○ President ○ **Vice President** ○ Treasurer ○ Secretary ○ Regular Member
Brief Bio in Paragraph Format	

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 23, 2023

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: QUARTERLY RETIREMENT ADMINISTRATOR'S REPORT FOR THE FOURTH QUARTER (OCT - DEC) OF 2022

Dear Board Members:

In compliance with VCERA's Monitoring & Reporting Policy, this report includes information regarding travel, training, key meetings and media communications, as well as other key issues. This report covers the 4th quarter of 2022, and the information provided reflects not only the work associated with the Retirement Administrator, but of other staff as well.

General

As with the previous quarters, issues centering around *Alameda* implementation continued to dominate the workload for the Retirement Administrator, General Counsel, and to some extent senior Operations staff. The Governor vetoed AB 826 on September 29th, and this triggered a great deal of activity for VCERA staff. As explained previously, staff was prepared to implement the provisions, but had to change and adapt after the veto was issued. In addition to internal meetings, legal discussions with the General Counsel, tax counsel, & fiduciary counsel, VCERA interacted a great deal with stakeholders, BOR trustees, and reworked approaches to estimates and other calculations in response. Staff brought a post-veto Resolution to the Board in October 2022, and the Board delayed action until April 2023. The preparation for this meeting consumed a great deal of time, and the subsequent delay caused additional uncertainty about the ultimate implementation plan parameters.

Staff spent considerable time reviewing and discussing the new structure COV has introduced for their flexible benefit allowance program. Staff also worked extensively with the Auditor-Controller to continue progress on the Alameda issues and corrections unrelated to flex credit.

Staff also continued to work with counsel(s) on the VCPFA and VCDSA appeals of standby exclusion; on October 11th, we learned of the tentative ruling in VCERA vs. County of Ventura et al., and VCERA's

General Counsel provided the Board with an update, summary and identified key takeaways from the ruling.

As Retirement Administrator, I spent considerable time gathering information in response to potential customer service concerns raised by a trustee who reported hearing from certain union members about delays in receiving estimates or information. There was also a concern that VCERA staff was providing incorrect information about how Cost of Living Adjustments (COLAs) were calculated. Fortunately, the investigation showed that estimates were not being delayed, and that the staff members indeed had a thorough grasp of the COLA provisions and were providing accurate information, and were in fact testing the COLA programming each year for accuracy before benefits were updated for impacted retirees. A follow-up report was provided to the Board with statistics and other relevant information.

Staff worked to get updated insurance policies in place in Q4, reviewed the draft actuarial valuation with Segal, and later distributed the final report to the Board and various stakeholders in advance of today's formal presentation of the new valuation.

Legal

General Counsel was involved in essentially all aspects of Alameda-related work with the Retirement Administrator, but performed extensive legal work in advancing the administrative appeal of VCPFA on Standby Pay. This was also true for the administrative appeal filed by Mr. Bondsmith on behalf of former Fire Control Workers.

In addition to work performed in connection with all issues related to Alameda, the General Counsel attended to the legal work of the quarter. Examples include work in the areas of community property, disability retirement advisory work and review of cases, review of contracts, advising Operations staff on benefits issues, and legal research and advice on investment contracts and issues.

Personnel

The recruitment for VCERA's Chief Operations Officer position was completed, and after an extensive interview process, Ms. Amy Herron accepted the position and joined our team on January 9th. In addition to the COO hiring, the Senior Information Technology Specialist vacancy in IT was filled and Michael Sanchez also joined the VCERA team on January 9th. Operations saw two promotions in the 4th quarter: Teri Cruz was promoted to a Retirement Benefits Specialist II (Program Administrator II) effective December 11, 2022, and Shana Barrow was promoted to Program Administrator I, effective October 30, 2022.

Board/Policy/Compliance

Much of the policy and compliance work during the period(s) related to *Alameda* related topics. In October, staff brought the Service Provider Selection Policy to the Board for review. Several policies are currently in staff review and several will be brought to the Board in Q1 and Q2 of 2023.

