Zoom Instructions Here

Alameda County Employees' Retirement Association

BOARD OF RETIREMENT

REVISED NOTICE and AGENDA

THIS MEETING WILL BE CONDUCTED VIA TELECONFERENCE [SEE EXECUTIVE ORDER N-29-20 ATTACHED AT THE END OF THIS AGENDA.]

ACERA MISSION:

To provide ACERA members and employers with flexible, cost-effective, participant-oriented benefits through prudent investment management and superior member services.

Thursday, May 21, 2020
2:00 p.m.

HOW TO PARTICIPATE	BOARD OF RETIREMENT - MEMBERS	
The public can view the Teleconference and comment via audio during the meeting. To join this Teleconference, please click on the link below. https://zoom.us/join Meeting ID: 836 1666 5181 Password: 345096 For help joining a Zoom meeting, see: https://support.zoom.us/hc/en-us/articles/201362193	**HENRY LEVY** **CHAIR**	**TREASURER**
	ELIZABETH ROGERS **FIRST VICE-CHAIR**	**ELECTED GENERAL**
	JAIME GODFREY **SECOND VICE-CHAIR**	**APPOINTED**
	DALE AMARAL	**ELECTED SAFETY**
	OPHELIA BASGAL	**APPOINTED**
	KEITH CARSON	**APPOINTED**
	TARRELL GAMBLE	**APPOINTED**
	LIZ KOPPENHAVER	**ELECTED RETIRED**
	GEORGE WOOD	**ELECTED GENERAL**
	NANCY REILLY	**ALTERNATE RETIRED**[1]
	DARRYL L.WALKER	**ALTERNATE SAFETY**[2]

[1] Alternate Retired Member (Votes in the absence of the Elected Retired Member, or, if the Elected Retired Member is present, then votes if both Elected General members, or the Elected Safety Member and an Elected General member, are absent).

2 Alternate Safety Member (Votes in the absence of (1) the Elected Safety, (2) either of the two Elected General Members, or (3) both the Retired and Alternate Retired members).

Note regarding accommodations: The Board of Retirement will provide reasonable accommodations for persons with special needs of accessibility who plan to attend Board meetings. Please contact ACERA at (510) 628-3000 to arrange for accommodation.

Note regarding public comments: Public comments are limited to four (4) minutes per person in total.

The order of agendized items is subject to change without notice. Board and Committee agendas and minutes are available online at www.acera.org.

1. CALL TO ORDER:

2. ROLL CALL:

3. PUBLIC COMMENT:

4. CONSENT CALENDAR:

A. APPROVE APPLICATIONS FOR SERVICE RETIREMENT:
Appendix A

B. APPROVE APPLICATIONS FOR RETIREMENT, DEFERRED:
Appendix B

C. APPROVE APPLICATIONS FOR DEFERRED TRANSFER:
None

D. LIST OF DECEASED MEMBERS:
Appendix D

E. APPROVE REQUESTS FOR 130 BI-WEEKLY PAYMENTS TO RE-DEPOSIT CONTRIBUTIONS AND GAIN CREDIT:
Appendix E

F. APPROVE STAFF RECOMMENDATIONS (UNCONTESTED) FOR DISABILITY RETIREMENTS:
Appendix F

G. APPROVE HEARING OFFICER RECOMMENDATIONS FOR DISABILITY RETIREMENTS:
None

H. APPROVAL of COMMITTEE and BOARD MINUTES:
April 16, 2020 Minutes of the Regular Board Meeting

I. MISCELLANEOUS MATTERS:
Unaudited Financial Statements as of March 31, 2020
Operating Expenses as of March 31, 2020
Quarterly Cash Forecast Report as of March 31, 2020
Board Member Conference Expense Report as of March 31, 2020
Senior Manager Conference and Training Expense Report as of March 31, 2020
Statement of Reserves and SRBR Financial Status Report as of December 31, 2019
Order Granting ACERA Lead Plaintiff Status in Portola Pharm. Securities Litigation
Quarterly Report on Member Under/Overpayments
1st Quarter 2020 Call Center Report
Approve Staff Recommendations for Adoption of New Pay Codes for the:
County of Alameda, Alameda Health System, Superior Courts and First 5

-------End of Consent Calendar-------
(MOTION)

REGULAR CALENDAR
REPORTS AND ACTION ITEMS

5. DISABILITIES, RECOMMENDATIONS AND MOTIONS:

None.

6. COMMITTEE REPORTS, RECOMMENDATIONS AND MOTIONS:

None.

7. NEW BUSINESS:

A. Discussion and possible motion that after contributions are made to the 401(h) accounts by the respective Participating Employers, ACERA, in accordance with the CERL, treat an equal amount of Supplemental Retiree Benefit Reserve assets as employer contributions for pensions and transfer the amount equal to the pro rata share of the 401(h) contributions for the 2020-2021 fiscal year for each Participating Employer. The exact amount will be adjusted by the balance remaining in each of the 401(h) accounts and is contingent upon receipt by ACERA of an authorizing resolution from the Participating Employers' governing bodies.

B. Discussion and possible motion to accept and file the December 31, 2019 Audited Financial Statements and Independent Auditor's Report.

C. Discussion and possible motion to adopt the Actuarial Valuation as of December 31, 2019.

D. Discussion and possible motion to adopt Government Accounting Standards Board (GASB) Statement No. 67 Actuarial Valuation and Addendum as of December 31, 2019.

E. Discussion and possible motion to adopt GASB Statement No. 74 Actuarial Valuation and Addendum as of December 31, 2019.

F. Chief Executive Officer's Report.

8. CONFERENCE/ORAL REPORTS:

9. ANNOUNCEMENTS:

10. BOARD INPUT:

11. ESTABLISHMENT OF NEXT MEETING:

Thursday, June 18, 2020 at 2:00 p.m.

12. CLOSED SESSION:

A. CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION, Gov't Code Sec. 54956.9(d)(1), *Alameda County Deputy Sheriff's Association v. Alameda County Employees' Retirement Association*, California Supreme Court Case No. S247095

13. REPORT ON ACTION TAKEN IN CLOSED SESSION:

14. ADJOURNMENT:

APPENDIX A
APPLICATION FOR SERVICE RETIREMENT

AKBAR, Irfan
Probation
Effective Date: 2/22/2020

ALBERGOTTIE, Linda
Social Services Agency
Effective: 12/28/2019

ALI, Aslam
Sheriff's Office
Effective: 3/21/2020

ANTOINE, Charles R.
Treasurer-Tax Collector
Effective: 3/21/2020

ATTIOGBE, Kwablah J-L
Public Works Agency
Effective: 3/21/2020

BAKER, Barry L.
Social Services Agency
Effective: 3/4/2020

BARON, Howard L.
Sheriff's Office
Effective: 3/22/2020

BAUMANN, Elizabeth P.
Health Care Services Agency
Effective: 3/21/2020

BEINTEMA, Connie
Sheriff's Office
Effective: 2/22/2020

BONCODIN, Maria-Luisa G.
Superior Courts
Effective: 3/8/2020

BROWN, Trevor M.
Probation
Effective: 3/22/2020

CAMPODONICO, Edward
Alameda Health System
Effective: 3/22/2020

CARLISLE, Richard S.
Alameda Health System
Effective: 3/21/2020

CARTER, Richard A.
Sheriff's Office
Effective: 2/29/2020

CAYANAN, Rodrigo
Social Services Agency
Effective: 2/22/2020

CHOW, Ted
ACERA
Effective: 3/21/2020

COHRAN, Philip T.
General Services Agency
Effective Date: 3/21/2020

COLON, Rafael
Probation
Effective: 3/21/2020

CRUZ, Louis N.
District Attorney
Effective: 2/8/2020

CSISZAR, Csilla
Social Services Agency
Effective: 2/4/2020

DAVILA, Robert W.
District Attorney
Effective: 3/21/2020

DE DIOS, Whilma C.
Probation
Effective: 2/22/2020

DE JESUS, Emily D.
Alameda Health System
Effective: 3/21/2020

DELEON, Yolanda C.
Alameda Health System
Effective: 2/23/2020

APPENDIX A
APPLICATION FOR SERVICE RETIREMENT

DENNY, Christian P.
Sheriff's Office
Effective: 3/21/2020

DOMINGO, Kofoworola M.
General Services Agency
Effective: 12/31/2019

EDNALAGA, Melanio S.
Assessor
Effective: 3/21/2020

FAUMUINA, Sao
Social Services Agency
Effective: 3/21/2020

FREITAG, Rodman D.
General Services Agency
Effective: 3/7/2020

GARCIA, Maria Amelia J.
Auditor-Controller
Effective: 2/22/2020

GLORIA, Carolina V.
Auditor-Controller
Effective: 3/21/2020

GORDON, Sandra J.
District Attorney
Effective Date: 3/21/2020

GOSSETT, Damien M.
Community Development Agency
Effective: 2/22/2020

HA, Hong T.
Information Technology
Effective: 3/21/2020

HALPERIN, Lisa A.
Health Care Services Agency
Effective: 3/20/2020

HASELTON, Thomas G.
District Attorney
Effective: 3/10/2020

HINDERLIE, Thomas R.
Public Works Agency
Effective: 3/21/2020

HODGSON, Hazel M.
Alameda Health System
Effective: 3/20/2020

JOHNSON, Karen M.
Sheriff's Office
Effective: 11/2/2019

JONES, Janet R.
Child Support Services
Effective: 3/7/2020

KELANI, Bolanle A.
Alameda Health System
Effective: 2/20/2020

KLASS, Deanne M.
Superior Courts
Effective: 3/14/2020

KOLTZ, John K.
Zone 7
Effective: 3/21/2020

KRAUSNICK, Michael E.
Health Care Services Agency
Effective: 2/22/2020

LABAYOG, Victorino J.
Health Care Services Agency
Effective: 3/21/2020

LAKE, Robert
Alameda Health System
Effective: 2/28/2020

APPENDIX A
APPLICATION FOR SERVICE RETIREMENT

LAM, Cynthia
Social Services Agency
Effective: 3/7/2020

LISTER, Daniel V.
Probation
Effective Date: 3/21/2020

LOVESETH, Sharon L.
Health Care Services Agency
Effective: 2/22/2020

LUI, Leung
Social Services Agency
Effective: 3/7/2020

MCKOY, Vivian
Alameda Health System
Effective: 2/15/2020

MEEKS, Denise M.
Social Services Agency
Effective: 2/22/2020

MOUNT, Kathy E.
ACERA
Effective: 3/7/2020

NANCE, Karen F.
Child Support Services
Effective: 3/21/2020

NEAL, Kim L.
Social Services Agency
Effective: 3/21/2020

NUNLEY, Pamela L.
District Attorney
Effective: 3/21/2020

OSBORNE, Tanya M.
Human Resource Services
Effective: 2/22/2020

PINEDO, John S.
Sheriff's Office
Effective: 3/8/2020

RUELAS, Patricia A.
Child Support Services
Effective: 3/21/2020

SADLER, William L.
Zone 7
Effective: 2/23/2020

SCHAECHNER, Lillian
Health Care Services Agency
Effective: 2/22/2020

SIMS, Sharon L.
Social Services Agency
Effective: 2/22/2020

SINGH, Nilma D.
Community Development Agency
Effective: 3/21/2020

SPENCER II, Roger W.
Public Defender
Effective Date: 3/21/2020

STEPHENS, Una M.
Social Services Agency
Effective: 3/7/2020

TANG,Wei Cheng
Alameda Health System
Effective: 3/21/2020

TAYLOR, Jeffrey
Sheriff's Office
Effective: 3/4/2020

VILLEGAS, Anthony M.
Probation
Effective: 3/21/2020

WALKER, Cynthia E.
Superior Courts
Effective: 2/1/2020

WHITTLE, Tony F.
Sheriff's Office
Effective: 3/7/2020

APPENDIX A
APPLICATION FOR SERVICE RETIREMENT

WILKENSON, Brian C.
Information Technology
Effective: 3/21/2020

WILLIAMS, Rosemery
Alameda Health System
Effective: 11/27/2019

WON, Kendell H.
District Attorney
Effective: 10/19/2019

YEE, Jeannie
Sheriff's Office
Effective: 2/22/2020

WONG, Elsie C.
Auditor-Controller
Effective: 3/21/2020

WONG, Lynn E.
Child Support Services
Effective: 3/21/2020

WONG, Terence F.
Community Development Agency
Effective: 12/12/2019

APPENDIX B
APPLICATION FOR DEFERRED RETIREMENT

DORMAN, Rosemary A.
Probation
Effective Date: 2/14/2020

EHMEN-KRAUSE, Esa S.
Probation
Effective Date: 3/13/2020

WHITE-SOSO, Fredericka L.
Alameda Health System
Effective Date: 3/2/2020

APPENDIX D
LIST OF DECEASED MEMBERS

ARCENEAUX, Danny
Social Services Agency
3/24/2020

BALDWIN, Lillian A.
ACERA
3/17/2020

BEAUGHAN, Barbara E.
Public Works Agency
4/17/2020

BOYD, Kenneth
Community Development Agency
3/23/2020

BUCHER, Rita M.
Non-Mbr Survivor of Alfred R. Bucher
4/22/2020

BULLUCK, Vancy C.
Social Services Agency
4/8/2020

APPENDIX D
LIST OF DECEASED MEMBERS

BUTZBACH, Eugene B.
Public Works Agency
3/18/2020

DOLSBY, Vicki D.
Non-Mbr Survivor of Gale F. Dolsby
3/18/2020

EDGERLY, Miranda
Superior Court
4/2/2020

EPPERSON, Joanne L.
General Services Agency
4/12/2020

FABELLA, Antonio U.
Sheriff's Office
3/18/2020

GARCIA, Linda M.
Social Services Agency
4/8/2020

GINES, Milagros
Non-Mbr Survivor of Camilo S. Rivera
3/29/2020

HARRISON, Florence A.
Health Care Services Agency
4/17/2020

HOLMAN, Christine J.
Social Services Agency
3/18/2020

KOLLAR, Sheila M
DRO of Clint R. Ojala
4/8/2020

LOPEZ, Dolores M.
Social Services Agency
3/27/2020

MCDONALD, Laura H.
Sheriff's Office
4/15/2020

MILLER, Harold I.
Public Works Agency
4/2/2020

O'CONNELL, Anne M.
ACERA
3/13/2020

O'DONNELL, Lambert M.
Non-Mbr Survivor of Grace E. O'Donnell
4/18/2020

REID, Imelda T.
Probation
4/5/2020

RIVERS, Shirley A.
Alameda Health System
2/14/2020

ROBERSON, Roger W.
Probation
4/6/2020

ROBERTS, Billie G.
Public Works Agency
4/20/2020

SALVADOR, Teresa U.
Sheriff's Office
4/12/2020

SCOTT-WILSON, Georgia M.
Alameda Health System
1/29/2020

SIVILA, Michael E.
Sheriff's Office
4/12/2020

SMITH, Denree M.
Social Services Agency
2/14/2020

SORENSEN, Lois A.
Non-Mbr Survivor of Ronald F. Sorensen
3/20/2020

APPENDIX D
LIST OF DECEASED MEMBERS

SPLAN, Tanjore E.
Sheriff's Office
3/12/2020

STORCH, Sandra J.
Public Health Services Agency
4/12/2020

TABOADA, Manuel J.
Alameda Health System
2/7/2020

THOMPSON, Abimbola B.
Assessor
2/28/2020

TUGADE, Andres A.
Non-Mbr Survivor of Romula C. Tugade
3/21/2020

TURPEN, Larry L.
Zone 7
3/12/2020

VOGEL, Marta K.
Alameda Health System
3/22/2020

WATSON, Leon S.
Alameda Health System
4/13/2020

WHEATLEY, Barnarese P.
Alameda Health System
3/5/2020

YEE, Peter
Social Services Agency
4/5/2020

APPENDIX E
REQUESTS FOR 130 BI-WEEKLY PAYMENTS TO RE-DEPOSIT CONTRIBUTIONS AND GAIN CREDIT

BRAUN, Eduard A.
Government Code § 31641.1 Other Public Service

DREHER, Julie
Government Code § 31641.5 Part Time & Days Prior

APPENDIX F
APPLICATION FOR DISABILITY RETIREMENT

Name: **Harper, Rashida**
Type of Claim: Annual Review for SCD (Granted on 1/17/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Ms. Harper's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

Name: **Jakub, Charles**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Mr. Jakub's application for a service-connected disability. Since Mr. Jakub is over 55 years old, future annual medical examinations and questionnaires will not be required.

Name: **Jamiol, Gwendolyn**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Ms. Jamiol's application for a service-connected disability. Since Ms. Jamiol is over 55 years old, future annual medical examinations and questionnaires will not be required.

Based on the Medical Advisor's and Staff's review and determination of Ms. Jamiol's ability to determine the permanency of her incapacity, to deny Ms. Jamiol's request for an earlier effective date.

APPENDIX F
APPLICATION FOR DISABILITY RETIREMENT

Name: **Jayamanne, Lalantha**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Mr. Jayamanne's application for a service-connected disability. Since Mr. Jayamannae is over 55 years old, future annual medical examinations and questionnaires will not be required.

Based on the Medical Advisor's and Staff's review and determination of Mr. Jayamanne's ability to determine the permanency of his incapacity, to grant Mr. Jayamanne's request for an earlier effective date.

Name: **Kamau, Hashim**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Mr. Kamau's application for a service-connected disability. Since Mr. Kamau is over 55 years old, future annual medical examinations and questionnaires will not be required.

Based on the Medical Advisor's and Staff's review and determination of Mr. Kamau's ability to determine the permanency of his incapacity, to deny Mr. Kamau's request for an earlier effective date.

Name: **Lawton, Jessica**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Ms. Lawton's application for a service-connected disability, and waiving future annual medical examinations and questionnaires at this time.

APPENDIX F
APPLICATION FOR DISABILITY RETIREMENT

Name: **McMullen, Saundria**
Type of Claim: Annual Review for SCD (Granted on 3/21/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Ms. McMullen's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

Name: **Owensby, Tammy**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Ms. Owensby's application for a service-connected disability, and waiving future annual medical examinations and questionnaires at this time.

Based on the Medical Advisor's and Staff's review and determination of Ms. Owensby's ability to determine the permanency of her incapacity, to deny Ms. Owensby's request for an earlier effective date.

Name: **Romine, Leitriss**
Type of Claim: Annual Review for SCD (Granted on 4/18/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Ms. Romine's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

Name: **Skidgel, Matthew**
Type of Claim: Annual Review for SCD (Granted on 1/17/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Mr. Skidgel's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

EXECUTIVE ORDER N-29-20

WHEREAS on March 4, 2020, I proclaimed a State of Emergency to exist in California as a result of the threat of COVID-19; and

WHEREAS despite sustained efforts, the virus continues to spread and is impacting nearly all sectors of California; and

WHEREAS the threat of COVID-19 has resulted in serious and ongoing economic harms, in particular to some of the most vulnerable Californians; and

WHEREAS time bound eligibility redeterminations are required for Medi-Cal, CalFresh, CalWORKs, Cash Assistance Program for Immigrants, California Food Assistance Program, and In Home Supportive Services beneficiaries to continue their benefits, in accordance with processes established by the Department of Social Services, the Department of Health Care Services, and the Federal Government; and

WHEREAS social distancing recommendations or Orders as well as a statewide imperative for critical employees to focus on health needs may prevent Medi-Cal, CalFresh, CalWORKs, Cash Assistance Program for Immigrants, California Food Assistance Program, and In Home Supportive Services beneficiaries from obtaining in-person eligibility redeterminations; and

WHEREAS under the provisions of Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay appropriate actions to prevent and mitigate the effects of the COVID-19 pandemic.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes of the State of California, and in particular, Government Code sections 8567 and 8571, do hereby issue the following order to become effective immediately:

IT IS HEREBY ORDERED THAT:

1. As to individuals currently eligible for benefits under Medi-Cal, CalFresh, CalWORKs, the Cash Assistance Program for Immigrants, the California Food Assistance Program, or In Home Supportive Services benefits, and to the extent necessary to allow such individuals to maintain eligibility for such benefits, any state law, including but not limited to California Code of Regulations, Title 22, section 50189(a) and Welfare and Institutions Code sections 18940 and 11265, that would require redetermination of such benefits is suspended for a period of 90 days from the date of this Order. This Order shall be construed to be consistent with applicable federal laws, including but not limited to Code of Federal Regulations, Title 42, section 435.912, subdivision (e), as interpreted by the Centers for Medicare and Medicaid Services (in guidance issued on January 30, 2018) to permit the extension of

otherwise-applicable Medicaid time limits in emergency situations.

2. Through June 17, 2020, any month or partial month in which California Work Opportunity and Responsibility to Kids (CalWORKs) aid or services are received pursuant to Welfare and Institutions Code Section 11200 et seq. shall not be counted for purposes of the 48-month time limit set forth in Welfare an Institutions Code Section 11454. Any waiver of this time limit shall not be applied if it will exceed the federal time limits set forth in Code of Federal Regulations, Title 45, section 264.1.

3. Paragraph 11 of Executive Order N-25-20 (March 12, 2020) is withdrawn and superseded by the following text:

   Notwithstanding any other provision of state or local law (including, but not limited to, the Bagley-Keene Act or the Brown Act), and subject to the notice and accessibility requirements set forth below, a local legislative body or state body is authorized to hold public meetings via teleconferencing and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body or state body. All requirements in both the Bagley-Keene Act and the Brown Act expressly or impliedly requiring the physical presence of members, the clerk or other personnel of the body, or of the public as a condition of participation in or quorum for a public meeting are hereby waived.