Operations

As explained in the last report, Operations consists of several departments: Payroll, Death Benefits, Active, Community Property, and Disability Units, as well as the Office Assistants (OAs).

Retiree Payroll & Death Benefits

During this past quarter, Operations staff assisted with the testing and implementation of the federal W-4P form and other tax withholding changes. This was a team effort involving IT, Fiscal and Operations. Staff also processed the health premium changes for the 2023 calendar year, assisted with 1099-R testing and implemented the 2022 415(b) limits.

At the end of the 4th quarter, VCERA monthly payroll exceeded 8,000 payees (retirees, survivors, and DRO non-members and alternate payees). Staff processed 77 new service retirements and 23 new survivor continuances from October through December, 2022. The average turnaround time from date of retirement to date of first check for new service retirees was 39 days.

	Q4
Service Retirements	77
Survivor Continuances	23
TOTAL	100
Avg. Turnaround Time from Date of Retirement to First Payment	39 days

Actives & Community Property

Staff also spent an increased amount of time handling customer service inquiries due to increased questions regarding flex credit and increased Member Portal assistance needs due to the addition of multi-factor authentication. During this period, the Actives unit completed 300 benefit estimates with an average turnaround time of 2.3 weeks, as well as 173 service credit purchase calculations:

Workflows	**Q4**	
Benefit Estimates	Completed	300
	New Requests	191
	Avg. Turnaround	2.3 weeks
Service Credit Purchases	Completed	173
	New Requests	79

	Q4
New Members	295
Terminations	328
Reciprocity	61

Disability

At the end of the 4th quarter, there were 45 “new model” cases in process and 5 cases directed to hearing. A total of 5 VCERA cases and 6 County cases were decided or closed during this period. Staff calculated 13 disability retirement estimates, led 10 disability counseling sessions, and performed 16 retiree payroll calculations.

	Q4
“New Model” cases in process at end of quarter *	50
Cases Closed in Quarter (Old & New Model)	11
Disability Retirement and Service Retirement Estimates	13
Disability Counseling Sessions	10

** including cases going to hearing*

One of the Disability Benefit Specialists has been on a leave of absence since June 2022. Despite being short-staffed, the Disability Unit was productive this quarter, completing 8 IME appointments and packaging an additional 5. During this time, the OAs in Operations provided exceptional clerical assistance. Staff continues to work with the outside disability attorney to schedule timely hearings.

Communications

The Communications Officer worked on the 2022 Annual Comprehensive Financial Report (ACFR) with the CFO, updated several VCERA forms, and made updates to the VCERA website for several topics. The employer letters communicating the new pending contribution rates were drafted based on the information in the new valuation presented today by Segal.

Made several updates to VCERA website including new 2023 payment dates, Board meeting dates, new compensation limits, new employee hires, Board member changes, and form updates.

<u>Fiscal</u>

During the 4th quarter of 2022, the VCERA Fiscal Unit workload consisted of both recurring, quarterly, annual, and special project fiscal activities. During this quarter, the recurring fiscal activities included fiscal investment portfolio management, general ledger account reconciliations, state of CA quarterly tax reporting, pension surveys, financial reporting, cash flow management, accounts payable, financial and variance analyses (i.e., member contribution, retiree payroll, general ledger account, audit, actuarial, and other as required) and team trainings.

Also. during this quarter, the fiscal unit workload consisted of numerous annual fiscal projects that are near completion or completed. The annual financial audit is now near completion, with no significant issues. The audit will be finalized in January 2023. A draft of the Annual Comprehensive Financial Report (ACFR) was generated with an auditor approved target completion date of January 2023. The fiscal unit collaborated with the VCERA System Administration team on the mandated IRS W4-P 2022 form – Withholding Certificate for Periodic Pension or Annuity Payments implementation project. The collaboration consisted of gaining an understanding of form components as each relates to required tax withhold changes, create an automated user-friendly EXCEL template, identify required system updates, attend meetings, evaluate testing, and participate in roll-out training. As requested, the fiscal unit timely delivered actuarial valuation data to Segal. In December 2022, Segal finalized the June 30, 2022 Actuarial Valuation and GASB 67 reports. Both actuarial reports will be presented for approval at the January 23rd VCERA Board meeting.