   In particular, any otherwise-applicable requirements that

   (i) state and local bodies notice each teleconference location from which a member will be participating in a public meeting;

   (ii) each teleconference location be accessible to the public;

   (iii) members of the public may address the body at each teleconference conference location;

   (iv) state and local bodies post agendas at all teleconference locations;

   (v) at least one member of the state body be physically present at the location specified in the notice of the meeting; and

   (vi) during teleconference meetings, a least a quorum of the members of the local body participate from locations within the boundaries of the territory over which the local body exercises jurisdiction

   are hereby suspended.

   A local legislative body or state body that holds a meeting via teleconferencing and allows members of the public to observe and address the meeting telephonically or otherwise electronically, consistent with the notice and accessibility requirements set forth below, shall have satisfied any requirement that the body allow members of the public to attend the meeting and offer public comment. Such a body need not make available any physical location from which members of the public may observe the meeting and offer public comment.

Accessibility Requirements: If a local legislative body or state body holds a meeting via teleconferencing and allows members of the public to observe and address the meeting telephonically or otherwise electronically, the body shall also:

(i) Implement a procedure for receiving and swiftly resolving requests for reasonable modification or accommodation from individuals with disabilities, consistent with the Americans with Disabilities Act and resolving any doubt whatsoever in favor of accessibility; and

(ii) Advertise that procedure each time notice is given of the means by which members of the public may observe the meeting and offer public comment, pursuant to subparagraph (ii) of the Notice Requirements below.

Notice Requirements: Except to the extent this Order expressly provides otherwise, each local legislative body and state body shall:

(i) Give advance notice of the time of, and post the agenda for, each public meeting according to the timeframes otherwise prescribed by the Bagley-Keene Act or the Brown Act, and using the means otherwise prescribed by the Bagley-Keene Act or the Brown Act, as applicable; and

(ii) In each instance in which notice of the time of the meeting is otherwise given or the agenda for the meeting is otherwise posted, also give notice of the means by which members of the public may observe the meeting and offer public comment. As to any instance in which there is a change in such means of public observation and comment, or any instance prior to the issuance of this Order in which the time of the meeting has been noticed or the agenda for the meeting has been posted without also including notice of such means, a body may satisfy this requirement by advertising such means using "the most rapid means of communication available at the time" within the meaning of Government Code, section 54954, subdivision (e); this shall include, but need not be limited to, posting such means on the body's Internet website.

All of the foregoing provisions concerning the conduct of public meetings shall apply only during the period in which state or local public health officials have imposed or recommended social distancing measures.

All state and local bodies are urged to use sound discretion and to make reasonable efforts to adhere as closely as reasonably possible to the provisions of the Bagley-Keene Act and the Brown Act, and other applicable local laws regulating the conduct of public meetings, in order to maximize transparency and provide the public access to their meetings.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 17th day of March 2020.

GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

April 16, 2020
Minutes of the Regular Board Meeting
For approval under May 21, 2020
Board “Consent Calendar”

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
BOARD OF RETIREMENT
MINUTES

THIS MEETING WAS CONDUCTED VIA TELECONFERENCE WITH VIDEO

Thursday, April 16, 2020

Chair Henry Levy called the meeting to order at 2:05.m.

Trustees Present:	Dale Amaral Ophelia Basgal Keith Carson Tarrell Gamble Jaime Godfrey Liz Koppenhaver Henry Levy Elizabeth Rogers George Wood Nancy Reilly (*Alternate*) Darryl Walker (*Alternate*)
Staff Present:	Margo Allen, Fiscal Services Officer Victoria Arruda, Human Resource Officer Angela Bradford, Executive Secretary Sandra Dueñas-Cuevas, Benefits Manager Kathy Foster, Assistant Chief Executive Officer Harsh Jadhav, Chief of Internal Audit Vijay Jagar, Retirement Chief Technology Officer, ACERA David Nelsen, Chief Executive Officer Jeff Rieger, Chief Counsel Betty Tse, Chief Investment Office
Staff Excused:	Jessica Huffman, Benefits Manager

PUBLIC INPUT

None.

CONSENT CALENDAR
REPORTS AND ACTION ITEMS

APPROVAL of APPLICATIONS FOR SERVICE RETIREMENT
Appendix A

APPROVAL of APPLICATIONS FOR RETIREMENT, DEFERRED
Appendix B
Appendix B-1

APPROVAL of APPLICATIONS FOR DEFERRED TRANSFER
None

LIST OF DECEASED MEMBERS
Appendix D

APPROVAL of REQUEST FOR 130 BI-WEEKLY PAYMENTS TO RE-DEPOSIT CONTRIBUTIONS AND GAIN CREDIT
Appendix E

APPROVAL of STAFF RECOMMENDATIONS (UNCONTESTED) FOR DISABILITY RETIREMENTS
Appendix F

APPROVAL of HEARING OFFICER RECOMMENDATIONS FOR DISABILITY RETIREMENTS
None

APPROVAL of COMMITTEE and BOARD MINUTES
February 13, 2020 Investment Committee Minutes
February 20, 2020 Audit Committee Minutes
February 20, 2020 Minutes of the Regular Board Meeting

MISCELLANOUS MATTERS
Operating Expenses as of February 29, 2020
Approval of Staff's recommendations for adoption of new pay codes for the County of Alameda, Alameda Health System and Superior Courts

20-14

It was moved by Elizabeth Rogers seconded by Liz Koppenhaver and approved by a vote of 8 yes (*Basgal, Carson, Gamble, Godfrey, Koppenhaver, Levy, Rogers, Wood*), 0 no, and 0 abstentions. (*Dale Amaral and Darryl Walker recused themselves because one or more of the Consent Calendar items involved their employing Department*):

BE IT RESOLVED BY THIS BOARD that the Consent Calendar is approved.

REGULAR CALENDAR
REPORTS AND ACTION ITEMS

DISABILITIES, CURRENT AND CONTINUING RECOMMENDATIONS AND MOTIONS

None.

COMMITTEE REPORTS, RECOMMENDATIONS AND MOTIONS

None.

NEW BUSINESS

Representatives Marc Davidson, Anthony Crooks, and Candida Hoeberichts from AEW provided the Trustees with a virtual teleconference presentation on the current Partners Real Estate Fund, number IX in the series. ACERA Chief Investment Officer Betty Tse explained that given prior investment experience with AEW, ACERA considers AEW a manager in good standing. Representatives of Callan Institutional Investment Consulting reviewed AEW's organization, research capabilities, and current objectives. Given the disruption caused by the COVID-19 global pandemic, AEW sees investment opportunities in the market dislocationsin real estate. For example, properties taken back by a bank because of loan default. AEW Partners Real Estate Fund IX is a closed-end limited partnership that invests in the four primary real estate property types and growth regions of the United States.

20-15

It was moved by Elizabeth Rogers and seconded by Jaime Godfrey that the Board approve an up to $35 million Investment in AEW Partners Real Estate Fund IX, as part of ACERA's Real Estate Portfolio – Opportunistic pending completion of legal and investment due diligence and successful contract negotiations. The motion carried 8 yes (*Basgal, Carson, Gamble, Godfrey, Koppenhaver, Levy, Rogers, Wood*), 1 no (*Amaral*), and 0 abstentions.

Chief Executive Officer Dave Nelsen presented and discussed Staff's proposal set forth in the memorandum attached to these minutes as **Exhibit A**.

20-16

It was moved by Keith Carson and seconded by Jaime Godfrey that the Board adopt the proposal in Exhibit A, with one change: Instead of having the Chair and Vice Chair of the Investment Committee make the investment decision in the first instance and only go to the Chair of the Board to break ties, the Board decided that all three of those Trustees will make the decision in the first instance, by majority vote. The motion carried 9 yes (*Amaral, Basgal, Carson, Gamble, Godfrey, Koppenhaver, Levy, Rogers, Wood*), 0 no, and 0 abstentions.

Investment Market Update (Information Item)

Verus representatives provided an update on the current market and the impact to ACERA's portfolio due to the COVID-19 Pandemic

Segal's Presentation and Discussion of the Actuarial Valuation and Review as of December 31, 2019 (Information Item)

Segal Consulting Actuary, Andy Yeung, presented and discussed ACERA's draft Actuarial Valuation and Review as of December 31, 2019 (*i.e.*, funding valuation report).

Segal's Presentation and Discussion of the GASB Statement No. 67 Valuation and addendums as of December 31, 2019 (Information Item)

Segal Consulting Representative, Eva Yum, presented and discussed ACERA's draft Governmental Accounting Standards Board (GASB) Statement No. 67 Valuation and addendums as of December 31, 2019 (*i.e.*, pension liability reporting).

Segal's Presentation and Discussion of the GASB Statement No. 74 Valuation and addendums as of December 31, 2019 (Information Item)

Segal Consulting Actuary, Andy Yeung, presented and discussed the draft GASB Statement No. 74 Valuation and addendums as of December 31, 2019 (*i.e., OPEB liability* reporting).

Solicit Input on the Frequency and Content of Operational Updates to the Board During This Period of Disruption

Mr. Nelsen informed the Trustees that if they want additional information/updates and/or want updated information more frequently during the COVID-19 Pandemic, to contact him via phone and/or email.

David Nelsen, Chief Executive Officer's Report

Mr. Nelsen presented his April 16, 2020, written CEO Report which provided an update on***: 1)*** Committee and Board Action Items; ***2)*** how ACERA is currently serving its members, ***3)*** the Pension Administration System; and ***4)*** Personnel Items. Mr. Nelsen also explained that ACERA will soon begin conducting Committee meetings during this pandemic, as necessary, in addition to its Board meetings.

CONFERENCE/ORAL REPORTS

Chair Henry Levy attended the Council of Institutional Investors in March 2020.

ANNOUNCEMENTS

Trustees/Staff welcomed Jeff Rieger, ACERA's new Chief Counsel.

BOARD INPUT

None.

ADJOURNMENT

The meeting adjourned at approximately 5:00 p.m.

Respectfully Submitted,

05/21/2020

David Nelsen
Chief Executive Officer

Date Adopted

APPENDIX A
APPLICATION FOR SERVICE RETIREMENT

ALBERGOTTIE, Linda
Social Services Agency
Effective Date: 12/28/2019

ALLEN, Sharon A.
Effective: 12/14/2019
Sheriff's Office

ANILAO, Cristti S.
Effective: 12/3/2019
Alameda Health System

BHIMJI, Altaf
Health Care Services Agency
Effective Date: 1/15/2020

BOLDEN, Valerie
Social Services Agency
Effective Date: 1/25/2020

BUXTON, Stephen L.
Effective Date: 1/25/2020
Assessor

COPES, Deborah
Superior Court
Effective Date: 1/11/2020

CORREIA, Kevin
Zone 7
Effective Date: 2/9/2020

CRUZ, Louis
District Attorney
Effective Date: 2/8/2020

DAVIS, Charlena
Social Services Agency
Effective Date: 9/20/2019

DEGAUD-OBROU, Colette
Alameda Health System
Effective Date: 11/7/2019

DICKSON, Ursula
District Attorney
Effective Date: 1/11/2020

DURAN, Delia
Effective Date: 1/25/2020
Social Services Agency

EIJANSANTOS, Ronald
Sheriff's Office
Effective Date: 2/9/2020

ELENDU, Ann U.
Effective: 8/15/2018
Alameda Health System

ELZY, Bennie
Probation
Effective Date: 12/2/2019

ESTRADA, Nellie
Effective 12/03/2019
Alameda Health System

FERNANDEZ, Thelma
Alameda Health System
Effective Date: 2/2/2020

FOSSETT, John L.
Effective: 1/01/2020
Assessor

GARCIA, Maria
Alameda Health System
Effective Date: 2/9/2020

GOODMAN, Kevin D.
Effective: 12/31/2019
Sheriff's Office

GREEN, Kelli
Social Services Agency
Effective Date: 12/2/2019

APPENDIX A
APPLICATION FOR SERVICE RETIREMENT

GRIFFEY, Dawn
Superior Court
Effective Date: 1/25/2020

GRUIDL, Kenneth
Sheriff's Office
Effective Date: 1/25/2020

GUMS, Angela D.
Effective: 1/18/2020
Health Care Services Agency

FRIBERG, James W.
Effective: 12/20/2019
Sheriff's Office

HALL, Laurie
Retirement
Effective Date: 3/4/2020

HALL, Phyllis K.
Effective: 1/10/2020
Probation

HALLOUM, Omar A.
Effective: 12/24/2019
Information Technology

HENDERSON, Douglas
Comminity Development Agency
Effective Date: 3/7/2020

HESS, David
Social Services Agency
Effective Date: 12/3/2019

HOU, Sandra
County Administrator
Effective Date: 2/8/2020

IRLANDA, Remedios
Effective: 1/11/2020
Alameda Health System

JACKSON, Melanie E.
Effective: 1/11/2020
Social Services Agency

JACKSON, Ray
Public Works Agency
Effective Date: 1/25/2020

JACKSON, Sharon
Alameda Health System
Effective Date: 1/12/2020

JAKUB, Charles T.
Effective: 12/14/2019
Public Works Agency

JOHNSON, Karen
Sheriff's Office
Effective Date: 11/2/2019

KESWANI, Anita
Effective: 12/14/2019
Alameda Health System

KILER, Diane L.
Effective: 1/11/2020
Auditor-Controller

LEE, Teodora S.
Effective: 12/24/2019
Alameda Health System

LEE-FRISON, Pamela
Probation
Effective Date: 1/21/2020

LOUKIANOFF, Michael
Health Care Services Agency
Effective Date: 1/22/2020

MARKLE, Madelyne
Effective: 11/26/2019
Alameda Health System

APPENDIX A
APPLICATION FOR SERVICE RETIREMENT

McGEE, Jim
Effective: 12/01/2019
Public Works Agency

MERTL, Deborah
Sheriff's Office
Effective Date: 1/28/2020

MORALES, Sal
County Counsel
Effective Date: 2/1/2020

O'DOWD, Mark
Effective: 12/31/2019
Public Works Agency

PURCELL, Libby A.
Effective: 1/12/2020
Alameda Health System

PUTICH, Richard R.
Effective: 12/01/2019
Zone 7

RANDA, Dalen
Probation
Effective Date: 1/24/2020

RODRIGUEZ, Vincent
Public Works Agency
Effective Date: 6/15/2019

RTOUBI, Latifa
Effective: 12/30/2019
Alameda Health System

RUDE, Theresa
County Administrator
Effective Date: 2/8/2020

SLAVIT, Paul
Effective: 1/21/2020
Superior Court

SMALL Jeanne
Effective: 8/15/2018
Sheriff's Office

SAN AGUSTIN, Enrique
Public Works Agency
Effective Date: 7/13/2019

SMITH, Edward
General Services Agency
Effective Date: 6/29/2019

STARK, David R.
Effective: 12/27/2019
Sheriff's Office

TATUM, Clinton
Alameda Health System
Effective Date: 1/14/2020

TRUJILLO DE TORRES, Salomae
Social Services Agency
Effective Date: 1/31/2020

VALENCIA, Perry
General Services Agency
Effective Date: 7/13/2019

WALKER, Douglas R.
Effective: 12/27/2019
Sheriff's Office

WONG, Craig
Sheriff's Office
Effective Date: 7/27/2019

WOO, Mark
Health Care Services Agency
Effective Date: 12/20/2019

WOODARD, Sharon
Effective: 12/27/2019
Alameda Health System

APPENDIX B
APPLICATION FOR DEFERRED RETIREMENT

ABRAHAM, Leah N.
Public Defender
Effective Date: 3/12/2020

AGNEW, Jonathan R.
Information Technology
Effective: 1/31/2020

KEYES, Jade R.
Alameda Health System
Effective Date: 1/17/2020

MCFARLAND, Nancy L.
Alameda Health System
Effective: 12/27/2019

SILVER, Rachel C.
Social Services Agency
Effective: 1/17/2020

STEWART, Shandonna M.
Alameda Health System
Effective: 1/03/2020

TAYLOR, Erik J.
Sheriff's Office
Effective: 1/03/2020

TURNER, Clarice J.
Alameda Health System
Effective: 2/24/2020

WARHUUS, Lisa M.
Health Care Services Agency
Effective: 3/6/2020

APPENDIX B-1
APPLICATION FOR NON-VESTED DEFERRED

ARAICA, Ernesto D.
Public Works Agency
Effective Date: 1/31/2020

LUKE, Ryan J.
Sheriff's Office
Effective: 3/6/2020

PENG, Kayla K.
Child Support Services
Effective Date: 1/24/2020

STEPNEY, Robert D.
Alameda Health System
Effective: 12/06/2019

APPENDIX D
LIST OF DECEASED MEMBERS

ANDERSEN, Ronald
Public Works Agency
2/27/2020

BARBER, Carolyn
Social Services Agency
2/15/2020

BAUGHMAN, Allen
Alameda County
02/03/2020

BISQUERA, Aurelio
Auditor-Controller
2/24/2020

BERGENDAHL, Lavoy
Social Services Agency
01/18/2020

BLANCO, Arnold
Non-Mbr Survivor of Maria Blanco
2/23/2020

BROWN, Johnnie
Social Services Agency
02/24/2020

CAYA, Robert
Alameda County
02/10/2020

DA VEGA, Clayton
Alameda County
01/25/2020

DAVIS, Louie
Social Services Agency
02/04/2020

DEGARMO, David
Public Defender
3/14/2020

DICKSON, Jon
Alameda Health System
3/6/2020

EVANS, Thomas
County Library
02/20/2020

HASHIMOTO, Takeshi
General Services Agency
3/5/2020

HEFFERNAN, Orlou
Alameda County
12/07/2019

HENDERSON, Alfred
Non-Member Survivor of Mable Henderson
02/01/2020

HOUSE, Thelma
Social Services Agency
3/5/2020

INGRAM, Eva
Alameda Health System
3/13/2020

JACKSON, Brenda
Alameda Health System
01/31/2020

JULIAN, Daniel
Non-Mbr Survivor of Betty Julian
3/8/2020

MALL, Athel
Alameda Health System
2/17/2020

MATHISEN, Aileen
Alameda Health System
3/6/2020

APPENDIX D
LIST OF DECEASED MEMBERS

MINOT, Roland
Non-Mbr Survivor of Anita Minot
3/10/2020

MUELLER, Ronald
LARPD
02/11/2020

OSUNA, Anne
Alameda County
01/30/2020

PANTONIAL, Zenaida
Public Defender
01/29/2020

PENNINGTON, Ora
Alameda Health System
02/29/2020

PETERSON, Dale
Alameda Health System
01/12/2020

POCHE, Bernard
Non-Mbr Survivor of Sharon Poche
2/17/2020

PUENTES, Mirta
Alameda County
08/12/2019

ROSE, James
Alameda County
01/30/2020

SAPER, Eugene
Sheriff's Office
2/19/2020

SIMMONS, Velma
Assessor
2/21/2020

SIMPSON, Riccardo
Alameda Health System
02/06/2020

SPENCE, William
Sheriff's Office
2/22/2020

SPIERING, Rochelle
Health Care Services Agency
2/11/2020

TABOADA, Manuel
Alameda County
02/07/2020

THOMPSON, Gloria
Social Services Agency
1/31/2020

WALSH, Dorothy
Non-Member Survivor of Bernard Walsh
12/25/2019

WHITE, Sheila
Information Technology
3/2/2020

WILLIAMSON, Gloria
Non-Mbr Survivor of Robert Williamson
2/22/2020

WINROW, Maelene
Social Services Agency
2/13/2020

APPENDIX E
REQUEST FOR 130 BI-WEEKLY PAYMENTS TO RE-DEPOSIT CONTRIBUTIONS AND GAIN CREDIT

THOMAS, Andrea N.
130 Biweekly Payroll Deductions for a total of $34,729.50
Government Code § 31652 Redeposit

APPENDIX F
APPLICATION FOR DISABILITY RETIREMENT

Name: **Algere, Tachia**
Type of Claim: Annual Review for SCD (Granted on 3/21/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Ms. Algere's service-connected disability and to require future annual medical examinations and questionnaires at this time.

Name: **Arbuckle, Jason**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Mr. Arbuckle's application for a service-connected disability. Since Mr. Arbuckle is over 55 years old, future annual medical examinations and questionnaires will not be required.

Name: **Bautista, Sandra**
Type of Claim: Annual Review for SCD (Granted on 3/21/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Ms. Bautista's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

APPENDIX F
APPLICATION FOR DISABILITY RETIREMENT

Name: **Bishop, Timothy**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Mr. Bishop's application for a service-connected disability. Since Mr. Bishop is over 55 years old, future annual medical examinations and questionnaires will not be required.

Name: **Kniffin, John**
Type of Claim: Annual Review for SCD (Granted on 1/17/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Mr. Kniffin's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

Name: **Krischer, Tanni**
Type of Claim: Annual Review for SCD (Granted on 9/20/18)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Ms. Krischer's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

Name: **Mendoza, Arnoldo**
Type of Claim: Earlier Effective Date

Staff's Recommendation:

Based on the Medical Advisor's and Staff's review and determination of Mr. Mendoza's ability to determine the permanency of his incapacity, to deny Mr. Mendoza's request for an earlier effective date.

APPENDIX F
APPLICATION FOR DISABILITY RETIREMENT

Name: **Neils, Adam**
Type of Claim: Annual Review for SCD (Granted on 4/18/19)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Mr. Neil's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

Name: **O'Brien, Michael**
Type of Claim: Annual Review for SCD (Granted on 9/20/18)

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report to continue the allowance for Mr. O'Brien's service-connected disability and to waive future annual medical examinations and questionnaires at this time.

Name: **Pope, Derek**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Mr. Pope's application for a service-connected disability, and waiving future annual medical examinations and questionnaires at this time.

Based on the Medical Advisor's and Staff's review and determination of Mr. Pope's ability to determine the permanency of his incapacity, to approve Mr. Pope's request for an earlier effective date.

APPENDIX F
APPLICATION FOR DISABILITY RETIREMENT

Name: **Scott, Lisa**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Ms. Scott's application for a service-connected disability. Since Ms. Scott is over 55 years old, future annual medical examinations and questionnaires will not be required.

Name: **Tulley, Jeanette**
Type of Claim: Service-Connected

Staff's Recommendation:

Adopt the findings and conclusions and approve and adopt the recommendation contained in the Medical Advisor's report, including but not limited to, granting Ms. Tulley's application for a service-connected disability, and requiring future annual medical examinations and questionnaires.

Based on the Medical Advisor's and Staff's review and determination of Ms. Tulley's ability to determine the permanency of her incapacity, to deny Ms. Tulley's request for an earlier effective date.

EXHIBIT A

Memo re Delegated Authority of Investment Staff
Motion No. 20-16 of April 16, 2020 Board Minutes

Office of the Chief Executive Officer
Office of Administration

DATE: April 16, 2020

TO: Members of the Board of Retirement

FROM: Dave Nelsen, Chief Executive Officer DN

SUBJECT: Delegated Authority of Investment Staff

The current COVID-19 pandemic has created significant disruption in our society. This disruption has impacted each of us from how we conduct our personal daily routines, to how we conduct our business. It has created investment market disruption as well. We have seen the value of our portfolio decrease significantly in reaction to these events, while experiencing extreme volatility.

When faced with a highly volatile market, devalued equities, and businesses that could be struggling to continue, there may be deals available to ACERA that offer significant value. However, some of these deals may not be available for long, and authority to act quickly could be essential. The Investment team, in consultation with Verus, are in support of providing additional temporary authority to staff to approve certain investment proposals.

The Proposal:

Grant the Investment Staff the temporary authority to approve the consultant's new and re-up investment proposals up to $75 million, upon completion of a thorough review and due diligence process with satisfactory results, in the following investment types:

a) Private Equities;
b) Absolute Returns;
c) Real Assets;
d) Real Estate; and,
e) Private Credit.

Under this temporary expanded authority, a deal would require the approval of the Chair and Vice-Chair of the Investment Committee (unless the deal is already within previously existing delegated authority that does not require such approval). In the event the Chair and the Vice-Chair disagree on the investment proposal, the Chair of the Board would cast the deciding vote to approve or not. This temporary authority would be through September 30, 2020, or until removed by action of the Board, whichever comes first.

Background:

Currently, Investment Staff can approve up to $25 million for new Private Equity or Absolute Return proposals, and up to $65 million for new Private Credit proposals. There is currently no delegated authority to Investment Staff for Real Estate or Real Assets proposals.

Discussion:

ACERA uses a very deliberative process for approving most investment proposals. While it is the case for many public plans that the additional administrative approval requirements may make them a less nimble investment partner, it has been a value of the ACERA Board that this deliberative process results in better outcomes over the long term.

This proposal would allow Investment Staff to bypass some of those processes a bit more frequently in order to take advantage of a unique investment environment, while still providing Trustee oversight and involvement. It is noted that the temporary modifications to the Brown Act by Governor Newsom have made conducting public meetings much easier and quicker to bring about. These modifications could allow for more nimble actions by the Board to approve proposals quickly. However, given the uncertainty of health and availability of the parties involved during this crisis, we feel this temporary grant of additional authority could be both prudent and beneficial for the portfolio, and ultimately for the members and employers.

Recommendation:

We recommend that the Board of Retirement grant the temporary increase to Investment Staff delegated authority as outlined in this memo.

Unaudited Financial Statements as of March 31, 2020
For approval under May 21, 2020
Board "Consent Calendar"

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: March 31, 2020, Unaudited Financial Statements

Executive Summary

Attached for review and discussion is the unaudited financial statements for the period ended March 31, 2020.

The Fiduciary Net Position Held in Trust and the Change in Fiduciary Net Position compared to the same period in 2019 decreased by $704 million.

Financial Highlights

- Net Position Restricted (Held in Trust for Benefits), as reported on the Statement of Fiduciary Net Position totaled $7.48 billion. Total Receivables increased by $17 million, Investments at fair value decreased by $700 million, Cash decreased by $1 million, Capital Assets increased by $2 million and Total Liabilities without Security Lending Liability increased by $22 million.

- The year-over-year Change in Net Position decreased by $1.90 billion. This is due to decrease in additions of $1.89 billion and increase in deductions of $8 million as explained below:

    - Total Additions year-over-year decreased by $1.89 billion. This includes, increase in contributions of $5 million, and decrease in investments of $1.90 billion.

    - Total Deductions year-over-year increased by $8 million. The amount is mainly attributable to the growth in payments of service retirement, disability benefits, retiree health programs, member refunds and administrative expenses.

Attachments:

- Statement of Fiduciary Net Position as of March 31, 2020
- Statement of Changes in Fiduciary Net Position as of March 31, 2020, and
- Notes to the Unaudited Financial Statements as of March 31, 2020

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
STATEMENT OF FIDUCIARY NET POSITION
As of 3/31/2020

	Year-To-Date 2020	Year-To-Date 2019
ASSETS		
Cash (Note 1)	1,707,598	2,222,161
Securities Lending Cash Collateral (Note 2)	122,705,115	224,493,927
Receivables:		
Contributions (Note 3)	27,565,392	23,911,661
Investment Receivables (Note 4a)	18,142,696	20,775,718
Unsettled Trades - Investments Sold	19,621,431	5,634,359
Futures Contracts - Equity Index (Note 5a)	2,464,018	423,153
Equity Index Swaps (Note 6a)	148,997	28,231
Foreign Exchange Contracts (Note 7a)	6,551	477,114
Other Receivables (Note 8)	173,662	114,458
Total Receivables	68,122,746	51,364,695
Prepaid Expenses	641,211	897,628
Total Current Assets	193,176,671	278,978,411
Investments - at Fair Value:		
Short-Term Investments (Note 9)	279,693,442	200,917,655
Domestic Equity	363,589,734	560,460,531
Domestic Equity Commingled Funds	1,579,155,694	1,955,814,959
International Equity	887,619,364	1,685,742,344
International Equity Commingled Funds (Note 10)	905,267,928	478,591,227
Domestic Fixed Income	826,379,265	948,713,909
International Fixed Income	130,085,543	110,404,113
International Fixed Income - Commingled Funds (Note 11)	127,467,879	140,667,484
Real Estate - Separate Properties (Note 12)	74,348,220	69,478,466
Real Estate - Commingled Funds (Note 13)	530,081,162	498,722,411
Real Assets	356,175,865	296,661,716
Absolute Return (Note 14a)	746,266,224	705,838,586
Private Equity (Note 14b)	620,709,701	514,787,452
Private Credit	40,159,793	0
Total Investments	7,466,999,813	8,166,800,853
Capital Assets at Cost (Net of Accumulated Depreciation or Amortization) (Note 15)	3,138,132	1,706,092
Intangible right-to-use Leased Assets (Net of - Accumulated Amortization)	150,641	0
Total Assets	***7,663,465,256***	***8,447,485,356***
LIABILITIES		
Securities Lending Liability (Note 2)	122,705,115	224,493,927
Unsettled Trades - Investments Purchased	20,805,073	12,216,092
Investment-Related Payables (Note 4b)	15,501,588	13,515,927
Futures Contracts - Equity Index (Note 5b)	10,227	156,840
Foreign Exchange Contracts (Note 7b)	14,350,256	1,995,960
Accrued Administration Expenses (Note 16)	2,114,981	2,857,554
Members Benefits & Refunds Payable (Note 17a)	3,689,951	4,155,206
Retirement Payroll Deductions Payable (Note 17b)	4,794	143,001
Lease Liability	164,599	0
Total Liabilities	***179,346,584***	***259,534,508***
Net Position		
Restricted - Held in Trust for Benefits	***7,484,118,672***	***8,187,950,848***
Total Net Position	***7,484,118,672***	***8,187,950,848***

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For the Three Months Ending 3/31/2020

	Year-To-Date 2020	*Year-To-Date 2019*
ADDITIONS		
Contributions: (Note 18)		
Members	27,428,155	25,423,455
Employers	77,535,785	74,713,811
Total Contributions	104,963,941	100,137,266
From Investment Activities:		
Net Appreciation/(Depreciation) in Fair Value of Investments (Note 19a)	(1,278,428,328)	615,823,894
Interest	10,522,943	11,255,446
Dividends	8,969,012	13,137,180
Real Estate - Net	5,695,515	4,420,468
Private Equity and Alternatives	(2,006,966)	(7,205,503)
Brokers Commissions - Directed Brokerage	8,842	5,970
Sub-Total of Dividends, Interest, Other Investment Income (Note 19b)	23,189,346	21,613,560
Total Income from Investment Activities	(1,255,238,982)	637,437,454
Total Investment Expenses (Note 20)	(12,326,594)	(8,026,286)
Net Income from Investment Activities (Note 21)	(1,267,565,576)	629,411,168
From Securities Lending Activities:		
Securities Lending Income	584,293	1,640,535
Securities Lending Expenses	(418,102)	(1,326,740)
Net Income from Securities Lending Activities (Note 22)	166,191	313,795
Total Net Investment Income	(1,267,399,385)	629,724,964
Miscellaneous Income (Note 23)	60,342	381,101
Total Additions	***(1,162,375,103)***	***730,243,331***
DEDUCTIONS		
Benefits:		
Service Retirement and Disability Benefits (Note 24)	124,856,170	117,352,199
Death Benefits (Note 25)	741,471	497,542
Supplemental Cost of Living Allowance	285,317	272,094
Retiree Healthcare Program	11,288,734	10,601,714
Total Benefit Payments	137,171,692	128,723,549
Member Refunds	1,528,810	2,070,692
Administration: (Note 26)		
Administrative Expenses	3,037,073	2,904,193
Actuarial Expenses	97,540	88,824
Business Continuity Expenses	151,702	138,038
Legal Expenses	211,533	420,381
Technology Expenses	211,118	219,875
401(h) Expenses	363,750	313,500
Total Administration	4,072,716	4,084,811
Total Deductions	***142,773,219***	***134,879,052***
Net Increase(Decrease)	***(1,305,148,321)***	***595,364,279***
Net Position Held in Trust for Benefits:		
Net Position - January 1	***8,789,266,993***	***7,592,586,569***
Net Position - March 31	***7,484,118,672***	***8,187,950,848***

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ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
NOTES TO THE UNAUDITED FINANCIAL STATEMENTS
As of March 31, 2020

Basis of Accounting
ACERA follows the accounting principles and reporting guidelines set forth by the Government Accounting Standards Board (GASB). ACERA's financial statements are prepared on the accrual basis of accounting.

(Note 1)
Cash - $1.71 million
Cash balance is the sum of the funds in the Wells Fargo Bank operating accounts. The decrease of $0.51 million from $2.22 million in March 31, 2019, is primarily due to the timing difference between receipt of contributions and the transfer of funds for retiree payroll and investment.

(Note 2)
Securities Lending Cash Collateral - $122.71 million
Cash collateral of $122.71 million and $224.49 million was held by ACERA related to securities on loan as of March 31, 2020, and March 31, 2019, respectively. This amount is reported as an asset with a corresponding liability for the same amount in compliance with the GASB Statement No. 28. The decrease in securities lending collateral is due to decrease in the balances of traditional active manager accounts in passive index funds.

(Note 3)
Contributions Receivables - $27.57 million
The receivable balances of March 31, 2020, increased approximately $3.65 million from $23.92 million in March 31, 2019. This is primarily due to increase in the member and employer contribution rates.

(Note 4a)
Investment Receivables - $18.14 million
The investment receivables balance as of March 31, 2020, decreased by $2.63 million from $20.77 million for March 31, 2019. The decrease is mainly attributed to interest and stock dividend receivables.

(Note 4b)
Investment Related Payables - $15.50 million
The increase of $1.98 million in investment related payables balance as of March 31, 2020, from $13.52 million for March 31, 2019 is primarily due to investment managers/consultants fees payable.

(Note 5)
Future Contracts Equity Index Receivables - $2.46 million and Payables - $0.01 million
5a. The receivable represents unrealized gains on open future contracts. The balance for unrealized gains as of March 31, 2020, and March 31, 2019, were $2.46 million and $0.42 million, respectively.

5b. The Payables represents the unrealized losses on open future contracts. The balance for unrealized losses as of March 31, 2020, and March 31, 2019, were $0.01 million and $0.16 million, respectively.

(Note 6)
Equity Index Swaps Receivable – $0.15 million and Payable - none
6a. The receivable represents the amount to be received from the counterparties of the equity index swaps. The total receivable as of March 31, 2020, were $0.15 million and March 31, 2019, were $0.03 million.

6b. The payable represents the amount owed, but not yet paid, to the counterparties of equity index swaps. The total payables as of March 31, 2020, and March 31, 2019, were none.

(Note 7)
Foreign Exchange Contracts Receivables - $0.01 million and Payables - $14.35 million
Foreign exchange (FX) contracts include currency forward contracts and spot contracts.

7a. The receivables represents unrealized gains on foreign exchange contracts. As of March 31, 2020, and March 31, 2019, unrealized gains on FX contracts were $0.01 million and $0.48 million, respectively. The decrease of $0.47 million is due to change in number and valuation of contracts and market volatility.

7b. The payables represents unrealized losses on foreign exchange contracts. As of March 31, 2020, and March 31, 2019, unrealized losses on FX contracts were $14.35 million and $2.00 million, respectively. The increase in unrealized losses of $12.35 million is due to change in number and valuation of contracts and market volatility.

(Note 8)
Other Receivables - $0.17 million
Other receivables as of March 31, 2020, are comprised primarily of funds due from deceased retirees' estates for overpayment of benefits; and from insurance for ACERA legal claims.

(Note 9)
Short-Term Investments - $279.69 million
Short-term investments are temporarily kept in a pooled account with State Street Bank. These pooled assets are primarily invested in short-term investment funds and deposits, including U.S. Treasury and agency obligations, corporate bonds, commercial paper, repurchase agreements, certificates of deposit, bankers' acceptances, time deposits, and floating-rate notes.

(Dollars in Millions)

Fund Name	***3/31/2020***
Unallocated Cash	$ 130.48
Brandywine	73.58
AQR Capital Management, LLC	25.46
Baird Investors	18.88
Capital Guardian	15.43
Kennedy	3.86
TCW	3.31
Loomis	2.98
William Blair Small Cap Growth	1.21
Mondrian	1.14
Bivium - Arga Investment Management	0.72
Bivium - Dundas Partners	0.71
Pzena	0.66
Bivium - Rádin Capital Partners	0.37
Bivium - Denali Advisors	0.24
Bivium - Applied Research Management	0.23
Bivium RVX Asset Management LLC	0.19
Bivium - Global Alpha Capital Mgmt	0.14
Transition	0.05
Next Century Investors Ultra	0.03
SSGA Liquid Pool	0.01
Next Century Growth Small Cap	0.01
Total	**$ 279.69**

(Note 10)
International Equity Commingled Funds - $905.27 million
As of March 31, 2020, and March 31, 2019, the International Equity Commingled Funds were $905.27 million and $478.59 million, respectively. The increase of $426.68 million is mainly due to addition of new funds net of market depreciation.

(Note 11)
International Fixed Income Commingled Funds - $127.47 million
The decrease of $13.20 million from the prior year is mainly due to market depreciation. Disclosure of credit ratings on mutual fund holdings of fixed income portfolio is not required per GASB Statement No. 40.

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
NOTES TO THE UNAUDITED FINANCIAL STATEMENTS
As of March 31, 2020

(Note 12)
Real Estate Separate Properties - $74.35 million
The following is a summary of Real Estate – Separate Property investments as of March 31, 2020, and March 31, 2019. The year over year increase of $4.87 million is due to the market appreciation of the Oakland 14th Street property.

(Dollars in Millions)

Investment Manager	*Net Mkt. Value 3-31-2020*	*Net Mkt. Value 3-31-2019*	*No. of Properties 2020*	*No. of Properties 2019*
RREEF	$ 74.35	$ 69.48	1	1

Note 13)
Real Estate Commingled Funds - $530.08 million
Detailed records regarding these investments of public pension funds are exempt from disclosure under the California Government Code Section 6254.26. The increase of $31.36 million in 2020 as compared to 2019 is mainly due to market appreciation and additional investments net of distributions.

(Note 14a)
Absolute Return - $746.27 million
Detailed records regarding these investments of public pension funds are exempt from disclosure under California Government Code Section 6254.26. The increase of $40.43 million in 2020 as compared to 2019 is predominantly due to additional investments net of distributions.

(Note 14b)
Private Equity - $620.71 million
Detailed records regarding these investments of public pension funds are exempt from disclosure under California Government Code Section 6254.26. The increase of $105.92 million in 2020 as compared to 2019 is mainly due to additional investments net of distributions; and net gain on investments.

(Note 15)
Capital Assets at Cost (Net of Accumulated Depreciation and Amortization) - $3.14 million

(Dollars in Millions)

Net Capital Assets	*3/31/2020*	*3/31/2019*
Retirement Information System and EDMS - Construction-In-Process	$ 1.75	$ 0.21
Equipment, Furniture & Information Systems	13.54	13.54
Electronic Document Management System	4.17	4.16
Less: Accumulated Depreciation	(17.65)	(17.63)
Net Book Value	1.81	0.28
Leasehold Improvements	2.59	2.59
Less: Accumulated Depreciation	(1.26)	(1.16)
Net Book Value	1.33	1.43
Total Capital Assets, Net	**$ 3.14**	**$ 1.71**

Depreciation is computed using the straight-line method over the following estimated useful lives or over the term of the lease on leasehold improvements:

Computer Hardware	5 years
Computer Software	3 years
Equipment	5 years
Furniture	7 years
Information System – Retirement	7 years
Information System – Accounting	3 years
EDMS	5 years
Disaster Recovery	5 years
Leasehold Improvements	27.5 years

(Note 16)
Accrued Administration Expenses - $2.11 million
Accrued administration expenses consist of accounts payable, payroll expense, actuarial services payable and other operating expense.

(Note 17)
17a. Members' Benefits & Refunds Payable - $3.69 million

The detail of Members Benefits and Refund Payables are as follows:

Accrued Benefits and Refunds	*3/31/2020*	*3/31/2019*
Basic Active Death Benefits	$ 0.47	$ 0.53
Active Death Contribution Refunds	1.23	1.83
Retired Death Benefits	1.94	1.28
Members' Contribution Refunds	0.05	0.52
Total Members' Benefit & Refunds Payable	**$ 3.69**	**$ 4.16**

17b. Retirement Payroll Deductions Payables - $0.01 million
The balance for March 31, 2020, includes $0.01 of health premium prepayments for 12 retirees and there was no remaining accrued amount for the Health Reimbursement Account (HRA) benefits. The corresponding balance for March 31, 2019, of $0.14 million included $0.01 million of health premium prepayments for 13 retirees and accrual of $0.13 million of HRA benefits.

(Note 18)
Contributions - $104.96 million
The increase in contributions of $4.82 million in 2020 as compared to 2019 is primarily due to increases in employer and member contribution rates.

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
NOTES TO THE UNAUDITED FINANCIAL STATEMENTS
As of March 31, 2020

(Note 19)
(Note 19a) Net Appreciation/ (Depreciation) in Fair Value of Investments – ($1,278.43) million
(Dollars in Millions)

	For the Period Ended	
	3/31/2020	*3/31/2019*
Actual / Realized Gains/(Losses)		
Domestic Equities	$ (8.46)	$ 8.57
International Equities	(7.96)	(2.38)
Domestic Bonds	12.35	0.03
International Bonds	1.33	(0.58)
Real Estate Commingled Funds	0.62	0.17
Real Estate Sep. Props.	-	-
Private Equity & Alternative	(6.34)	6.97
Real Assets	(2.26)	0.13
Private Credit	-	-
Swaps and Others	3.33	(0.34)
Futures	(14.82)	0.67
Currency	(1.85)	(1.43)
Total Realized Gains/(Losses)	(24.06)	11.81
Paper / Unrealized Gains/(Losses)		
Domestic Equities	(534.34)	311.70
International Equities	(573.45)	235.00
Domestic Bonds	(22.33)	24.28
International Bonds	(25.29)	11.20
Real Estate Commingled Funds	4.72	3.93
Real Estate Sep. Props.	-	-
Private Equity & Alternative	13.77	(0.34)
Real Assets	(101.59)	14.75
Private Credit	(1.10)	-
Swaps and Others	2.65	0.27
Futures	2.28	1.26
Currency	(19.69)	1.96
Total Unrealized Gains/(Losses)	(1,254.37)	604.01
Total Net Realized and Unrealized Gains/(Losses)	$ (1,278.43)	$ 615.82

(Note 19b) Dividend, Interest, and Other Investment Income - $23.19 million

(Dollars in Millions)

	For the Period Ended	
Dividend, Interest, and Other Investment Income	*3/31/2020*	*3/31/2019*
Interest Income	$ 10.52	$ 11.25
Dividend Income	8.97	13.14
Real Estate Income	5.70	4.42
Private Equity, Absolute Return, Private Credit and Real Asset Income/(Loss)[1]	(2.01)	(7.21)
Directed Brokerage Commission Recapture	0.01	0.01
Total Net Income[2]	**$ 23.19**	**$ 21.61**

[1] Loss in current year is mainly related to Absolute Return investments and the loss in 2019 is mainly related to Real Asset investments.