The Fiscal team continues to carry a significant workload that includes additional private equity and private credit investments assets reconciliations, daily operational tasks, and other as required fiscal duties.

<u>Information Technology</u>

VCERA IT completed annual penetration testing of both the VCERA external network and Member Portal, social engineering and phishing campaigns were included this year to test staff's ability to determine legitimacy of requests and determine if sensitive information was provided to potential scammers. As part of the annual cybersecurity campaign, cybersecurity training was provided to staff. Confidential memo was provided to VCERA Senior Staff and the Board.

VCERA IT has acquired and implemented an asset management and help desk solution. All computer related assets have been uploaded to the software and the help desk functionality has been implemented. VCERA Staff are using the portal to submit all IT and V3 related requests to staff. This solution will provide reporting and tracking of the number of requests and time spent on each request. Additional features such as contract management and onboarding staff are available and will be reviewed for potential implementation with other VCERA Departments.

Both VCERA IT and Senior Staff met with Vitech to discuss potential changes to the hosting environment and current version of V3. VCERA's CTO will be meeting with the CTOs from SamCERA and OCERS to discuss Vitech's offerings. The outcome of this meeting and Vitech's proposal will provide data to be used as part of the project to evaluate hosting of V3.

The W4P changes have been implemented in V3 production and training was provided to staff by both the Systems Administrators and Fiscal. No changes were needed for the 1099-R so staff worked with Fiscal to provide the necessary data. Additionally, the PEPRA Benefit Calculator was implemented on the Member Portal and the Hosting contract and Vitech Support Contract were both sent back to Vitech on 11/21/22. The Systems Administrators have been working diligently on testing enhancements and required tax changes and focused on year end tasks. Transmittal files are being processed bi-weekly and immediate issues are being addressed, but staff have not had the time to review and track outstanding that was previously performed by Louise Webster, since her departure. VCERA IT has completed the recruitment for the Senior Information Technology Specialist. Michael Sanchez was hired from the County of Ventura District Attorney IT Department and starts with VCERA on January 9, 2023.

VCERA's CTO drafted an internal Change Management Policy to implement best practices and guidelines for VCERA IT when managing changes in V3 and other areas of IT. Final review of the policy is underway and will be implemented by the end of January 2023. She also completed a one year term as the Chair of the County of Ventura's Business Technology Committee (BTC) and continues to sit on the BTC Subcommittee for evaluating county wide policies related to IT and Security.

Specifically related to the items in the Business Plan:

Objective #1: Agenda Management Software – complete

Objective #2: Gartner EP – underway and support, guidance and research is provided by Gartner regularly. Gartner's tools and support have helped increase awareness and cybersecurity posture of VCERA over the last year. The CTO attended the Gartner IT Symposium, obtaining valuable information and developed networking connections with other pension systems and county IT managers.

Objective #3: Cybersecurity Testing – compete & outlined above (Annual Penetration Testing)

<u>Travel & Training</u>

The RA did not attend any training courses, apart from the SACRS Fall Conference. Other office staff members have attended CALAPRS round tables.

<u>Media</u>

Retirement Administrator fielded a follow-up media inquiry regarding AB 826 and subsequent veto.

Key Meetings

Most key meetings were related to the work described elsewhere in this report. Staff also met with the new Sheriff to assist in communicating information about his VCERA membership and retirement.

Please contact me with any questions you may have regarding this quarterly report.

Sincerely,

Linda Webb

Linda Webb
Retirement Administrator

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 23, 2023

SUBJECT: CHIEF INVESTMENT OFFICER'S 4th QUARTER 2021 INVESTMENT ACTIVITY REPORT

Dear Board Members:

Below is a summary of fourth quarter 2022 investment activity.