[2]The increase in Net Income of $1.58 million in current year as compared to 2019 is mostly due to Real Asset losses in 2019.

(Note 20)
Investment Expenses - $12.33 million

(Dollars in Millions)

	For the Period Ended			
Investment Expenses	*Basis Points*	*3/31/2020*	*Basis Points*	*3/31/2019*
Investment Manager and Incentive Fees	14.97	$ 11.18	9.34	$ 7.63
Investment Custodian	0.19	0.14	0.17	0.14
Investment Consultants & Other Expenses(*)	0.43	0.32	(0.60)	(0.49)
Subtotal	15.59	11.64	8.91	7.28
Investment Allocated Cost	0.91	0.69	0.92	0.75
Total Investment Expenses(**)	**16.50**	**$ 12.33**	**9.83**	**$ 8.03**

(*) *Investment Consultant and Other Expenses*
(Dollars in Millions)

	For the Period Ended			
	Basis Points	*3/31/2020*	*Basis Points*	*3/31/2019*
Investment Advising & Performance (Pearls, Alternative Investment)	0.3	$ 0.23	0.27	$ 0.22
Consultant - Portfolio Rebalancing	0.02	0.01	0.01	0.01
Consultant - Legal (Alternative Investment)	0.05	0.04	0.08	0.06
Subtotal – Consultants Expenses	0.37	0.28	0.36	0.29
Proxy Services	0.02	0.01	0.01	0.01
Transaction Cost Analysis	0.02	0.01	0.01	0.01
Other Investment Expenses/(Income) ***	0.02	0.02	(0.98)	(0.80)
Subtotal – Other Investment Expenses	0.06	0.04	(0.96)	(0.78)
Total Investment Consultants and Other Expenses	**0.43**	**$ 0.32**	**(0.60)**	**$ (0.49)**

(**) The increase in total investment expenses of $4.30 million in 2020 as compared to 2019 is primarily due to investment management and incentive fees in Private Equity, Real Assets and Absolute Return.

(***) The increase in other investment expenses of $0.82 million in 2020 as compared to 2019 is primarily due to foreign tax expense correction in 2019 resulted in the reduction of 2019 expenses.

(Note 21)
Net Investment Income/ (Losses) - ($1,267.57) million

(Dollars in Millions)

	For the Period Ended		*Inc./(Dec.)*
	3/31/2020	*3/31/2019*	*from prior period*
Paper / Unrealized Gains/(Losses)	$ (1,254.37)	$ 604.01	$ (1,858.38)
Actual / Realized Gains/(Losses)	(24.06)	11.81	(35.87)
Investment Income (Interest/Dividend/RE/Other) - Net of Expenses	10.86	13.59	(2.73)
Total Net Income/ (Losses)	**$ (1,267.57)**	**$ 629.41**	**$ (1,896.98)**

(Note 22)
Securities Lending Net Income - $0.17 million
The securities lending net income balance as of March 31, 2020, and March 31, 2019, were $0.17 million and $0.31 million, respectively. The decrease in securities lending income is due to decrease in the balances of traditional active manager accounts in passive index funds.

(Note 23)
Miscellaneous Income - $0.06 million
The miscellaneous income of $0.06 million is predominantly from prior year investment income and recovery.

(Note 24)
Service Retirement and Disability Benefits - $124.86 million
The increase of $7.51 million was predominantly due to the higher average benefit paid to the newly added retirees as compared to that of deceased retirees with lower average benefits as well as a modest increase of 279 in the total number of retirees and beneficiaries receiving benefits, from 9,816 on March 31, 2019 to 10,095 on March 31, 2020.

(Note 25)
Death Benefits - $0.74 million
The death benefits paid out during the three months ended March 31, 2020, were comprised of $0.06 million of Retired Death Benefits, $0.12 million of Active Death Benefits, and $0.56 million of Survivorship Benefits.

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
NOTES TO THE UNAUDITED FINANCIAL STATEMENTS
As of March 31, 2020

(Note 26)
Total Administration - $4.07 million
ACERA's Board of Retirement adopted Section 31580.2 of the 1937 Act. This Section allows ACERA to exclude investment (included in Total Investment Expenses under Note 20 above), actuarial, legal, business continuity related expenses and technology costs from administrative expenses subject to the statutory limits. Under Section 31618.5 ACERA excludes the SRBR administrative expenses from its total administrative expenses. ACERA's SRBR administrative expenses are the amount that exceeds the employers' 401(h) contributions allocated to estimated administrative costs of Postemployment Medical Benefits.

The detail of total Administration Expenses are as follows:
(Dollars in Millions)

	3/31/2020	*3/31/2019*	*Inc./(Dec.) from previous period*
Administrative Expenses	$ 3.04	$ 2.90	0.14
Actuarial Expenses	0.10	0.09	0.01
Business Continuity Expenses	0.15	0.14	0.01
Legal Expenses	0.21	0.42	(0.21)
Technology Expenses	0.21	0.22	(0.01)
401(h) Administrative Expenses	0.36	0.31	0.05
Total	**$ 4.07**	**$ 4.08**	**$ (0.01)**

Operating Expenses as of March 31, 2020
For approval under May 21, 2020
Board "Consent Calendar"

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: Operating Expenses Budget Summary for the period ended March 31, 2020

ACERA's operating expenses are $468K under budget for the period ended March 31, 2020. Budget overages and surpluses worth noting are as follows:

Budget Surpluses

1. *Staffing:* Staffing is $272K under budget. This amount comprises surplus in staff vacancies of ($84K) and fringe benefits of ($270K), which are offset by overage in temporary staffing of $82K due to vacant positions filled by temporary staff.
2. *Staff Development:* Staff Development is $36K under budget due to savings from unattended staff trainings.
3. *Professional Fees:* Professional Fees are $63K under budget. This amount comprises surplus in actuarial fees[1] of ($36K) due to saving from last year accrual and legal fees of ($28K), which are offset by overage in operations consultant fees of $1K.
4. *Office Expense:* Office Expense is 13K under budget. This amount comprises surpluses in office maintenance and supplies of ($9K), printing and postage of ($3K), bank charges and miscellaneous administration of ($2K), building expenses of ($1K), equipment lease and maintenance of ($1K) and minor equipment and furniture of ($3K). Which are offset by overage in communication expenses of $6K.
5. *Member Services:* Member Services are $33K under budget. This amount comprises surpluses in disability legal arbitration and transcripts of ($15K) and disability medical expense of ($15K) due to reduction in number of disability cases, health reimbursement account of ($1K), and members printing and postage of ($4K), which are offset by overage in member training and education of $2K.
6. *Systems:* Systems are $29K under budget. This amount comprises surpluses in software maintenance and support of ($33K) primarily due to timing difference caused by delay in the start of projects, which are offset by overage in business continuity expense of $4K due to COVID-19.
7. *Depreciation*: Depreciation is $2K under budget, which is mainly related to the computer software.

[1] ACERA has savings of $36K from 2019 actuarial services accrual. $30K is related to Actuarial Standard of Practice #51 Pension Risk and $6K is related to consulting services provided by Segal.

8. *Board of Retirement:* Board of Retirement is $20K under budget. This amount comprises surpluses in board employer reimbursement of ($3K), board compensation of ($4K), board miscellaneous expenses of ($4K), and board conferences and training of ($9K) due to unattended conferences and trainings.

Staffing Detail

Permanent vacant positions as of March 31, 2020:

Department	Position	QTY	Comments
Benefits	Retirement Technician	3	Filled by temporary staff - currently budgeted until 12/2020
Investments	Senior Investment Officer	1	Vacant - currently budgeted until 12/2020
Investments	Investment Officer	1	Vacant - currently budgeted until 12/2020
	Total Positions	**5**	

Pension Administration System Project - As of 3/31/2020					
	Year-To-Date			Annual	
	Actual	Budget	Variance	2020 Budget	2019 Actual
Consultant Fees					
Levi, Ray and Shoup	395,084	636,000	(240,916)	2,544,000	224,153
LRWL / Segal	107,220	99,990	7,230	400,000	398,160
Leap Technologies	-	-	-	-	98,970
Total	502,304	735,990	(233,686)	2,944,000	721,283
Staffing	124,747	166,500	(41,753)	665,000	387,808
TOTAL	**627,051**	**902,490**	**(275,439)**	**3,609,000**	**1,109,091**

ACERA

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

TOTAL OPERATING AND INVESTMENT EXPENSES SUMMARY

YEAR TO DATE - ACTUAL VS. BUDGET

March 31, 2020

	Actual *Year-To-Date*	Budget *Year-To-Date*	YTD Variance *(Under)/Over*	2020 *Annual* *Budget*	% Actual to *Annual Budget*
Staffing	$ 3,564,069	$ 3,836,490	$ **(272,421)**	$ 15,691,000	**22.7%**
Staff Development	52,585	88,645	**(36,060)**	482,000	**10.9%**
Professional Fees (Next Page)	306,612	369,940	**(63,328)**	1,215,000	**25.2%**
Office Expense	116,296	128,720	**(12,424)**	531,000	**21.9%**
Insurance	235,351	235,350	**1**	967,000	**24.3%**
Member Services	82,441	115,180	**(32,739)**	527,000	**15.6%**
Systems	259,073	288,250	**(29,177)**	1,128,000	**23.0%**
Depreciation	30,139	32,160	**(2,021)**	123,000	**24.5%**
Board of Retirement	109,321	129,500	**(20,179)**	660,000	**16.6%**
Uncollectable Benefit Payments	-	-	-	22,000	**0.0%**
Total Operating Expenses	**$ 4,755,887**	**$ 5,224,235**	**$ (468,348)**	**$ 21,346,000**	**22.3%**
Investment Consultant Fees	277,310	354,270	**(76,960)**	1,418,000	**19.6%**
Investment Custodian Fees	142,697	147,000	**(4,303)**	588,000	**24.3%**
Investment Manager and Incentive Fees	11,181,637	12,586,680	**(1,405,043)**	50,227,000	**22.3%**
Other Investment Expenses	41,780	115,800	**(74,020)**	463,000	**9.0%**
Total Portfolio Management Investment Expense	**$ 11,643,424**	**$ 13,203,750**	**$ (1,560,326)**	**$ 52,696,000**	**22.1%**
Total Operating and Portfolio Management Investment Expenses	**$ 16,399,311**	**$ 18,427,985**	**$ (2,028,674)**	**$ 74,042,000**	**22.1%**

ACERA

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
PROFESSIONAL FEES
YEAR TO DATE - ACTUAL VS. BUDGET
March 31, 2020

	Actual Year-To-Date	Budget Year-To-Date	YTD Variance (Under)/Over	2020 Annual Budget	% Actual to Annual Budget
Professional Fees					
Consultant Fees - Operations and Projects[1]	$ 82,115	$ 81,450	$ 665	$ 366,000	**22.4%**
Actuarial Fees[2]	118,040	154,490	(36,450)	466,000	**25.3%**
External Audit[3]	77,000	77,000	-	153,000	**50.3%**
Legal Fees[4]	29,457	57,000	(27,543)	230,000	**12.8%**
Total Professional Fees	**$ 306,612**	**$ 369,940**	**$ (63,328)**	**$ 1,215,000**	**25.2%**

	Actual Year-To-Date	Budget Year-To-Date	YTD Variance (Under)/Over	2019 Annual Budget	% Actual to Annual Budget
[1] CONSULTANT FEES - OPERATIONS AND PROJECTS:					
Administration					
Benchmarking	-	-	-	20,000	0.0%
Total Administration	-	-	-	20,000	0.0%
Benefits					
Alameda County HRS (Benefit Services)	31,500	31,500	-	126,000	25.0%
Segal (Benefit Consultant/Retiree Open Enrollment)	31,365	30,750	615	123,000	25.5%
Dental and Vision Consulting	-	-	-	20,000	0.0%
Total Benefits	62,865	62,250	615	269,000	23.4%
Human Resources					
Lakeside Group (County Personnel)	19,250	19,200	50	77,000	25.0%
Total Human Resources	19,250	19,200	50	77,000	25.0%
Total Consultant Fees - Operations	**$ 82,115**	**$ 81,450**	**$ 665**	**$ 366,000**	**22.4%**
[2] ACTUARIAL FEES					
Actuarial valuation	38,500	38,500	-	77,000	50.0%
GASB 67 & 68 Valuation	-	-	-	48,000	0.0%
GASB 74 & 75 Actuarial	-	-	-	14,000	0.0%
Actuarial Standard of Practice 51 Pension Risk	-	30,000	(30,000)	60,000	0.0%
Supplemental Consulting	41,040	47,490	(6,450)	190,000	21.6%
Triennial Experience Study	18,000	18,000	-	36,000	50.0%
Supplemental Retiree Benefit Reserve valuation	20,500	20,500	-	41,000	50.0%
Total Actuarial Fees	**$ 118,040**	**$ 154,490**	**$ (36,450)**	**$ 466,000**	**25.3%**
[3] EXTERNAL AUDIT					
External audit	65,000	65,000	-	129,000	50.4%
GASB 67 & 68	6,000	6,000	-	12,000	50.0%
GASB 74 & 75-External Audit	6,000	6,000	-	12,000	50.0%
Total External Audit Fees	**$ 77,000**	**$ 77,000**	**$ -**	**$ 153,000**	**50.3%**
[4] LEGAL FEES					
Fiduciary Counseling					
Nossaman	10,656	33,000	(22,344)	130,000	
Subtotal	10,656	33,000	(22,344)	130,000	8.2%
Tax and Benefit Issues					
Hanson Bridgett	2,543	9,000	(6,457)	40,000	
Subtotal	2,543	9,000	(6,457)	40,000	6.4%
Litigation & Miscellaneous Legal Advice					
Nossaman	15,128	13,957	1,171	55,830	
Reed Smith	1,130	1,043	87	4,170	
Subtotal	16,258	15,000	1,258	60,000	27.1%
Total Legal Fees	**$ 29,457**	**$ 57,000**	**$ (27,543)**	**$ 230,000**	**12.8%**

Quarterly Cash Forecast Report
as of March 31, 2020
For approval under May 21, 2020
Board “Consent Calendar”

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: Actual Cash and Forecast as of March 31, 2020

Executive Summary

ACERA liquidates cash from the plan's invested assets on a monthly basis to meet its increasing financial obligations. To better manage assets, best practices recommend a robust cash forecast and analysis to understand, communicate, and manage the invested assets that fund ever-increasing pension liabilities and administrative expense obligations.

- Table 1 is the annual cash forecast from April 2020 to March 2021, which will roll forward monthly as the year progresses; and,
- Tables 2 through 4 is the annualized, 5-year actual cash management information. Please note that the current year 2020 comprises the three months actual and nine months forecast information.

Table 1 Cash Forecast: Table 1 provides the current forecasted negative cash position for the period spanning April 2020 to March 2021. The average monthly negative cash position for the referenced period is $17,866,864. Excluding the two three-pay-period months i.e., May 2020 and October 2020, annotated by an *. The year-over-year increase in average monthly forecasted negative cash position compared to the same period in 2019-2020 is $925,434.

Table 1	**Annual Cash Forecast from April 2020 to March 2021**					
Month-Year	**Total Receipts**		**Total Disbursements**		**Negative Cash Position**	
Apr-20	$	33,435,000	$	50,130,687	$	(16,695,687)
May-20*		46,670,000		50,738,669		(4,068,669)
Jun-20		32,726,842		50,657,647		(17,930,804)
Jul-20		32,233,685		50,726,624		(18,492,939)
Aug-20		32,340,527		50,795,602		(18,455,074)
Sep-20		32,982,938		50,864,579		(17,881,641)
Oct-20*		49,524,671		50,933,557		(1,408,886)
Nov-20		33,196,623		51,002,534		(17,805,911)
Dec-20		33,303,465		51,071,512		(17,768,046)
Jan-21		33,634,300		51,551,677		(17,917,377)
Feb-21		33,741,143		51,620,654		(17,879,512)
Mar-21		33,847,985		51,689,632		(17,841,647)
Total	**$**	**427,637,179**	**$**	**611,783,375**	**$**	**(184,146,196)**
Average	**$**	**33,144,251**	**$**	**51,011,115**	**$**	**(17,866,864)**

Table 1 notes: *These are three-pay-period months which are excluded from the average because they cause inaccuracy with extreme fluctuation.

Tables 2 through 4, below, provide a 5-year, annualized analysis of ACERA's cash management.

Table 2	5-Year Annual Cash Inflow		
Year	**Total Contributions, Misc. Cash Receipts, etc.**	**Cash Draw from SSB***	**Total Cash Inflow**
2020	**$ 422,646,087**	**$ 211,000,000**	**$ 633,646,087**
2019	401,756,315	232,000,000	633,756,315
2018	361,633,074	224,000,000	585,633,074
2017	335,099,875	217,350,000	552,449,875
2016	325,836,998	196,400,000	522,236,998

Table 2. Annualized inflow of total cash receipts. The Cash Draw from SSB, in the second column is the actual net cash drawn from ACERA's investment portfolio.

Table 3	5-Year Annual Cash Outflow		
Year	**Retiree Payroll, Accounts Payable, ACERA Payroll, etc.**	**Cash Return to SSB***	**Total Cash Outflow**
2020	**$ 602,609,206**	**$ 33,500,000**	**$ 636,109,206**
2019	570,574,725	60,500,000	631,074,725
2018	534,704,781	66,503,646	601,208,427
2017	502,857,234	33,750,000	536,607,234
2016	475,743,162	45,900,000	521,643,162

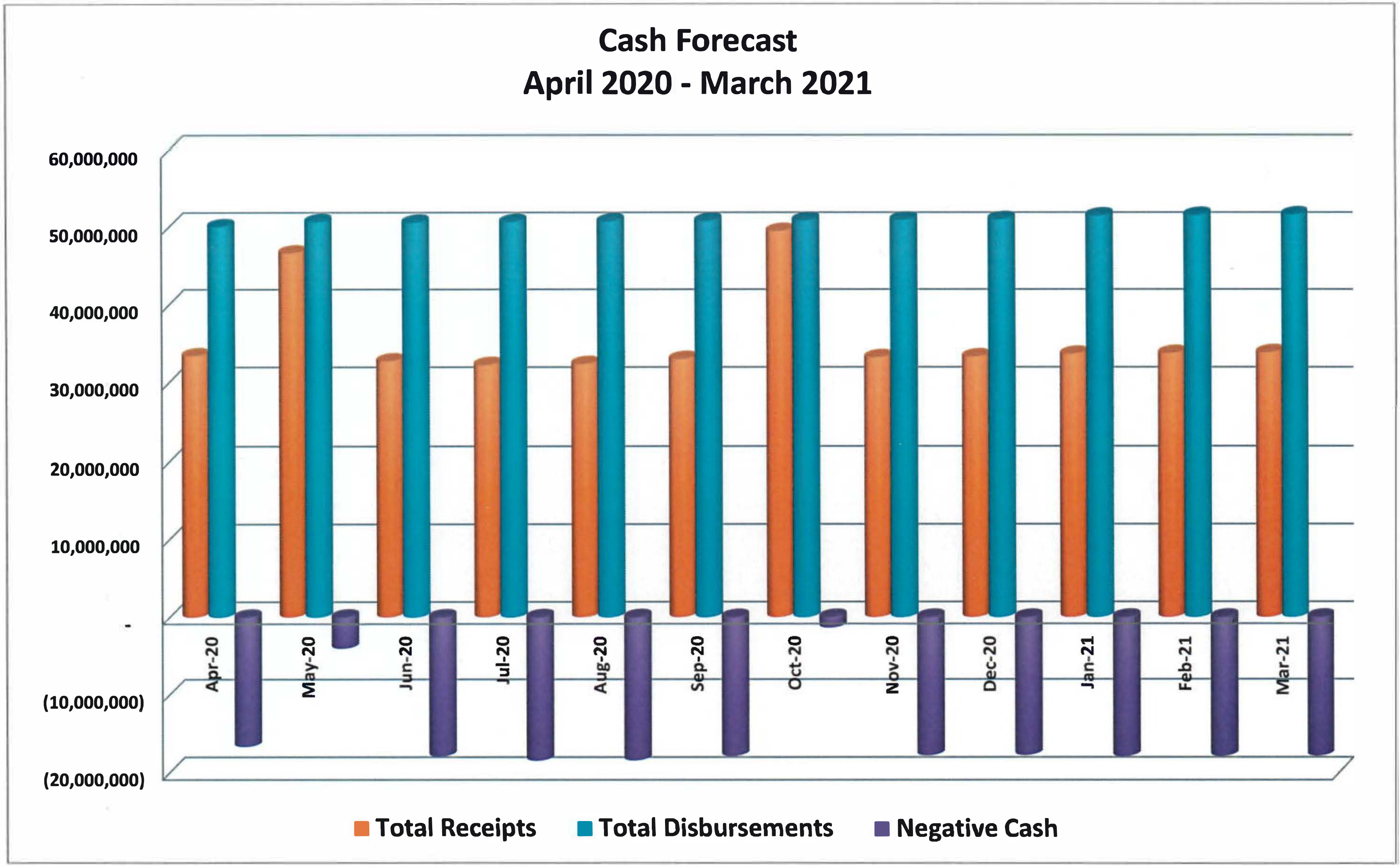
Table 3. Annualized outflow of retirement and benefit payments, accounts payable, and ACERA payroll. Excess cash (Cash Return to SSB column) is wired to the SSB HI1A account.

Table 4	5-Year Annual Net Cash Position		
Year	**Negative Cash**	**Net Cash Draw from SSB**	**Variance**
2020	**$ (179,963,119)**	**$ 177,500,000**	**$ (2,463,119)**
2019	(168,818,410)	171,500,000	2,681,590
2018	(173,071,707)	157,496,354	(15,575,353)
2017	(167,757,359)	183,600,000	15,842,641
2016	(149,906,164)	150,500,000	593,836

Table 4. Annualized Negative Cash position and the SSB Net Cash Draw. Due to timing differences and end-of-year balance differences, the net cash draw can fluctuate several hundred-thousand dollars in a year-over-year comparison.

* State Street Bank (SSB)

Conclusion: This information is not meant to be statistically inferential in nature; but rather, it presents facts about ACERA's negative cash position on a 5-year annualized basis. Future analysis of the this information can be undertaken to evaluate specific tendency; however, the current presentation is intended to provide a factual assessment of the actual cash draw down of ACERA's investment portfolio.


Cash Forecast
April 2020 - March 2021
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
-
(10,000,000)
(20,000,000)
Apr-20
May-20
Jun-20
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Total Receipts
Total Disbursements
Negative Cash

Board Member Conference Expense Report as of March 31, 2020 For approval under May 21, 2020 Board “Consent Calendar”

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE:	May 21, 2020
TO:	Members of the Board of Retirement
FROM:	Margo Allen, Fiscal Services Officer
SUBJECT:	Board Conference Expense Report for the period January 1, 2020 to March 31, 2020

Attached is the Jan-Mar Board conference and training expense report. As of March 31, 2020, reported expenses were $13,755.

Attachment: Board Conference Expense Report for the period January 1, 2020 to March 31, 2020

ACERA Trustees
Board Conference Expense Report
January 1, 2020 to March 31, 2020

From	To	Attendee	Conference	Location	Total
02/10/20	02/11/20	Darryl Walker	Super Return US West	Century City, CA	$ 1,488
03/04/20	03/05/20	Darryl Walker	SEO Conference & AICON (Alternative Investments Conference)	New York, NY	$ 967
03/25/20	03/26/20	Darryl Walker	NASP - Diverse and Emerging Manager Forum		$ 277
		Darryl Walker Total			**$ 2,732**
02/10/20	02/11/20	Elizabeth Rogers	Pension Bridge ESG Summit	San Diego, CA	$ 891
		Elizabeth Rogers Total			**$ 891**
02/10/20	02/11/20	Henry Levy	Pension Bridge ESG Summit	San Diego, CA	$ 977
03/09/20	03/09/20	Henry Levy	CII - 2020 Spring Trustee Training	Washington, DC	$ 2,740
03/09/20	03/09/20	Henry Levy	CII - 2020 Spring Master Class	Washington, DC	$ 295
		Henry Levy Total			**$ 4,012**
02/10/20	02/11/20	Jaime Godfrey	Pension Bridge ESG Summit	San Diego, CA	$ 1,071
03/04/20	03/05/20	Jaime Godfrey	SEO Conference	New York, NY	$ 1,364
		Jaime Godfrey Total			**$ 2,435**
01/16/20	01/16/20	Tarrell Gamble	NASP - Diverse and Emerging Manager Forum	Chicago, IL	$ 1,427
03/03/20	03/04/20	Tarrell Gamble	SEO Conference	New York, NY	$ 1,247
03/17/20	03/17/20	Tarrell Gamble	Corporate Directors Forum - Essentials of Corporate Directorship	San Diego, CA	$ 1,010
		Tarrell Gamble Total			**$ 3,684**
		Grand Total			**$ 13,755**

Senior Manager Conference and Training Expense Report as of March 31, 2020 For approval under May 21, 2020 Board "Consent Calendar"

ACERA

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: Senior Managers Conference and Training Expense Report for the period January 1, 2020, to March 31, 2020

Attached is the Jan-Mar 2020 senior managers' conference and training expense report. As of March 31, 2020, reported expenses totaled $10,658.

Attachment: Senior Managers Conference and Training Expense Report for the period January 1, 2020, to March 31, 2020

ACERA Sr. Managers
Preliminar SM Conference and Training Expense Report
January 1, 2020 to March 31, 2020

From	To	Senior Manager	Training or Conference	Name	Amount
			Trainings		
01/09/20	01/10/20	Betty Tse	Training	Pacific Center for Asset Management	$ 979
Betty Tse Total					**$ 979**
			Conferences		
03/07/20	03/10/20	Dave Nelsen	Conference	CALAPRS General Assembly	$ 1,381
			Trainings		
02/06/20	02/07/20	Dave Nelsen	Training	CALAPRS Roundtable	$ 758
01/17/20	01/17/20	Dave Nelsen	Training	SACRS Legislative Committee Meetin	$ 48
Dave Nelsen Total					**$ 2,187**
			Conferences		
01/24/20	01/28/20	Harsh Jadhav	Conference	Cybersecurity Conference	$ 2,879
Harsh Jadhav Total					**$ 2,879**
			Conferences		
03/07/20	03/10/20	Kathy Foster	Conference	CALAPRS General Assembly	$ 1,438
			Trainings		
02/28/20	03/02/20	Kathy Foster	Training	Towers Watson Forum	$ 1,386
Kathy Foster Total					**$ 2,824**
			Trainings		
01/22/20	01/22/20	Margo Allen	Training	Communicating with Tact and Finesse	$ 149
03/04/20	03/05/20	Margo Allen	Training	Enterprise Risk Management	$ 1,445
02/21/20	02/21/20	Margo Allen	Training	HR Metrics: A Critical Measurement of the impact of Human Resources Management	$ 195
Margo Allen Total					**$ 1,789**
Grand Total					**$ 10,658**

Statement of Reserves and SRBR Financial Status Report as of December 31, 2019
For approval under May 21, 2020
Board "Consent Calendar"

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: Statement of Reserves and Supplemental Retirees Benefit Reserve (SRBR) Status as of December 31, 2019

Statement of Reserves

The Statement of Reserves as of December 31, 2019, is attached for your review. The semi-annual interest crediting as of December 31, 2019, was completed on February 20, 2020.

For the six-month period ended December 31, 2019, approximately $296.9 million of total interest was credited to all the valuation reserve accounts, including the 401(h) account and the SRBR.

- Regular earnings of $296.9 million were credited to the valuation reserve accounts, the 401(h) account and the SRBR at the rate of return of 3.5754%, short of one half of the assumed crediting rate of return of 3.6250%.
- The earnings were below the expected rate of return and as a result there was no crediting of earnings above the assumed rate of return (excess earnings).

The total interest crediting rate to the valuation reserve accounts and the 401(h) account as well as the SRBR was 3.5754% (see table below).

Earnings Classification	Valuation Reserve & 401(h) Accounts			SRBR	
	Amount	Rate		Amount	Rate
Regular Earnings	$264,251,425	3.5754%		$32,679,805	3.5754%
Excess Earnings	0	0.0000%		0	0.0000%
Total Interest Credited	**$264,251,425**	**3.5754%**		**$32,679,805**	**3.5754%**

The process for crediting interest as of December 31, 2019, is presented in the table on the next page. Note that for this semi-annual interest crediting period, the Contingency Reserve Account (CRA) was restored to 1% of total assets as of December 31, 2019, and the entire balance of $89,388,911 was subsequently withdrawn from the CRA to fund the interest crediting shortfall. Without the use of the CRA funds the interest crediting rate would've been 2.4991%.

Interest Crediting Methodology as of December 31, 2019	
Expected Actuarial Earnings for the period	$ 302,301,625.54
10 % Amortization of deferred amounts – (Sum of the last 10 periods)	(5,370,395.46)
Actuarial earnings on a smoothed basis	**296,931,230.08**
CRA adjustment to 1% of total assets as of 12/31/2019	(89,388,911.43)
Actuarial earnings available for interest crediting at the rate 2.4991%	***207,542,318.65***
CRA usage to cover the interest crediting shortfall	89,388,911.43
Total amount to credit interest at 3.5754%	**$ 296,931,230.08**

There was a market ***gain*** of approximately $488.0 million for the six-month period ended December 31, 2019, which was higher than the expected actuarial earnings of approximately $302.3 million. As a result, $185.7 million in ***gains*** were added to the market stabilization reserve (the difference of the actual market gain and the expected actuarial earnings). In addition, $5.4 million of net ***losses*** from the previous ten (10) interest crediting cycles were recognized in the current interest crediting period. Thus, the market stabilization reserve increased from net deferred ***gain*** of $69.7 million as of June 30, 2019, to $260.7 million in deferred ***gains*** as of December 31, 2019.

Supplemental Retiree Benefit Reserve (SRBR) Status Report

The 10-year history of SRBR activity through December 31, 2019, is attached for your review. The December 31, 2019, ending balance of the SRBR account is approximately $924.7 million.

The break-down of the December 31, 2019 total interest crediting rate is as follows:

- Regular earnings were credited at the assumed rate of return of 3.5754% just short of one half of the assumed crediting rate of return of 3.6250%.
- No earnings above the assumed rate of return (excess earning) were credited.

The total interest credited to the SRBR for the six-month period ended December 31, 2019, was approximately $32.7 million of regular earning and $0.0 of excess earnings. For the year ended December 31, 2019 approximately $57.0 million of regular earnings and $0.0 excess earnings were credited to the SRBR.

For the six-month period ended December 31, 2019, the net deductions from SRBR were approximately $22.0 million. These deductions include the net transfer to/from the employer advance reserve for 401(h) contributions of $21.3 million as wells as payments of supplemental COLA and retired death benefits of $0.7 million. For the year ended December 31, 2019, the net deductions from SRBR were approximately $51.8 million. These deductions include the net transfer to/from the employer advance reserve for 401(h) contributions of $50.4 million as wells as payments of supplemental COLA and retired death benefits of $1.4 million.

Attachments:

- Statement of Reserves as of December 31, 2019.
- SRBR Status as of December 31, 2019.

Order Granting ACERA Lead Plaintiff Status in *Portola Pharmaceuticals, Inc.* Securities Litigation For approval under May 21, 2020 Board "Consent Calendar"

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

PAUL HAYDEN, Plaintiff, v. PORTOLA PHARMACEUTICALS, INC., et al., Defendants.	Case No. 20-cv-00367-VC **ORDER GRANTING MOTION TO APPOINT LEAD PLAINTIFF AND LEAD COUNSEL, VACATING HEARING, AND SETTING BRIEFING SCHEDULE FOR AMENDED PLEADINGS** Re: Dkt. Nos. 30, 47
JOHN R. MCCUTCHEON, Plaintiff, v. PORTOLA PHARMACEUTICALS, INC., et al., Defendants.	Case No. 3:20-cv-00949-VC
SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY , Plaintiff, v. PORTOLA PHARMACEUTICALS, INC., et al., Defendants.	Case No. 3:20-cv-01501-VC

The hearing set for Thursday, April 23 is vacated. Alameda County Employees' Retirement Association's now-unopposed motion to appoint lead plaintiff and lead counsel is granted. *See*

3:20-cv-00949-VC, Dkt. No. 30. The Court adopts the following schedule for amended pleadings:

- ACERA shall file its Amended Complaint no later than 28 days after the entry of this order.
- Defendants shall respond to the Amended Complaint within 28 days of the filing of the Amended Complaint.
- If Defendants move to dismiss the Amended Complaint, the deadline for ACERA to file any response or opposition to the motion to dismiss shall be within 28 days of the filing of the motion to dismiss.
- Defendants shall file any reply brief in support of any motion to dismiss within 21 days of the filing of the opposition brief.
- A hearing on the motion to dismiss will take place on Thursday, August 20, 2020.

IT IS SO ORDERED.

Dated: April 22, 2020

VINCE CHHABRIA
United States District Judge

Quarterly Report on Member Under/Overpayments
For approval under May 21, 2020
Board "Consent Calendar"

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Jessica Huffman, Retirement Benefits Manager

SUBJECT: **Quarterly Report on Member Underpayments and Overpayments**

Attached are the quarterly reports regarding member contributions and overpayments of retirement allowance due to death for the most current six-month period. The report regarding Staff errors contains the cases initially presented that have not yet been resolved, along with recently discovered errors. The information below provides more specifics in each of these categories.

Overpayments of Retirement Allowance Due to Death

This report provides any payments (including HRA (Health Reimbursement Arrangements) payments) made after the death of a retiree. In instances where a death is not reported timely, an overpayment occurs. For the six-month reporting period June 30, 2019 through November 30, 2019, 141 deaths occurred. There are 6 overpayments due to unreported deaths to report at this time. Staff is actively attempting to collect on these overpayments.

Staff Errors

There are no overpayments due to staff errors to report.

Overpayments and Underpayments of Member Contributions

This report, which is for the period June 30, 2019 through November 30, 2019, shows discrepancies in member contribution amounts resulting in an underpayment or overpayment above the $50 threshold, average time to resolve, and an explanation of the error type. For this reporting period, staff identified 13 members who underpaid their mandatory employee contributions and 4 members who overpaid their mandatory employee contributions. Staff reviewed and resolved each of the 17 cases of incorrect payment. There were a total of 2,604 exceptions from all Participating Employers. The most common exception type was underpayments due to the Employers withholding retirement contributions based on the incorrect salary.

Attachments

Overpayments of Retirement Allowance Due to Unreported Death
June 30, 2019 to November 30, 2019

Benefit Type	Date of Death	Date ACERA was notified of Death	Last Check Issued	Net Receivable Owed	Staff's Comment
Service Retirement –	7/18/2019	07/26/2019	7/31/2019	$121.80	Staff initiated ACH reversal request with Well Fargo but was unsuccessful at collecting. Three unsuccessful attempts have been made to collect the overpayment from the family. Staff will continue to attempt collection of overpayment.
Service Retirement –	8/23/2019	9/16/2019	8/31/2019	$ 934.26	Staff initiated ACH reversal request with Well Fargo but was unsuccessful at collecting. Three unsuccessful attempts have been made to collect the overpayment from the family. Staff will continue to attempt collection of overpayment.
Service Retirement –	9/12/2019	10/02/2019	09/30/2019	$ 1,251.78	Staff initiated ACH reversal request with Well Fargo but was unsuccessful at collecting. Two unsuccessful attempts have been made to collect the overpayment from the family. Staff will continue to attempt collection of overpayment.
Service Retirement -	9/22/2019	10/21/2019	09/30/2019	$1,893.02	Staff initiated ACH reversal request with Well Fargo but was unsuccessful at collecting. Two unsuccessful attempts have been made to collect the overpayment from the family. Staff will continue to attempt collection of overpayment.
Service Retirement -	10/10/2019	10/31/2019	9/30/2019	$1,938.36	Staff initiated ACH reversal request with Well Fargo but was unsuccessful at collecting. Two unsuccessful attempts have been made to collect the overpayment from the family. Staff will continue to attempt collection of overpayment.
Service Retirement –	10/21/2019	11/13/2019	10/31/2019	$1,209.83	Staff initiated ACH reversal request with Well Fargo but was unsuccessful at collecting. Two unsuccessful attempts have been made to collect the overpayment from the family. Staff will continue to attempt collection of overpayment.
			Total Receivable	$7,349.05	

Active Members - Overpayments and Underpayments of Member Contributions
June 30, 2019 to November 30, 2019

Alameda County					
	Amount	**Date Discovered/ Received**	**Date Completed**	**# of days to complete**	**Cause**
Overpayments: 1	$261.66	07/25/19	08/02/19	7	Plan/Tier Adjustment based on Membership Policy
2	$169.21	8/2/19	8/16/19	12	Plan/Tier Adjustment based on Membership Policy
Underpayments: 1	$399.73	9/12/19	9/30/19	14	Plan/Tier Adjustment based on Membership Policy
Summary	**Most Common Exception Type:** Employer Withheld Contribution Based on Incorrect Salary **Total Exceptions:** 1056 **% Above Exceptions of Total Exceptions:** 0.28%				

Alameda County Housing Authority					
	Amount	**Date Discovered/ Received**	**Date Completed**	**# of days to complete**	**Cause**
Overpayments: 1	**No Overpayments to Report**				
Underpayments: 1	$38.34	7/18/19	7/19/19	1	Employer Withheld Contribution Based on Incorrect Salary
Summary	**Most Common Exception Type:** Employer Withheld Contribution Based on Incorrect Salary **Total Exceptions:** 49 **% Above Exceptions of Total Exceptions:** 2.04%				

Alameda Health Systems					
	Amount	**Date Discovered/ Received**	**Date Completed**	**# of days to complete**	**Cause**
Overpayments: 1	$1,204.64	7/19/19	8/2/19	14	Contribution reported over SS Cap
Underpayments: 1	$375.06	9/18/19	9/20/19	2	Employer Withheld Contribution Based on Incorrect Salary
2	$729.97	9/18/19	9/20/19	2	Employer Withheld Contribution Based on Incorrect Salary
3	$740.50	9/19/19	9/20/19	1	Employer Withheld Contribution Based on Incorrect Salary
4	$1,572.83	9/18/19	9/20/19	2	Employer Withheld Contribution Based on Incorrect Salary
5	$571.87	9/18/19	9/20/19	2	Employer Withheld Contribution Based on Incorrect Salary
6	$771.59	9/19/19	9/21/19	2	Employer Withheld Contribution Based on Incorrect Salary
7	$337.26	9/18/19	9/20/19	1	Employer Withheld Contribution Based on Incorrect Salary
Summary	**Most Common Exception Type:** Employer Withheld Contribution Based on Incorrect Salary **Total Exceptions:** 843 **% Above Exceptions of Total Exceptions:** 0.95%				

First 5 Alameda County					
	Amount	**Date Discovered/ Received**	**Date Completed**	**# of days to complete**	**Cause**
Overpayments	**No Overpayments to Report**				
Underpayments	**No Underpayments to Report**				
Summary	**Most Common Exception Type:** N/A **Total Exceptions:** 4 **% Above Exceptions of Total Exceptions:** 0.00%				

Livermore Area Recreation and Park District					
	Amount	**Date Discovered/ Received**	**Date Completed**	**# of days to complete**	**Cause**
Overpayments	**No Overpayments to Report**				
Underpayments 1	**$423.63**	**9/5/19**	**9/13/19**	**5**	Age adjustment due to Reciprocity
Summary	**Most Common Exception Type:** N/A **Total Exceptions:** 8 **% Above Exceptions of Total Exceptions:** 12.5%				

Alameda County Superior Courts					
	Amount	**Date Discovered/ Received**	**Date Completed**	**# of days to complete**	**Cause**
Overpayments: 1	$314.49	9/23/19	9/25/19	2	Employer Withheld Contribution Based on Incorrect Salary
Underpayments: 1	$158.08	7/17/19	7/18/19	1	Employer Withheld Contribution Based on Incorrect Salary
2	$93.36	10/7/19	10/8/19	1	Employer Withheld Contribution Based on Incorrect Salary
3	$44.24	11/14/19	11/15/19	1	Contributions Reported under the Social Security Cap
Summary	**Most Common Exception Type:** Employer Withheld Contribution Based on Incorrect Salary **Total Exceptions:** 644 **% Above Exceptions of Total Exceptions: 0.62**%				

1st Quarter 2020 Call Center Report
For approval under May 21, 2020
Board "Consent Calendar"

ACERA

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Ismael Piña, Assistant Benefits Manager

SUBJECT: **1st Quarter 2020 Call Center Report**

Attached is the Service Level Report for the first quarter of 2020. Our service levels continue to trend upward with the team handling a total of 5,557 incoming calls this past quarter. The service levels for January, February, and March were 96.41%, 97.6%, and 96.8%, respectively.

The matrix below provides the five highest call volume categories for the first quarter of 2020 comparted to the fourth quarter of 2019.

Q1 2020 Highest Volume	**Categories of Calls**		**Q4 2019 Highest Volume**	**Categories of Calls**
32%	Retirement related Q's		40%	Health/Dental/ Vision related Q's
28%	Counseling		32%	Retirement related Q's
17%	Health/Dental/ Vision related Q's		10%	Purchase/Redeposits/ Service Audit Requests
13%	1099R's		9%	Direct Deposit/Checks
10%	Death Benefits		8%	Separation/Termination Related Q's

Attachment

ACERA

YTD 2020 Member Services and Reception Service Level Report

Performance Indicators	Jan. 2020 Member	Jan. 2020 Reception	Feb. 2020 Member	Feb. 2020 Reception	Mar. 2020 Member	Mar. 2020 Reception	Apr. 2020 Member	Apr. 2020 Reception	May '2020 Member	May '2020 Reception	June '2020 Member	June '2020 Reception
KPI - Service Level	96.41%		97.60%		96.80%							
ACD Agent Handled Calls	1,450	360	1,508	431	1,369	439						
Number of Abandoned Calls	27	8	22	11	21	35						
Average Hold Time Before Abandon (minutes:seconds)	1:15	0:53	1:24	0:43	1:11	0:39						
Abondon Call Rate (Goal: 3% or less)	1.60%	1.60%	1.30%	1.40%	0.00%	5.90%						
Average Talk Time (minutes:seconds)	5:41	0:53	5:36	0:41	5:32	0:43						

Performance Indicators	July 2020 Member	July 2020 Reception	Aug. 2020 Member	Aug. 2020 Reception	Sept. 2020 Member	Sept. 2020 Reception	Oct. 2020 Member	Oct. 2020 Reception	Nov '2020 Member	Nov '2020 Reception	Dec '2020 Member	Dec '2020 Reception
KPI - Service Level												
ACD Agent Handled Calls												
Number of Abandoned Calls												
Average Hold Time Before Abandon (minutes:seconds)												
Abondon Call Rate (Goal: 3% or less)												
Average Talk Time (minutes:seconds)												

	YTD 2020
Total Member Calls	4,327
Total Reception Calls	1,230
TOTAL - Both	**5,557**

Adoption of New Pay Codes for the County of Alameda

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Sandra Dueñas-Cuevas, Benefits Manager SDC

SUBJECT: **Approval of Six New County Pay Codes as "Compensation Earnable" and " Pensionable Compensation"**

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the 1) Emergency Paid Sick Leave (ESPL) Act and Emergency Family and Medical Leave Expansion Act (EFMLEA). The new Acts are effective April 1, 2020 through December 31, 2020.