Private investments:
- $100 million private credit commitment to PIMCO Credit Opportunities Fund IV- NEPC/ Board approved
- $10 million private equity commitment to Pantheon Credit Opportunities Fund II NEPC/ Board approved
- $20 million private equity commitment to Buenaventure I- Abbott mandate

Investment presentations:
- Abbott Capital Management:
  - Private equity investment environment and outlook; program; portfolio strategy, composition, and performance review
  - Investment Plan and 2023 Pipeline
  - California Government Code Section 7514.7 mandatory annual disclosure reporting for private equity portfolio investments
  - Progress toward Private Equity Target as of June 30, 2022
- Blackrock: U.S. large and small-mid cap equity index portfolios; non-U.S. and global equity index portfolios; U.S. fixed income index portfolio investments
- Loomis Sayles Combined Annual Presentation of the Multisector Full Discretion and Strategic Alpha portfolios
- NEPC:
  - 2022 Q3, and September, October, and November preliminary monthly investment performance reports
  - California Government Code Section 7514.7 mandatory annual disclosure reporting for private credit, real estate, and real assets investments
  - Research report and joint recommendation for private credit commitment to Pantheon Private Credit Secondaries Fund
  - Research report and joint recommendation for private credit commitment to PIMCO Credit Opportunities Fund IV
- Pantheon Private Credit Secondaries Fund Supplemental Commitment
- PIMCO Credit Opportunities Fund IV
- Reams Asset Management: unconstrained bond portfolio and U.S. Treasury bond portfolio
- Western Asset Management: core fixed income and portable alpha (equity) portfolios

- VCERA CIO:
  - 2023 calendars of investment presentations and on-site due diligence
  - Recommendation Board letter to approve supplemental private credit commitment to Pantheon's Credit Opportunities Fund II
  - Recommendation Board letter to approve PIMCO Credit Opportunities Fund IV private credit commitment
  - Recommendation Board letter to approve NEPC Public Funds Workshop
  - Informational Notice of Nuveen acquiring Arcmont Asset Management

Other:

- Teleconferences, phone calls etc. with investment managers across asset classes, consultants, custodian, regarding actions taken and portfolio monitoring; and to ensure liquidity to effect VCERA priorities.
- Group conference calls with California public pension fund CIOs to share investor activity

Progress on Goals for 2022

VCERA's Investment Program: Board adopted asset allocation implementation

- Continuous evaluation of consultant driven *private equity* deal flow and opportunities towards reaching the Board approved 18% asset allocation target, while continuing vintage year diversification. VCERA committed $269.1 million to private equity funds in calendar year 2022, slightly below its $275 million pacing target. VCERA's private equity commitment target for 2023 is projected to be approximately $250 million.
- Continuous evaluation of consultant driven *private credit* deal flow and opportunities towards achieving the Board approved allocation of 8% targeted to private credit over 3 to 5 years. VCERA committed $265 million to private credit funds in 2022, exceeding its $240 million pacing target.
- Targeting the March 27 Board meeting to update the Private Equity and Private Credit Pacing Plans.

Reduced Fees

- Fee discounts have been achieved with Board approved 2022 private investments commitments in 8 funds, across publicly traded equities and fixed income, private equity, private credit, and infrastructure.

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

California Association of Public Retirement Systems

CALAPRS

EDUCATION · COMMUNICATION · NETWORKING

Register Now!

CALAPRS invites you to attend the **Annual General Assembly, March 4 - March 7, 2023 in beautiful Monterey at the Monterey Marriott Hotel**! The General Assembly is an educational conference for retirement system trustees, senior staff, and our annual sponsors. Attendees will learn from experts and peers, while getting the opportunity to greet their colleagues face-to-face and network.

General Assembly Program-at-a-Glance

- Keynote Session: Searching for a Soft Landing in 2023 with Brian Nick, Chief Investment Strategist for Nuveen
- NASRA Statistics Update with Keith Brainard
- Legal Mock Trial with Maytak Chin & Harvey Leiderman

- Digital Opportunities Panel with Suzanne Jenike with OCERS, Danielle Couture, SBCERA, and Tim Taylor with Enterprise Solutions Development Division
- Robotic Process Automation with Robert Pucci, Executive Director of Intelligent Automation, State of Tennessee
- LDROM & Inflation Impact with Todd Tauzer, Segal
- Geopolitical Risks Not Yet Resolved in 2023 with Matt Gertken, Chief Strategist, BCA Research
- And more to come...