The County requested that the following six new pay codes be designated as "compensation earnable" and "pensionable compensation":

- EP2 – Emergency Pd SL – 2/3 Day Max $200
  Pay code EP2 will be used when the employee applies and submits the Families First Coronavirus Response Act (FFCRA) Certification Form. The employee will be eligible to receive 2/3 of their regular rate of pay up to $200 per day and $2,000 total. Employees who apply for this leave and who earn over the maximum, can supplement with their paid leave to bring pay up to 100% or choose leave without pay. This pay code is effective April 1, 2020 through December 31, 2020.

- EP5 – Emergency Pd SL (Day Max $511)
  Pay Code EP5 will be used when the employee applies and submits the Families First Coronavirus Response Act (FFCRA) Certification Form. The employee will be eligible to receive their regular rate of pay up to $511. Employees who apply for this leave and who earn over the maximum cap of $511, can supplement with their paid leave to bring pay up to 100% or choose leave without pay. This pay code is effective April 1, 2020 through December 31, 2020.

- EPA – Emergency Leave Act Pay Adj
  Pay Code EPA will be used when the employee applies and submits the Families First Coronavirus Response Act (FFCRA) Certification Form. This code will be used if the timesheet coding relating to Emergency Family and Medical Leave Expansion Act leave, EFMLEA, does not bring the employee up to 100% of biweekly salary. This pay code is effective April 1, 2020 through December 31, 2020.

- FE2 – FML Emerg Pd SL – 2/3 Day Max $200
  Pay Code FE2 will be used when the employee applies and submits the Families First Coronavirus Response Act (FFCRA) Certification Form. The employee will be eligible to receive 2/3 of their regular rate of pay up to $200 per day and $2,000 total. This is the FMLA code that goes with new pay code EP2. Employees who apply for this leave and who earn over the maximum, can supplement with their paid leave to bring pay up to 100% or choose leave without pay. This pay code is effective April 1, 2020 through December 31, 2020.

- FE5 – FML Emerg Pd SL (Day Max $511)
  Pay Code FE5 will be used when the employee applies and submits the Families First Coronavirus Response Act (FFCRA) Certification Form. The employee will be eligible to receive their regular rate of pay up to $511. This is the FMLA code that coordinates with new pay code EP5. Employees who apply for this leave and who earn over the maximum cap of $511, can supplement with their paid leave to bring pay up to 100% or choose leave without pay. This pay code is effective April 1, 2020 through December 31, 2020.

- FEA – Emerg Expan – 2/3 Day Max $200
  Pay Code FEA will be used when the employee applies and submits the Families First Coronavirus Response Act (FFCRA) Certification Form. The employee will be eligible to receive 2/3 of their regular rate of pay up to $200 per day and $10,000 max. Employees who apply for this leave and who earn over the maximum, can supplement with their paid leave to bring pay up to 100% or choose leave without pay. This pay code is effective April 1, 2020 through December 31, 2020.

Staff, including Chief Counsel, reviewed and discussed the required supporting documentation (attached) with the Auditor-Controller and made the administrative determination that the new pay codes qualify as “compensation earnable” under Government Code Section 31461 (for Legacy members) and “pensionable compensation” under Government Code Section 7522.34 (for PEPRA members). The two relevant Government Code sections are attached for the Board’s review.

Staff informed the County that staff’s administrative determination will be on the Board’s consent calendar for approval at the Board’s May 21, 2020 meeting. If this item is not pulled from the consent calendar for discussion, then the Board will approve staff’s determinations that the six pay codes are all “compensation earnable” under Government Code Section 31461 (for Legacy members) and “pensionable compensation” under Government Code Section 7522.34 (for PEPRA members).

Attachments

ALAMEDA COUNTY
AUDITOR-CONTROLLER AGENCY
MELISSA WILK

AUDITOR-CONTROLLER/CLERK-RECORDER

REQUEST FOR ACERA'S REVIEW OF A NEW PAY ITEM/CODE

Employer Name:	County of Alameda
Date of Request	4/11/2020
Employer Department Submitting the Request	Auditor-Controller's Agency
Contact Person/Employer (include title/position)	Dawn Duffy
Contact Person Telephone incl area code	(510) 272-6383
Contact Person Email address	dawn.duffy@acgov.org
Pay Item Name (and code Number)	**EP2** Emergency Pd SL-2/3DayMax $200
Pay Item Effective Date per authorization:	4/5/2020
State if additional documentation is attached	No

NOTE: The following information is required before ACERA can review and respond to the request. To meet ACERA's requirements, please provide substantive responses below or on a separate paper and return , with this form, all of the supporting documentation prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e. Job Code 0499-Nurse Practitioners II may receive this pay item)

RESPONSE #1:

All employees who submit the Families First Coronavirus Response Act (FFCRA) Certification Form

2. State employment status of employees eligible to receive the pay item (i.e. full time employees, part time employees)

RESPONSE #2: Full Time, part time, SAN, TAP

3. State the number of members or employees who are eligible to receive the pay item (i.e. all members or employees in a job classification eligible to receive the pay item, or "not to exceed one employee")

RESPONSE #3: Any County employee

4. State whether pay item is for overtime or regular base pay

RESPONSE #4: Regular base pay

5. State whether pay item is calculated as a fixed amount or percentage of the base pay

RESPONSE #5: Employees will be eligible to receive two thirds of their regular rate of pay up to $200 per day and $2000 total. Employees who apply for this leave and who earn over the maximum, can supplement with their paid leave to bring pay up to 100% or choose leave without pay.

6. State whether the pay item is paid one time (i.e. incentive pay, referral pay, bonus, award)

RESPONSE #6: No

7. State whether the pay item is an ad hoc payment (i.e, stipend, payment for attending a meeting during the working hours, payment for attending a meeting during non-working hours)

RESPONSE #7: No

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance)

RESPONSE #8: No

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees)

RESPONSE #9: 37.5/40 hour workweek, part time, SAN, TAP

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour workweek, or outside the employee's 40 hour workweek)

RESPONSE #10: No

11. State whether the pay item if for deferred compensation

RESPONSE #11: No

12. State whether the pay item is for retro payments

RESPONSE #12: No

13. State whether the pay item is for accrued unused leaves (i.e., sick leave, annual leave, floating holiday, vacation, comp time)

RESPONSE #13: No

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee

RESPONSE #14: No

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working)

RESPONSE #15: No

16. State whether the pay item is paid in one lump sum or biweekly (or over some other time period- monthly, quarterly, annually)

RESPONSE #16: Biweekly

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution)

RESPONSE #17:

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the:

1) Emergency Paid Sick Leave ("EPSL") Act, and
2) Emergency Family and Medical Leave Expansion Act ("EFMLEA").

The new Acts are effective April 1, 2020, are not retroactive, and cover the period between April 1, 2020 and December 31, 2020.

For additional information, refer to the attached FFCRA Manager and Employee Guidelines and the FFCRA Certification Form, issued by Alameda County Human Resource Services. I'm also including our timesheet coding examples. Our internal procedure is under development.

ALAMEDA COUNTY
AUDITOR-CONTROLLER AGENCY
MELISSA WILK

AUDITOR-CONTROLLER/CLERK-RECORDER

REQUEST FOR ACERA'S REVIEW OF A NEW PAY ITEM/CODE

Employer Name:	County of Alameda
Date of Request	4/11/2020
Employer Department Submitting the Request	Auditor-Controller's Agency
Contact Person/Employer (include title/position)	Dawn Duffy
Contact Person Telephone incl area code	(510) 272-6383
Contact Person Email address	dawn.duffy@acgov.org
Pay Item Name (and code Number)	**EP5** Emergency Pd SL (Day Max $511)
Pay Item Effective Date per authorization:	4/5/2020
State if additional documentation is attached	No

NOTE: The following information is required before ACERA can review and respond to the request. To meet ACERA's requirements, please provide substantive responses below or on a separate paper and return , with this form, all of the supporting documentation prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e. Job Code 0499-Nurse Practitioners II may receive this pay item)

RESPONSE #1:

All employees applying for who submit the Families First Coronavirus Response Act (FFCRA) Certification Form

2. State employment status of employees eligible to receive the pay item (i.e. full time employees, part time employees)

RESPONSE #2: Full Time, part time, SAN, TAP

3. State the number of members or employees who are eligible to receive the pay item (i.e. all members or employees in a job classification eligible to receive the pay item, or "not to exceed one employee")

RESPONSE #3: Any County employee

4. State whether pay item is for overtime or regular base pay

RESPONSE #4: Regular base pay

5. State whether pay item is calculated as a fixed amount or percentage of the base pay

RESPONSE #5: The pay code EP5 pays a maximum of $511 per day. Employees will be eligible to receive their regular rate of pay up to $511. Employees who apply for this leave and who earn over

the maximum cap of $511, can supplement with their paid leave to bring pay up to 100% or choose leave without pay.

6. State whether the pay item is paid one time (i.e. incentive pay, referral pay, bonus, award)

RESPONSE #6: No

7. State whether the pay item is an ad hoc payment (i.e, stipend, payment for attending a meeting during the working hours, payment for attending a meeting during non-working hours)

RESPONSE #7: No

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance)

RESPONSE #8: No

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees)

RESPONSE #9: 37.5/40 hour workweek, part time, SAN, TAP

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour workweek, or outside the employee's 40 hour workweek)

RESPONSE #10: No

11. State whether the pay item if for deferred compensation

RESPONSE #11: No

12. State whether the pay item is for retro payments

RESPONSE #12: No

13. State whether the pay item is for accrued unused leaves (i.e., sick leave, annual leave, floating holiday, vacation, comp time)

RESPONSE #13: No

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee

RESPONSE #14: No

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working)

RESPONSE #15: No

16. State whether the pay item is paid in one lump sum or biweekly (or over some other time period-monthly, quarterly, annually)

RESPONSE #16: Biweekly

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution)

RESPONSE #17:

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the:

1) Emergency Paid Sick Leave ("EPSL") Act, and
2) Emergency Family and Medical Leave Expansion Act ("EFMLEA").

The new Acts are effective April 1, 2020, are not retroactive, and cover the period between April 1, 2020 and December 31, 2020.

For additional information, refer to the attached FFCRA Manager and Employee Guidelines and the FFCRA Certification Form, issued by Alameda County Human Resource Services. I'm also including our timesheet coding examples.

ALAMEDA COUNTY
AUDITOR-CONTROLLER AGENCY
MELISSA WILK

AUDITOR-CONTROLLER/CLERK-RECORDER

REQUEST FOR ACERA'S REVIEW OF A NEW PAY ITEM/CODE

Employer Name:	County of Alameda
Date of Request	4/14/2020
Employer Department Submitting the Request	Auditor-Controller's Agency
Contact Person/Employer (include title/position)	Dawn Duffy
Contact Person Telephone incl area code	(510) 272-6383
Contact Person Email address	dawn.duffy@acgov.org
Pay Item Name (and code Number)	**EPA** Emergency Leave Act Pay Adj
Pay Item Effective Date per authorization:	4/5/2020
State if additional documentation is attached	No

NOTE: The following information is required before ACERA can review and respond to the request. To meet ACERA's requirements, please provide substantive responses below or on a separate paper and return , with this form, all of the supporting documentation prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e. Job Code 0499-Nurse Practitioners II may receive this pay item)

RESPONSE #1:

All employees who submit the Families First Coronavirus Response Act (FFCRA) Certification Form

2. State employment status of employees eligible to receive the pay item (i.e. full time employees, part time employees)

RESPONSE #2: Full Time, part time, SAN, TAP

3. State the number of members or employees who are eligible to receive the pay item (i.e. all members or employees in a job classification eligible to receive the pay item, or "not to exceed one employee")

RESPONSE #3: Any County employee

4. State whether pay item is for overtime or regular base pay

RESPONSE #4: Regular base pay

5. State whether pay item is calculated as a fixed amount or percentage of the base pay

RESPONSE #5: Fixed amount. This code will be used if the timesheet coding relating to Emergency Family and Medical Leave Expansion Act leave, EFMLEA, does not bring the employee up to 100% of biweekly salary.

6. State whether the pay item is paid one time (i.e. incentive pay, referral pay, bonus, award)

RESPONSE #6: No

7. State whether the pay item is an ad hoc payment (i.e, stipend, payment for attending a meeting during the working hours, payment for attending a meeting during non-working hours)

RESPONSE #7: No

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance)

RESPONSE #8: No

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees)

RESPONSE #9: 37.5/40 hour workweek, part time, SAN, TAP

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour workweek, or outside the employee's 40 hour workweek)

RESPONSE #10: No

11. State whether the pay item if for deferred compensation

RESPONSE #11: No

12. State whether the pay item is for retro payments

RESPONSE #12: No

13. State whether the pay item is for accrued unused leaves (i.e., sick leave, annual leave, floating holiday, vacation, comp time)

RESPONSE #13: No

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee

RESPONSE #14: No

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working)

RESPONSE #15: No

16. State whether the pay item is paid in one lump sum or biweekly (or over some other time period- monthly, quarterly, annually)

RESPONSE #16: Biweekly

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution)

RESPONSE #17:

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the:

1) Emergency Paid Sick Leave ("EPSL") Act, and
2) Emergency Family and Medical Leave Expansion Act ("EFMLEA").

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REQUEST FOR ACERA'S REVIEW OF A NEW PAY ITEM/CODE

Employer Name:	County of Alameda
Date of Request	4/11/2020
Employer Department Submitting the Request	Auditor-Controller's Agency
Contact Person/Employer (include title/position)	Dawn Duffy
Contact Person Telephone incl area code	(510) 272-6383
Contact Person Email address	dawn.duffy@acgov.org
Pay Item Name (and code Number)	**FE2** FML Emerg Pd SL-2/3DayMax $200
Pay Item Effective Date per authorization:	4/5/2020
State if additional documentation is attached	No

NOTE: The following information is required before ACERA can review and respond to the request. To meet ACERA's requirements, please provide substantive responses below or on a separate paper and return , with this form, all of the supporting documentation prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e. Job Code 0499-Nurse Practitioners II may receive this pay item)

RESPONSE #1:

All employees who submit the Families First Coronavirus Response Act (FFCRA) Certification Form

2. State employment status of employees eligible to receive the pay item (i.e. full time employees, part time employees)

RESPONSE #2: Full Time, part time, SAN, TAP

3. State the number of members or employees who are eligible to receive the pay item (i.e. all members or employees in a job classification eligible to receive the pay item, or "not to exceed one employee")

RESPONSE #3: Any County employee

4. State whether pay item is for overtime or regular base pay

RESPONSE #4: Regular base pay

5. State whether pay item is calculated as a fixed amount or percentage of the base pay

RESPONSE #5: Employees will be eligible to receive two thirds of their regular rate of pay up to $200 per day and $2000 total. This is the FMLA code that goes with new pay code EP2. Employees

who apply for this leave and who earn over the maximum, can supplement with their paid leave to bring pay up to 100% or choose leave without pay.

6. State whether the pay item is paid one time (i.e. incentive pay, referral pay, bonus, award)

RESPONSE #6: No

7. State whether the pay item is an ad hoc payment (i.e, stipend, payment for attending a meeting during the working hours, payment for attending a meeting during non-working hours)

RESPONSE #7: No

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance)

RESPONSE #8: No

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees)

RESPONSE #9: 37.5/40 hour workweek, part time, SAN, TAP

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee’s 37.5 hour workweek, or outside the employee’s 40 hour workweek)

RESPONSE #10: No

11. State whether the pay item if for deferred compensation

RESPONSE #11: No

12. State whether the pay item is for retro payments

RESPONSE #12: No

13. State whether the pay item is for accrued unused leaves (i.e., sick leave, annual leave, floating holiday, vacation, comp time)

RESPONSE #13: No

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee

RESPONSE #14: No

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working)

RESPONSE #15: No

16. State whether the pay item is paid in one lump sum or biweekly (or over some other time period- monthly, quarterly, annually)

RESPONSE #16: Biweekly

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution)

RESPONSE #17:

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the:

1) Emergency Paid Sick Leave ("EPSL") Act, and
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ALAMEDA COUNTY
AUDITOR-CONTROLLER AGENCY
MELISSA WILK

AUDITOR-CONTROLLER/CLERK-RECORDER

REQUEST FOR ACERA'S REVIEW OF A NEW PAY ITEM/CODE

Employer Name:	County of Alameda
Date of Request	4/11/2020
Employer Department Submitting the Request	Auditor-Controller's Agency
Contact Person/Employer (include title/position)	Dawn Duffy
Contact Person Telephone incl area code	(510) 272-6383
Contact Person Email address	dawn.duffy@acgov.org
Pay Item Name (and code Number)	**FE5** FML Emerg Pd SL (DayMax $511)
Pay Item Effective Date per authorization:	4/5/2020
State if additional documentation is attached	No

NOTE: The following information is required before ACERA can review and respond to the request. To meet ACERA's requirements, please provide substantive responses below or on a separate paper and return , with this form, all of the supporting documentation prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e. Job Code 0499-Nurse Practitioners II may receive this pay item)

RESPONSE #1:

All employees applying for who submit the Families First Coronavirus Response Act (FFCRA) Certification Form

2. State employment status of employees eligible to receive the pay item (i.e. full time employees, part time employees)

RESPONSE #2: Full Time, part time, SAN, TAP

3. State the number of members or employees who are eligible to receive the pay item (i.e. all members or employees in a job classification eligible to receive the pay item, or "not to exceed one employee")

RESPONSE #3: Any County employee

4. State whether pay item is for overtime or regular base pay

RESPONSE #4: Regular base pay

5. State whether pay item is calculated as a fixed amount or percentage of the base pay

RESPONSE #5: Employees will be eligible to receive their regular rate of pay up to $511. This is the FMLA code that coordinates with new pay code EP5. Employees who apply for this leave and

who earn over the maximum cap of $511, can supplement with their paid leave to bring pay up to 100% or choose leave without pay.

6. State whether the pay item is paid one time (i.e. incentive pay, referral pay, bonus, award)

RESPONSE #6: No

7. State whether the pay item is an ad hoc payment (i.e, stipend, payment for attending a meeting during the working hours, payment for attending a meeting during non-working hours)

RESPONSE #7: No

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance)

RESPONSE #8: No

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees)

RESPONSE #9: 37.5/40 hour workweek, part time, SAN, TAP

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour workweek, or outside the employee's 40 hour workweek)

RESPONSE #10: No

11. State whether the pay item if for deferred compensation

RESPONSE #11: No

12. State whether the pay item is for retro payments

RESPONSE #12: No

13. State whether the pay item is for accrued unused leaves (i.e., sick leave, annual leave, floating holiday, vacation, comp time)

RESPONSE #13: No

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee

RESPONSE #14: No

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working)

RESPONSE #15: No

16. State whether the pay item is paid in one lump sum or biweekly (or over some other time period- monthly, quarterly, annually)

RESPONSE #16: Biweekly

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution)

RESPONSE #17:

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the:

1) Emergency Paid Sick Leave ("EPSL") Act, and
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REQUEST FOR ACERA'S REVIEW OF A NEW PAY ITEM/CODE

Employer Name:	County of Alameda
Date of Request	4/11/2020
Employer Department Submitting the Request	Auditor-Controller's Agency
Contact Person/Employer (include title/position)	Dawn Duffy
Contact Person Telephone incl area code	(510) 272-6383
Contact Person Email address	dawn.duffy@acgov.org
Pay Item Name (and code Number)	**FEA** Emerg Expan-2/3DayMax$200
Pay Item Effective Date per authorization:	4/5/2020
State if additional documentation is attached	No

NOTE: The following information is required before ACERA can review and respond to the request. To meet ACERA's requirements, please provide substantive responses below or on a separate paper and return , with this form, all of the supporting documentation prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e. Job Code 0499-Nurse Practitioners II may receive this pay item)

RESPONSE #1:

All employees who submit the Families First Coronavirus Response Act (FFCRA) Certification Form

2. State employment status of employees eligible to receive the pay item (i.e. full time employees, part time employees)

RESPONSE #2: Full Time, part time, SAN, TAP

3. State the number of members or employees who are eligible to receive the pay item (i.e. all members or employees in a job classification eligible to receive the pay item, or "not to exceed one employee")

RESPONSE #3: Any County employee

4. State whether pay item is for overtime or regular base pay

RESPONSE #4: Regular base pay

5. State whether pay item is calculated as a fixed amount or percentage of the base pay

RESPONSE #5: Employees will be eligible to receive two thirds of their regular rate of pay up to $200 per day and $10,000 max. Employees who apply for this leave and who earn over the

maximum, can supplement with their paid leave to bring pay up to 100% or choose leave without pay.

6. State whether the pay item is paid one time (i.e. incentive pay, referral pay, bonus, award)

RESPONSE #6: No

7. State whether the pay item is an ad hoc payment (i.e, stipend, payment for attending a meeting during the working hours, payment for attending a meeting during non-working hours)

RESPONSE #7: No

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance)

RESPONSE #8: No

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees)

RESPONSE #9: 37.5/40 hour workweek, part time, SAN, TAP

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour workweek, or outside the employee's 40 hour workweek)

RESPONSE #10: No

11. State whether the pay item if for deferred compensation

RESPONSE #11: No

12. State whether the pay item is for retro payments

RESPONSE #12: No

13. State whether the pay item is for accrued unused leaves (i.e., sick leave, annual leave, floating holiday, vacation, comp time)

RESPONSE #13: No

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee

RESPONSE #14: No

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working)

RESPONSE #15: No

16. State whether the pay item is paid in one lump sum or biweekly (or over some other time period-monthly, quarterly, annually)

RESPONSE #16: Biweekly

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution)

RESPONSE #17:

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the:

1) Emergency Paid Sick Leave ("EPSL") Act, and
2) Emergency Family and Medical Leave Expansion Act ("EFMLEA").

The new Acts are effective April 1, 2020, are not retroactive, and cover the period between April 1, 2020 and December 31, 2020.

For additional information, refer to the attached FFCRA Manager and Employee Guidelines and the FFCRA Certification Form, issued by Alameda County Human Resource Services. I'm also including our timesheet coding examples.

Gov. Code Sec. 31461. (a) "Compensation earnable" by a member means the average compensation as determined by the board, for the period under consideration upon the basis of the average number of days ordinarily worked by persons in the same grade or class of positions during the period, and at the same rate of pay. The computation for any absence shall be based on the compensation of the position held by the member at the beginning of the absence. Compensation, as defined in Section 31460, that has been deferred shall be deemed "compensation earnable" when earned, rather than when paid.

(b) "Compensation earnable" does not include, in any case, the following:

(1) Any compensation determined by the board to have been paid to enhance a member's retirement benefit under that system. That compensation may include:

(A) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member, and which was converted to and received by the member in the form of a cash payment in the final average salary period.

(B) Any one-time or ad hoc payment made to a member, but not to all similarly situated members in the member's grade or class.

(C) Any payment that is made solely due to the termination of the member's employment, but is received by the member while employed, except those payments that do not exceed what is earned in each 12-month period during the final average salary period regardless of when reported or paid.

(2) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that which may be earned in each 12-month period during the final average salary period, regardless of when reported or paid.

(3) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(4) Payments made at the termination of employment, except those payments that do not exceed what is earned in each 12-month period during the final average salary period, regardless of when reported or paid.

Gov. Code Sec. 7522.34. (a) "Pensionable compensation" of a new member of any public retirement system means the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules.

(b) Compensation that has been deferred shall be deemed pensionable compensation when earned rather than when paid.

(c) "Pensionable compensation" does not include the following:

(1) Any compensation determined by the board to have been paid to increase a member's retirement benefit under that system.

(2) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.

(3) Any one-time or ad hoc payments made to a member.

(4) Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment, but is received by the member while employed.

(5) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.

(6) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(7) Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.

(8) Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.

(9) Employer contributions to deferred compensation or defined contribution plans.

(10) Any bonus paid in addition to the compensation described in subdivision (a).

(11) Any other form of compensation a public retirement board determines is inconsistent with the requirements of subdivision (a).

(12) Any other form of compensation a public retirement board determines should not be pensionable compensation.

Adoption of New Pay Codes for Alameda Health System

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Sandra Dueñas-Cuevas, Benefits Manager SDC

SUBJECT: **Approval of One New Alameda Health System of New Pay Code as "Compensation Earnable" and Not as "Pensionable Compensation"**

Alameda Health System requested that the following one new pay code be designated as "compensation earnable" and not "pensionable compensation":

- 452 – COLA Lump Sum/ACMEA Lump Sum Payment
  Pay code 452 will be used when the employee is at or above the top of their salary range and is paid as a lump sum instead of increase to base pay rate.

Staff, including Chief Counsel, reviewed and discussed the required supporting documentation (attached) with the Retirement Plans Administrator and made the administrative determination that the new pay codes qualify as "compensation earnable" under Government Code Section 31461 (for Legacy members) and not considered "pensionable compensation" under Government Code Section 7522.34 (for PEPRA members). The two relevant Government Code sections are attached for the Board's review.

Staff informed the County that staff's administrative determination will be on the Board's consent calendar for approval at the Board's May 21, 2020 meeting. If this item is not pulled from the consent calendar for discussion, then the Board will approve staff's determinations that the one pay code is "compensation earnable" under Government Code Section 31461 (for Legacy members) and not considered "pensionable compensation" under Government Code Section 7522.34 (for PEPRA members).

Attachments

REQUEST FOR ACERA APPROVAL OF NEW PAY CODE

Employer Name: ______**Alameda Health System**________ Date: ______**09/06/19**____________

Contact Person/Employer (include title/position): **Cynthia Enriquez, Retirement Plans Administrator**

Contact Person Telephone: **(510) 618-2141** Email: **cenriquez@alamedahealthsystem.org**

Pay Item Name (and code number): **Pay Code 452 – COLA Lump Sum**

The following information is required before ACERA can review and respond to your request. Please provide substantive responses on separate paper and return with this form prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e., Job Code 0499-Nurse Practitioners II may receive this pay item). **Unrepresented and ACMEA employees**

2. State employment status of employees eligible to receive the pay item (i.e., full time employees, part time employees) **All full time and part time status**

3. State the number of members or employees who are eligible to receive the pay item (i.e., all members or employers in a job classification eligible to receive the pay item, or "not to exceed one employee") **This pay code can be used by all Tier 1, Tier 2 and Tier 4 employees.**

4. State whether pay item is for overtime or regular base pay. **It is for Cost of Living Increase for employees that are at or above top of salary range, so lump sum payment is made.**

5. State whether pay item is calculated as a fixed amount or percentage of the base pay. **Fixed amount.**

6. State whether the pay item is paid one time (i.e., incentive pay, referral pay, bonus, award). **This pay is a one-time payment.**

7. State whether the pay item is an ad hoc payment (i.e., stipend, payment for attending a meeting during working hours, payment for attending a meeting during non working hours). **This pay is NOT an ad hoc payment.**

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance). **This pay is NOT a reimbursement.**

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees). **It varies as it can be used by all employees.**

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour work week, or outside of the employee's 40 hour work week). **This pay is NOT for work performed outside of the regular workweek.**

11. State whether the pay item is for deferred compensation. **This pay is NOT Deferred Compensation.**

12. State whether the pay item is for retro payments. **This pay is NOT for retro payments.**

13. State whether the pay item is for accrued unused leave (i.e., sick leave, annual leave, floating holiday, vacation, comp time). **This pay is NOT for accrued unused leave.**

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee. **This pay has NOT been previously provided in kind by the employer.**

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working). **This pay is NOT for severance or separation.**

16. State whether the pay item is paid in one lump sum or bi-weekly (or over some other time period-monthly, quarterly, annually). **This pay is paid in a lump sum.**

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution). **This pay is a Cost of Living Increase for employees at or above the top of their salary range and is paid as a lump sum instead of increase to base pay rate.**

REQUEST FOR ACERA APPROVAL OF NEW PAY CODE

Employer Name: _**Alameda Health System** ___________ Date: ______**03/04/20**__________

Contact Person/Employer (include title/position): **Cynthia Enriquez, Retirement Plans Administrator**

Contact Person Telephone: **(510) 618-2141** Email: **cenriquez@alamedahealthsystem.org**

Pay Item Name (and code number):
No new code has been established at this time, seeking preliminary approval if pay would be pensionable.

The following information is required before ACERA can review and respond to your request. Please provide substantive responses on separate paper and return with this form prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e., Job Code 0499-Nurse Practitioners II may receive this pay item). **ACMEA employees**

2. State employment status of employees eligible to receive the pay item (i.e., full time employees, part time employees) **all active ACMEA employees (FT, PT, SANS)**

3. State the number of members or employees who are eligible to receive the pay item (i.e., all members or employers in a job classification eligible to receive the pay item, or "not to exceed one employee") **all ACMEA employees**

4. State whether pay item is for overtime or regular base pay.
Lump Sum payment in lieu of pay increase to base pay, not overtime

5. State whether pay item is calculated as a fixed amount or percentage of the base pay.
Fixed amount

6. State whether the pay item is paid one time (i.e., incentive pay, referral pay, bonus, award).
One time lump sum payment

7. State whether the pay item is an ad hoc payment (i.e., stipend, payment for attending a meeting during working hours, payment for attending a meeting during non working hours). **Lump Sum payment in lieu of base rate increase (per union agreement)**

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance). **Not a reimbursement**

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees). **Varies as all employees are included**

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour work week, or outside of the employee's 40 hour work week). **Not payment for hours worked**

11. State whether the pay item is for deferred compensation. **Not deferred compensation**

12. State whether the pay item is for retro payments. **Not retro payment**

13. State whether the pay item is for accrued unused leave (i.e., sick leave, annual leave, floating holiday, vacation, comp time). **Not accrued unused leave**

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee. **NO**

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working). **NO**

16. State whether the pay item is paid in one lump sum or bi-weekly (or over some other time period-monthly, quarterly, annually). **Lump Sum one-time payment**

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution). **Lump Sum payment in lieu of pay increase per union agreement.**

Gov. Code Sec. 31461. (a) "Compensation earnable" by a member means the average compensation as determined by the board, for the period under consideration upon the basis of the average number of days ordinarily worked by persons in the same grade or class of positions during the period, and at the same rate of pay. The computation for any absence shall be based on the compensation of the position held by the member at the beginning of the absence. Compensation, as defined in Section 31460, that has been deferred shall be deemed "compensation earnable" when earned, rather than when paid.

(b) "Compensation earnable" does not include, in any case, the following:

(1) Any compensation determined by the board to have been paid to enhance a member's retirement benefit under that system. That compensation may include:

(A) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member, and which was converted to and received by the member in the form of a cash payment in the final average salary period.

(B) Any one-time or ad hoc payment made to a member, but not to all similarly situated members in the member's grade or class.

(C) Any payment that is made solely due to the termination of the member's employment, but is received by the member while employed, except those payments that do not exceed what is earned in each 12-month period during the final average salary period regardless of when reported or paid.

(2) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that which may be earned in each 12-month period during the final average salary period, regardless of when reported or paid.

(3) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(4) Payments made at the termination of employment, except those payments that do not exceed what is earned in each 12-month period during the final average salary period, regardless of when reported or paid.

Gov. Code Sec. 7522.34. (a) "Pensionable compensation" of a new member of any public retirement system means the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules.

(b) Compensation that has been deferred shall be deemed pensionable compensation when earned rather than when paid.

(c) "Pensionable compensation" does not include the following:

(1) Any compensation determined by the board to have been paid to increase a member's retirement benefit under that system.

(2) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.

(3) Any one-time or ad hoc payments made to a member.

(4) Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment, but is received by the member while employed.

(5) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.

(6) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(7) Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.

(8) Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.

(9) Employer contributions to deferred compensation or defined contribution plans.

(10) Any bonus paid in addition to the compensation described in subdivision (a).

(11) Any other form of compensation a public retirement board determines is inconsistent with the requirements of subdivision (a).

(12) Any other form of compensation a public retirement board determines should not be pensionable compensation.

Adoption of New Pay Codes for Superior Courts

ACERA

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Sandra Dueñas-Cuevas, Benefits Manager

SUBJECT: **Approval of One New Court Pay Code as "Compensation Earnable" and " Pensionable Compensation"**

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions, which provide paid leave to impacted employees. FFCRA contains the 1) Emergency Paid Sick Leave (ESPL) Act and Emergency Family and Medical Leave Expansion Act (EFMLEA)

The Superior Court requested that the following new pay code be designated as "compensation earnable" and "pensionable compensation":

- 367 – Emergency Sick Leave

Pay code 367 will be used to provide sick leave and expanded family and medical leave for specified reasons related to COVID-19. The pay code is effective April 6, 2020. Staff, including Chief Counsel, reviewed and discussed the required supporting documentation (attached) with the Court's Director of Finance and Facilities and made the administrative determination that the new pay codes qualify as "compensation earnable" under Government Code Section 31461 (for Legacy members) and "pensionable compensation" under Government Code Section 7522.34 (for PEPRA members). The two relevant Government Code sections are attached for the Board's review.

Staff informed the Courts that staff's administrative determination will be on the Board's consent calendar for approval at the Board's May 21, 2020 meeting. If this item is not pulled from the consent calendar for discussion, then the Board will approve staff's determinations that the two pay codes are "compensation earnable" under Government Code Section 31461 (for Legacy members) and "pensionable compensation" under Government Code Section 7522.34 (for PEPRA members).

Attachments

Exhibit 2

REQUEST FOR ACERA'S REVIEW

OF A NEW PAY ITEM/CODE

Employer Name: Superior Court of California, County of Alameda

Date: __4/9/2020_____________

Contact Person/Employer (include title/position): _Jan Tillman/Senior Accountant (additionally: Sarah Ybarra/Payroll Specialist)

Contact Person Telephone: 510-891-6215 (Jan Tillman) or 510-891-6226 (Sarah Ybarra)

Email: Payrollunit@alameda.courts.ca.gov or jtillman@alameda.courts.ca.gov

Pay Item Name (and code number): Emergency Sick Leave; code# 367

The following information is required before ACERA can review and respond to your request. Please provide substantive responses on separate paper and return with this form prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e., Job Code 0499-Nurse Practitioners II may receive this pay item).

2. State employment status of employees eligible to receive the pay item (i.e., full time employees, part time employees)

3. State the number of members or employees who are eligible to receive the pay item (i.e., all members or employers in a job classification eligible to receive the pay item, or "not to exceed one employee")

4. State whether pay item is for overtime or regular base pay.

5. State whether pay item is calculated as a fixed amount or percentage of the base pay.

6. State whether the pay item is paid one time (i.e., incentive pay, referral pay, bonus, award).

7. State whether the pay item is an ad hoc payment (i.e., stipend, payment for attending a meeting during working hours, payment for attending a meeting during non working hours).

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance)

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees)

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee’s 37.5 hour work week, or outside of the employee’s 40 hour work week)

11. State whether the pay item is for deferred compensation.

12. State whether the pay item is for retro payments.

13. State whether the pay item is for accrued unused leave (i.e., sick leave, annual leave, floating holiday, vacation, comp time)

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee.

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working)

16. State whether the pay item is paid in one lump sum or bi-weekly (or over some other time period-monthly, quarterly, annually)

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution).

1. All job classifications eligible

2. Part Time and Full Time

3. All members in all job classifications eligible to receive this pay code

4. Regular base pay

5. Calculated as same amount of Base Pay (hour for hour)

6. This is not a one-time payment

7. provide paid sick leave and expanded family and medical leave for specified reasons related to COVID-19

8. Not a reimbursement

9. All employees eligible to receive pay: 37.5 and 40 hours (including Part Time)

10. This is not for payment outside regular work week

11. Not for deferred compensation

12. Not for retro payments

13. Not for accrued unused leave

14. Not for compensation that had previously been provided

15. Not for severance or separation

16. Paid bi-weekly, based on Hours

17. employee must be eligible to receive regular wages

Gov. Code Sec. 31461. (a) "Compensation earnable" by a member means the average compensation as determined by the board, for the period under consideration upon the basis of the average number of days ordinarily worked by persons in the same grade or class of positions during the period, and at the same rate of pay. The computation for any absence shall be based on the compensation of the position held by the member at the beginning of the absence. Compensation, as defined in Section 31460, that has been deferred shall be deemed "compensation earnable" when earned, rather than when paid.

(b) "Compensation earnable" does not include, in any case, the following:

(1) Any compensation determined by the board to have been paid to enhance a member's retirement benefit under that system. That compensation may include:

(A) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member, and which was converted to and received by the member in the form of a cash payment in the final average salary period.

(B) Any one-time or ad hoc payment made to a member, but not to all similarly situated members in the member's grade or class.

(C) Any payment that is made solely due to the termination of the member's employment, but is received by the member while employed, except those payments that do not exceed what is earned in each 12-month period during the final average salary period regardless of when reported or paid.

(2) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that which may be earned in each 12-month period during the final average salary period, regardless of when reported or paid.

(3) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(4) Payments made at the termination of employment, except those payments that do not exceed what is earned in each 12-month period during the final average salary period, regardless of when reported or paid.

Gov. Code Sec. 7522.34. (a) "Pensionable compensation" of a new member of any public retirement system means the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules.

(b) Compensation that has been deferred shall be deemed pensionable compensation when earned rather than when paid.

(c) "Pensionable compensation" does not include the following:

(1) Any compensation determined by the board to have been paid to increase a member's retirement benefit under that system.

(2) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.

(3) Any one-time or ad hoc payments made to a member.

(4) Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment, but is received by the member while employed.

(5) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.

(6) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(7) Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.

(8) Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.

(9) Employer contributions to deferred compensation or defined contribution plans.

(10) Any bonus paid in addition to the compensation described in subdivision (a).

(11) Any other form of compensation a public retirement board determines is inconsistent with the requirements of subdivision (a).

(12) Any other form of compensation a public retirement board determines should not be pensionable compensation.

Adoption of New Pay Codes for First 5

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Sandra Dueñas-Cuevas, Benefits Manager SDC

SUBJECT: **Requests for Consideration of Approval of New First 5 Pay Codes as "Compensation Earnable" and " Pensionable Compensation"**

FFCRA is an emergency law created in response to COVID-19 and contains two (2) provisions which provide paid leave to impacted employees. FFCRA contains the 1) Emergency Paid Sick Leave (ESPL) Act and Emergency Family and Medical Leave Expansion Act (EFMLEA). The new Acts are effective April 1, 2020 through December 31, 2020.

First 5 requested that the following five new pay codes be considered for designation as "compensation earnable" and "pensionable compensation" if appropriate:

- PFL – Emergency Family & Medical Leave
  Pay code PFL can be used by any employee who has been employed for 30 or more days. Leave is calculated by multiplying the number of Emergency Family & Medical Leave hours by the base pay rate up to 2/3 of an employee's regular pay up to $200 per day. This pay code is effective April 1, 2020 through December 31, 2020.

- PSF – Emergency Paid Sick Time Family
  Pay Code PSF can be used by any employee who has been employed for 30 or more day. The employer must provide full-time employees with up to 80 hours of paid sick leave if the employee is unable to work or telework due to COID-19. Part-time Employees are entitle to paid sick leave based on the number of hours the employee work, on average, over a two-week period. This pay code is effective April 1, 2020 through December 31, 2020.

- PSS – Emergency Paid Sick Time Self
  Pay Code PSS can be used by any employee who has been employed for 30 or more day. The employer must provide full-time employees with up to 80 hours of paid sick leave if the employee is unable to work or telework due to COID-19. Part-time Employees are entitle to paid sick leave based on the number of hours the employee work, on average, over a two-week period. This pay code is effective April 1, 2020 through December 31, 2020.

Staff, including Chief Counsel, reviewed and discussed the required supporting documentation (attached) with the Human Resources Administrator and made the administrative determination that the three above new pay codes qualify as “compensation earnable” under Government Code Section 31461 (for Legacy members) and “pensionable compensation” under Government Code Section 7522.34 (for PEPRA members). The two relevant Government Code sections are attached for the Board’s review.

The following two new pay codes were considered separately as they are cash payments for Paid Time Off. PT2 was created for Legacy members and is therefore considered “compensation earnable”. PT4 was created for PEPRA members and will not be considered as “pensionable compensation”.

- PT2 – Paid Time Off Sell
  Pay Code PT2 will be used when a Legacy member employee would like to sell available Paid Time Off to mitigate financial hardships they are experiencing due to COVID-19. This pay code is effective April 16, 2020. * The new pay code qualifies as “compensation earnable” under Government Code Section 31461.

- PT4 – Paid Time Off Sell
  Pay Code PT4 will be used when a PEPRA member employee would like to sell available Paid Time Off to mitigate financial hardships they are experiencing due to COVID-19. This pay code is effective April 16, 2020. It is not considered “pensionable compensation” under Government Code Section 7522.34.

Staff informed First 5 that staff’s administrative determination will be on the Board’s consent calendar for approval at the Board’s May 21, 2020 meeting. If this item is not pulled from the consent calendar for discussion, then the Board will approve staff’s determinations that the six pay codes are all “compensation earnable” under Government Code Section 31461 (for Legacy members) and “pensionable compensation” under Government Code Section 7522.34 (for PEPRA members) with the exceptions as stated above for PT2, which is “compensation earnable” for Legacy Members and PT4, which, as a cash payment for PEPRA members is not considered “pensionable compensation”.