Download the Program Agenda

Register Today!

BONUS SESSION: AB1234 Ethics for Public Pension Trustees

Ashley Dunning, a Partner with Nossaman LLP will also be presenting a 2-hour session, AB1234 Ethics for Public Pension Trustees. This ethics session is mandatory training for public officials and covers conflict of interest rules, public meeting and record requirements, due process requirements, and other significant rules for legal compliance by public officials, with a particular focus on how these rules apply to retirement board trustees and senior staff.

LODGING

CALAPRS has arranged for a discounted room rate at the meeting hotel, the Monterey Marriott for the duration of the meeting.

Room Rate: $234/night, plus taxes and fees*
Book Online: https://book.passkey.com/go/CALAPRS2023
By Phone: 877-901-6632; Group Code: CALAPRS

Cut-off Date: The room rate is available until **February 7, 2023** or until the block is sold out, whichever comes first.

All attendees are responsible for their own room, tax and incidental charges.

Register now to become a 2023 CALAPRS Sponsor!

Annual CALAPRS sponsorship includes the following key benefits:

- **Registration for up to (2) two representatives to the CALAPRS General Assembly**, an educational event for trustees and senior staff, to be held on March 4-7, 2023 in Monterey, CA (see below).
- A listing in the CALAPRS Membership Roster
- A semi-annual CALAPRS Newsletter

- Your sponsorship of CALAPRS benefits the state through its promotion of well-educated and professional trustees and staff in the California pension systems. Learn more.

The cost of CALAPRS Sponsorship for 2023 is $2,500.

Renewing a prior sponsorship? Log-in to renew.

Become A Sponsor Today!

HEALTH & SAFETY

CALAPRS is dedicated to providing a safe event experience for all participants involved including attendees, sponsors, staff, and guests. CALAPRS will conduct the General Assembly as advised by government (local, state, and national) regulations, CDC recommendations, and venue requirements at the time of the event.CALAPRS will communicate with registered attendees ahead of the event should proof of vaccination, testing, masking, or other requirements come into effect for this meeting.

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Contact CALAPRS

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CALAPRS
EDUCATION • COMMUNICATION • NETWORKING
California Association of Public Retirement Systems

MARCHING FORWARD

GENERAL ASSEMBLY 2023

MARCH 4 – 7, 2023 ➤ MONTEREY, CA

The California Association of Public Retirement Systems (CALAPRS) invites you to attend the annual **General Assembly, March 4 – March 7, 2023 at the Monterey Marriott**! The General Assembly is an educational conference for retirement system trustees, senior staff, and our annual sponsors. Attendees will learn from experts and peers, while getting the opportunity to network with colleagues.

REGISTRATION

Register online at www.calaprs.org/events

- **Retirement System Fee:** $250/person
- **Sponsor Fee:** $2,500 annual sponsorship includes registration for 2 representatives at no additional cost.

LODGING

CALAPRS has arranged for a discounted room rate at the meeting hotel, the Monterey Marriott, 350 Calle Principal, Monterey, CA for the duration of the meeting.

Room Rate: $234/night, plus taxes and fees
Book Online: bit.ly/GA2023_Hotel
By Phone: 1-877-901-6632 and reference "CALAPRS"

Cut-off Date: The room rate is available until February 7, 2023 or until the block is sold out, whichever comes first.

HEALTH & SAFETY

CALAPRS is dedicated to providing a safe event experience for all participants involved including attendees, sponsors, staff, and guests. CALAPRS will conduct the General Assembly as advised by government (local, state, and national) regulations, CDC recommendations, and venue requirements at the time of the event. Read the fully in-person event policy here: www.calaprs.org/page/eventpolicy

CALAPRS GENERAL ASSEMBLY | PROGRAM

DAY 01
SATURDAY, MARCH 4

4:00 – 6:00 PM
Registration Open

DAY 02
SUNDAY, MARCH 5

9:30 AM – 5:00 PM
Registration Open

10:00 AM – 12:00 PM
AB1234 Ethics for Trustees | Ashley K. Dunning, Partner, Co-Chair Public Pensions & Investment Group, Nossaman LLP

2:00 – 2:15 PM
Opening Remarks | Johanna Shick, CEO, SJCERA and General Assembly Conference Chair; and Dave Nelsen, CEO, ACERA and CALAPRS President

2:15 – 3:15 PM
NASRA Statistics | Keith Brainard, Research Director, National Association of State Retirement Administrators

3:15 – 3:30 PM
Networking Break

3:30 – 4:30 PM
Legal Mock Trial | Maytak Chin, Partner and Harvey Leiderman, Partner, Reed Smith LLP

7:00 – 9:30 PM
Strolling Dinner at the Monterey Bay Aquarium | System attendees may bring a guest to the Strolling Dinner. Please contact info@calaprs.org to add a guest.

DAY 03
MONDAY, MARCH 6

7:00 AM – 4:00 PM
Registration Open

7:15 – 8:15 AM
Breakfast

8:15 – 8:30 AM
Opening Remarks | Johanna Shick, CEO, SJCERA and General Assembly Conference Chair

8:30 – 9:30 AM
Searching for a Soft Landing in 2023 | Brian Nick, CAIA, Chief Investment Strategist, Nuveen

9:30 – 10:00 AM
Networking Break

10:00 – 11:00 AM
Geopolitical Risks Not Yet Resolved In 2023 | Matt Gertken, Chief Strategist, BCA Research

11:00 AM – 12:00 PM
Investments in 2023 – What You Need to Know | Toner, CFA, Chief Investment Officer, Verus

12:00 – 1:30 PM
Lunch

1:30 – 2:30 PM
Robotic Process Automation | Robert Pucci, Executive Director of Intelligent Automation, State of Tennessee

2:30 – 3:00 PM
Networking Break

3:00 – 4:00 PM
Tracking Productivity & Performance Measures | CalPERS

5:00 – 6:00 PM
Networking Reception (Ferrantes Bayview Room of the Monterey Marriott)

DAY 04
TUESDAY, MARCH 7

7:30 – 11:00 AM
Registration Open

7:30 – 8:30 AM
Breakfast

8:30 – 10:00 AM
Digital Opportunities Panel: Online Retirement Process, Trustee Electronic Elections, and Multi-Factor Authentication/ID-ME | Danielle Couture, Communications Manager, SBCERA; Suzanne Jenike, Assistant CEO External Operations, OCERS; and Tim Taylor, Enterprice Solutions Development Division Chief, CalPERS

10:00 – 10:15 AM
Networking Break

10:15 – 11:00 AM
LDROM & The Impact of Inflation on Liabilities | Todd Tauzer, Vice President & Actuary, Segal

11:00 – 11:15 AM
Closing Remarks | Johanna Shick, CEO, SJCERA and General Assembly Conference Chair

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Thank you to our 2023 General Assembly Planning Committee

Johanna Shick, CEO, SJCERA (Chair)
Steve Delaney, CEO, OCERS
Scott Hood, CEO, SamCERA
Greg Levin, CPA, CEO, SBCERS
Dave Nelsen, CEO, ACERA
Anthony Suine, Deputy Executive Officer, Communications & Stakeholder Relations, CalPERS

From: Wassel, Catie on behalf of UBSRealty_ClientService
To: UBSRealty_ClientService
Subject: News Flash – California Flooding Impact
Date: Wednesday, January 11, 2023 2:28:32 PM
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Real Estate & Private Markets
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News Flash

California Flooding Impact – January 11, 2023

As many of you may be aware, torrential rain storms have caused historic flooding across the State of California. Our thoughts and prayers are with those affected by the flooding.

There has been no significant damage or flooding to any of the properties contained in the portfolios we manage on your behalf. Minor roof leaks have been reported. We continue to monitor this situation closely and will report back to you in the event that this situation should change.

With employees based in California, we continue to be concerned not only for our colleagues but for all of the residents in this area who are dealing with these very difficult conditions.

Contact us

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