Attachments

Exhibit 2

REQUEST FOR ACERA'S REVIEW

OF A NEW PAY ITEM/CODE

Employer Name: First 5 Alameda County____________ Date: ____04/02/2020______

Contact Person/Employer (include title/position): Steven Quach, Payroll & Finance Manger

Contact Person Telephone: 510-227-6997 Email: steven.quach@first5alameda.org

Pay Item Name (and code number): Emergency Family & Medical Leave (PFL)

Effective April 1, 2020

The following information is required before ACERA can review and respond to your request. Please provide substantive responses on separate paper and return with this form prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e., Job Code 0499-Nurse Practitioners II may receive this pay item). Any F5 Alameda County employee
2. State employment status of employees eligible to receive the pay item (i.e., full time employees, part time employees) Either full-time or part-time employees may receive this pay item.
3. State the number of members or employees who are eligible to receive the pay item (i.e., all members or employers in a job classification eligible to receive the pay item, or "not to exceed one employee") Any F5 employee is eligible.
4. State whether pay item is for overtime or regular base pay. Emergency Family & Medical Leave would be for regular base pay.
5. State whether pay item is calculated as a fixed amount or percentage of the base pay. This pay item is calculated by multiplying the number of Emergency Family & Medical Leave hours by the base pay rate up to 2/3rds of an employee's regular pay up to $200 per day.
6. State whether the pay item is paid one time (i.e., incentive pay, referral pay, bonus, award). This pay item would be paid whenever an employee takes off applicable time.

7. State whether the pay item is an ad hoc payment (i.e., stipend, payment for attending a meeting during working hours, payment for attending a meeting during non working hours). This is not an ad hoc payment.

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance) The pay item is not a reimbursement.

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees) Regular employees working full-time (40 hours/week) or part-time employees receive Emergency Family & Medical Leave hours. Part-time employees earn prorated Emergency Family & Medical Leave hours based on their FTE.

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour work week, or outside of the employee's 40 hour work week) This pay item is not for work performed outside regular work week.

11. State whether the pay item is for deferred compensation. Pay item is not for deferred compensation.

12. State whether the pay item is for retro payments. Pay item is not for retro payments.

13. State whether the pay item is for accrued unused leave (i.e., sick leave, annual leave, floating holiday, vacation, comp time) Pay item is not for accrued unused leave.

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee. It is not.

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working) This pay item is not severance and is not in connection with separation from employment. It is made while the employee is an active employee.

16. State whether the pay item is paid in one lump sum or bi-weekly (or over some other time period-monthly, quarterly, annually). It is paid as requested as part of bi-weekly payroll.

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution). Any employee who has been employed for 30 or more days is eligible.

April 6, 2020

To: Sandra Duenas, ACERA

From: Lyssa DeGolia
Human Resources Administrator

Re: Justification for Pay Code Creation—Emergency Paid Sick Time

We are requesting the creation of a new pay code for First 5 Alameda County.

On March 18, 2020, President Trump signed into law The Families First Coronavirus Response Act. First 5 Alameda County is a covered employer who must provide full-time employees with up to 80 hours of paid sick leave if the employees are unable to work (or telework) due to COVID-19. Part-time employees are entitled to paid sick leave based on the number of hours the employees work, on average, over a two-week period.

We need this new pay code to comply with this legal requirement.

The ACERA Exhibit 2 form has been completed for this code. Please let me know if you need further information.

Thank you,

Lyssa DeGolia

Cc: Kristin Spanos, CEO
Mojgan Vijeh, Director, Operations and Technology
Christine Hom, Finance Officer
Steven Quach, Payroll and Finance Manager

Exhibit 2

REQUEST FOR ACERA'S REVIEW

OF A NEW PAY ITEM/CODE

Employer Name: First 5 Alameda County____________ Date: ____04/02/2020______

Contact Person/Employer (include title/position): Steven Quach, Payroll & Finance Manger

Contact Person Telephone: 510-227-6997 Email: steven.quach@first5alameda.org

Pay Item Name (and code number): Emergency Paid Sick Time Self (PSS) & Family (PSF)

Effective April 1, 2020

The following information is required before ACERA can review and respond to your request. Please provide substantive responses on separate paper and return with this form prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e., Job Code 0499- Nurse Practitioners II may receive this pay item). Any F5 Alameda County employee

2. State employment status of employees eligible to receive the pay item (i.e., full time employees, part time employees) Either full-time or part-time employees may receive this pay item.

3. State the number of members or employees who are eligible to receive the pay item (i.e., all members or employers in a job classification eligible to receive the pay item, or "not to exceed one employee") Any F5 employee is eligible.

4. State whether pay item is for overtime or regular base pay. Emergency Paid Sick Time would be for regular base pay.

5. State whether pay item is calculated as a fixed amount or percentage of the base pay. This pay item is calculated by multiplying the number of Emergency Paid Sick Time hours by the base pay rate.

6. State whether the pay item is paid one time (i.e., incentive pay, referral pay, bonus, award). This pay item would be paid whenever an employee takes off applicable time.

7. State whether the pay item is an ad hoc payment (i.e., stipend, payment for attending a meeting during working hours, payment for attending a meeting during non working hours). This is not an ad hoc payment.

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance) The pay item is not a reimbursement.

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees) Regular employees working full-time (40 hours/week) or part-time employees receive Emergency Paid Sick Time hours. Part-time employees earn prorated Emergency Paid Sick Time hours based on their FTE.

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour work week, or outside of the employee's 40 hour work week) This pay item is not for work performed outside regular work week.

11. State whether the pay item is for deferred compensation. Pay item is not for deferred compensation.

12. State whether the pay item is for retro payments. Pay item is not for retro payments.

13. State whether the pay item is for accrued unused leave (i.e., sick leave, annual leave, floating holiday, vacation, comp time) Pay item is not for accrued unused leave.

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee. It is not.

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working) This pay item is not severance and is not in connection with separation from employment. It is made while the employee is still an active employee.

16. State whether the pay item is paid in one lump sum or bi-weekly (or over some other time period-monthly, quarterly, annually). It is paid as requested as part of bi-weekly payroll.

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution). Any employee who has been employed for 30 or more days is eligible.

FIRST 5
ALAMEDA COUNTY

April 6, 2020

To: Sandra Duenas, ACERA

From: Lyssa DeGolia
Human Resources Administrator

Re: Justification for Pay Code Creation—Paid Time Off Sell

We are requesting the creation of a new pay code for First 5 Alameda County.

Since the beginning of March, First 5 Alameda County has implemented a series of work accommodations in response to the Covid-19 outbreak. We want to provide support to our employees, many of whom have had their families economically impacted and are experiencing hardships with school closures. We would like to offer employees the opportunity to sell available Paid Time Off to mitigate financial hardships they are experiencing.

The ACERA Exhibit 2 form has been completed for this code. Please let me know if you need further information.

Thank you,

Lyssa DeGolia

Cc: Kristin Spanos, CEO
Mojgan Vijeh, Director, Operations and Technology
Christine Hom, Finance Officer
Steven Quach, Payroll and Finance Manager

Exhibit 2

REQUEST FOR ACERA'S REVIEW

OF A NEW PAY ITEM/CODE

Employer Name: __First 5 Alameda County______________ Date: 4/1/2020

Contact Person/Employer (include title/position): Steven Quach, Payroll & Finance Manger

Contact Person Telephone: __510-227-6997_________________

Email: steven.quach@first5alameda.org__________________________

Pay Item Name (and code number): Paid Time Off Sell - effective April 16, 2020

______Pay Code Numbers: PT2 & PT4

The following information is required before ACERA can review and respond to your request. Please provide substantive responses on separate paper and return with this form prior to issuing (paying) the pay item to any employee who is an ACERA member.

1. State the job classification of employees eligible for the pay item (i.e., Job Code 0499-Nurse Practitioners II may receive this pay item). Any regular F5 Alameda County employee may sell back Paid Time Off hours.

2. State employment status of employees eligible to receive the pay item (i.e., full time employees, part time employees) Either full-time or part-time employees may receive this pay item.

3. State the number of members or employees who are eligible to receive the pay item (i.e., all members or employers in a job classification eligible to receive the pay item, or "not to exceed one employee") Any F5 employee is eligible to sell back Paid Time Off hours provided that he or she has a balance greater than zero at the time of sell.

4. State whether pay item is for overtime or regular base pay. Paid Time Off Sell would be for regular base pay.

5. State whether pay item is calculated as a fixed amount or percentage of the base pay. This pay item is calculated by multiplying the number of sell back hours by the base pay rate.

6. State whether the pay item is paid one time (i.e., incentive pay, referral pay, bonus, award). This pay item would be paid whenever an employee decides to sell back Paid Time Off hours.

7. State whether the pay item is an ad hoc payment (i.e., stipend, payment for attending a meeting during working hours, payment for attending a meeting during nonworking hours). This is not an ad hoc payment.

8. State whether the pay item is a reimbursement (i.e., car allowance, housing allowance, uniform allowance, mileage payment, cell phone allowance) The pay item is not a reimbursement.

9. State regular working hours of the employees who will receive the pay item (i.e., 37.5 hour workweek employees, 40 hour workweek employees). Regular employees working full-time (40 hours/week) or part-time may request to sell back Paid Time Off hours. Part-time employees earn prorated Paid Time Off hours based on their FTE.

10. State whether pay item is for work performed outside of the regular workweek (i.e., payment for work or services performed outside of the employee's 37.5 hour work week, or outside of the employee's 40 hour work week). This pay item is not for work performed outside regular work week.

11. State whether the pay item is for deferred compensation. Pay item is not for deferred compensation.

12. State whether the pay item is for retro payments. Pay item is not for retro payments.

13. State whether the pay item is for accrued unused leave (i.e., sick leave, annual leave, floating holiday, vacation, comp time). Yes, this pay item is for accrued unused Paid Time Off leave hours.

14. State whether the payment is compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member or employee. It is not.

15. State whether the payment is severance or other payment in connection with or in anticipation of a separation from employment (and state if this payment is made while employee is working). This pay item is not severance and is not in connection with separation from employment. It is made while the employee is still an active employee.

16. State whether the pay item is paid in one lump sum or bi-weekly (or over some other time period-monthly, quarterly, annually). The pay item is based on the number of Paid Time Off hours the employee decides to sell back in that pay period. It would be paid on a regular bi-weekly basis.

17. State the basis for eligibility for the pay item (i.e., certification of completion of training program conducted by an accredited university, or employee assigned as supervisor of badge distribution). Any regular full-time or part-time employee who has Paid Time Off hours available to sell back is eligible to request a sell.

Gov. Code Sec. 31461. (a) "Compensation earnable" by a member means the average compensation as determined by the board, for the period under consideration upon the basis of the average number of days ordinarily worked by persons in the same grade or class of positions during the period, and at the same rate of pay. The computation for any absence shall be based on the compensation of the position held by the member at the beginning of the absence. Compensation, as defined in Section 31460, that has been deferred shall be deemed "compensation earnable" when earned, rather than when paid.

(b) "Compensation earnable" does not include, in any case, the following:

(1) Any compensation determined by the board to have been paid to enhance a member's retirement benefit under that system. That compensation may include:

(A) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member, and which was converted to and received by the member in the form of a cash payment in the final average salary period.

(B) Any one-time or ad hoc payment made to a member, but not to all similarly situated members in the member's grade or class.

(C) Any payment that is made solely due to the termination of the member's employment, but is received by the member while employed, except those payments that do not exceed what is earned in each 12-month period during the final average salary period regardless of when reported or paid.

(2) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that which may be earned in each 12-month period during the final average salary period, regardless of when reported or paid.

(3) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(4) Payments made at the termination of employment, except those payments that do not exceed what is earned in each 12-month period during the final average salary period, regardless of when reported or paid.

Gov. Code Sec. 7522.34. (a) "Pensionable compensation" of a new member of any public retirement system means the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules.

(b) Compensation that has been deferred shall be deemed pensionable compensation when earned rather than when paid.

(c) "Pensionable compensation" does not include the following:

(1) Any compensation determined by the board to have been paid to increase a member's retirement benefit under that system.

(2) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.

(3) Any one-time or ad hoc payments made to a member.

(4) Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment, but is received by the member while employed.

(5) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.

(6) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

(7) Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.

(8) Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.

(9) Employer contributions to deferred compensation or defined contribution plans.

(10) Any bonus paid in addition to the compensation described in subdivision (a).

(11) Any other form of compensation a public retirement board determines is inconsistent with the requirements of subdivision (a).

(12) Any other form of compensation a public retirement board determines should not be pensionable compensation.

NEW BUSINESS

7.A. **Discussion and possible motion that after contributions are made to the 401(h) accounts by the respective Participating Employers, ACERA, in accordance with the CERL, treat an equal amount of Supplemental Retiree Benefit Reserve assets as employer contributions for pensions and transfer the amount equal to the pro rata share of the 401(h) contributions for the 2020-2021 fiscal year for each Participating Employer. The exact amount will be adjusted by the balance remaining in each of the 401(h) accounts and is contingent upon receipt by ACERA of an authorizing resolution from the Participating Employers' governing bodies.**

7.B. **Discussion and possible motion to accept and file the December 31, 2019 Audited Financial Statements and Independent Auditor's Report.**

7.C. **Discussion and possible motion to adopt the Actuarial Valuation as of December 31, 2019.**

7.D. & 7.E. **Discussion and possible motion to adopt Government Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74 Actuarial Valuations and Addendums as of December 31, 2019.**

7.F. **Chief Executive Officer's Report.**

NEW BUSINESS

7.A. Discussion and possible motion that after contributions are made to the 401(h) accounts by the respective Participating Employers, ACERA, in accordance with the CERL, treat an equal amount of Supplemental Retiree Benefit Reserve assets as employer contributions for pensions and transfer the amount equal to the pro rata share of the 401(h) contributions for the 2020-2021 fiscal year for each Participating Employer. The exact amount will be adjusted by the balance remaining in each of the 401(h) accounts and is contingent upon receipt by ACERA of an authorizing resolution from the Participating Employers' governing bodies.

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: Participating Employers' Recommended Contributions to their Alameda County Employees' Retirement Association 401(h) Accounts for the 2020-2021 Fiscal Year

Executive Summary

Each year, the governing bodies of ACERA's Participating Employers authorize ACERA to establish a 401(h) account on their behalf. These accounts are funded by the Participating Employers with a portion of the normal annual contributions to ACERA. Simultaneously, after contributions are made in accordance with the County Employee Retirement Law (CERL), ACERA treats an equal amount of Supplemental Retiree Benefits Reserve (SRBR) assets as employer contributions for pensions and transfers that amount to the appropriate Employer Advance Reserve. This procedure provides retirees with contributions towards their Retiree Health Benefits (RHBs) on a tax-free basis in compliance with Internal Revenue Code Section (IRC) §401(h).

Background

Beginning with resolution 96-634 for the fiscal year ending June 30, 1996, the Alameda County Board of Supervisors has annually authorized County contributions to a 401(h) account to provide non-vested RHBs to retirees on a non-taxable basis. In accordance with the County's annual resolution, ACERA's actuary has estimated the cost to fund this account, and the County has paid these funds into the 401(h) account in conjunction with its annual normal retirement contribution payment.

In 2005, in an effort to limit its cost related to Other Post-Employment Benefits (OPEBs) the Alameda County Board of Supervisors adopted Resolution number R-2005-292. The resolution states: (1) the County's annual contribution to ACERA's 401(h) account be limited to costs related to non-vested OPEB benefits attributed to retired County employees, and (2) that contributions for retired employees of other ACERA member entities (e.g. Alameda County Medical Center now named Alameda Health System, Housing Authority and Livermore Area Recreation and Park District, etc.) were the responsibility of those entities. Subsequently, the Alameda County Housing Authority, the Alameda Health System (AHS), the Livermore Area Recreation and Park District (LARPD) and First Five-Alameda County Children and Families Commission (First 5) chose to establish their own 401(h) accounts. Alameda County includes the Alameda County Office of Education in the County's 401(h). In accordance with Government Code 71624, the Superior Court of California is also included in the County's 401(h). However, the Superior Court funds its own 401(h) contribution amount.

The Segal Company, ACERA's actuary, projected that $55,657,000 will be required in contributions for the 2020-2021 fiscal year. IRC § 401(h) limits the total contribution under the plan to 25% of total contributions. In the attached letter, The Segal Company confirmed that the estimate of the 401(h) contributions does not exceed the 25% limit of the total contribution under the plan imposed by the IRC Section 401(h).

The attached 401(h) Contributions Summary by Participating Employer schedule shows a percentage breakdown of the 401(h) expense by employer based on the number of retirees eligible for non-vested OPEB benefits. This percentage was applied to the projected 401(h) contributions total of $55,657,000 and was adjusted by the estimated balance remaining in the 401(h) account, as of June 30, 2020 for fiscal year 2020-2021.

Employer	Percentage	Net Contribution
Alameda County	80.97%	$37,910,945.86
AHS	12.36%	$5,847,613.86
First 5	0.12%	$57,261.54
Housing Authority	0.60%	$281,620.01
LARPD	0.70%	$329,550.84
Superior Court	5.25%	$2,480,592.97
Total Net Contribution	100.00%	**$46,907,585.08**

The estimated contributions for all Participating Employers include:
- Projected health premium subsidy increases of 3.125% for medical and 4% for Medicare Part B, dental and vision;
- An additional 10% subsidy requirement for 2020-2021 to provide a margin for unexpected retirements (e.g., if the employer grants Golden Handshake benefits);
- Administrative expenses for health benefits[1]

ACERA will send a letter to each of the Participating Employers requesting that their respective governing bodies pass a resolution to approve the funding of their 401(h) account in the upcoming fiscal year in the amount specified by ACERA's actuary and adjusted by the balance remaining in their 401(h) account.

Recommendation
Staff recommends to the Board of Retirement that after contributions are made to the 401(h) accounts by the respective Participating Employers, ACERA, in accordance with the CERL, treat an equal amount of Supplemental Retiree Benefits Reserve (SRBR) assets as employer contributions for pensions and transfer the amount equal to the pro rata share of the 401(h) contributions for the 2020-2021 fiscal year for each Participating Employer. The exact amount will be adjusted by the balance remaining in each of their 401(h) accounts and is contingent upon receipt by ACERA of an authorizing resolution from each of the Participating Employers' governing bodies.

MMA/srp
Attachments (2)

[1]This is required to comply with tax qualification requirements per ACERA's Tax Counsel.

NEW BUSINESS

7.B. Discussion and possible motion to accept and file the December 31, 2019 Audited Financial Statements and Independent Auditor's Report.

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE:	May 21, 2020
TO:	Members of the Board of Retirement
FROM:	Margo Allen, Fiscal Services Officer
SUBJECT:	December 31, 2019, Audited Financial Statements and Independent Auditor's Report

Executive Summary

Williams, Adley & Co., has completed its independent audit of ACERA's 2019 financial statements. The December 31, 2019, end-of-year financial audit encompassed ACERA's basic financial statements, that is:

- Statement of Fiduciary Net Position;
- Statement of Changes in Fiduciary Net Position;
- Notes to the Basic Financial Statements and Supplementary Information; and,
- Supplemental Schedules.

The auditor's responsibility is to express an opinion of ACERA's financial statements in accordance with the *Government Auditing Standards*. To that end, Williams Adley & Co. is here to present its findings for reasonable assurance about whether ACERA's financial statements are free from material misstatement.

Recommendation

Staff recommends that the Board of Retirement accept and file the December 31, 2019, audited financial statements and independent auditor's report.

Attachment: Audited Financial Statements and Independent Auditor's Report

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Audit Results for the Year Ended
December 31, 2019

WILLIAMS ADLEY
Confidence Earned

FY 2019 AUDIT HIGHLIGHTS

- The audit is substantially complete.
- Procedures were performed in accordance with the audit plan presented to the audit committee in February.
- No internal control or compliance findings were noted in the Yellow Book report.
- The opinion on the financial statements is unmodified.
- Required communications will be delivered in a separate letter.

WILLIAMS ADLEY

Confidence Earned

Financial

WILLIAMS ADLEY

Independent Auditor's Report

Board of Retirement
Alameda County Employees' Retirement Association
Oakland, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Alameda County Employees' Retirement Association (ACERA), as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise ACERA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of ACERA as of December 31, 2019, and the change in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters Net Pension Liability of Employers

As described in note 5, based on the most recent actuarial valuation as of December 31, 2019, ACERA's independent actuaries determined that, at December 31, 2019, the total pension liability exceeded the pension plan's fiduciary net position by $2.1 billion.

Net OPEB Liability of Employers

As described in note 7, based on the most recent actuarial valuation as of December 31, 2019, ACERA's independent actuaries determined that, at December 31, 2019, the total OPEB liability exceeded the OPEB plan's fiduciary net position by $112.9 million.

Our opinion is not modified with respect to these matters.

WILLIAMS, ADLEY & COMPANY-CA, LLP
Certified Public Accountants / Management Consultants
7677 Oakport Street, Ste. 1000 • Oakland, CA 94621 • (510) 893-8114 • Fax: (510) 893-2603
http://ca.williamsadley.com

WILLIAMS ADLEY

Other Matters Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in the net pension liability and related ratios, schedule of employer contributions for the pension plan and non-OPEB, schedule of investment returns, schedule of changes in the net OPEB liability and related ratios, and the schedule of employer contributions for OPEB, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise ACERA's basic financial statements. The schedules of administration expense, investment expenses, and payments to other consultants, and the introduction, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

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

Report on Summarized Comparative Information

We have previously audited ACERA's 2018 financial statements, and our report dated June 19, 2019, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2018, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated June __, 2020, on our consideration of ACERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering ACERA's internal control over financial reporting and compliance.

Oakland, California
June XX, 2020

Management's Discussion and Analysis

Management's Discussion and Analysis (MD&A) presents the financial activities of the Alameda County Employees' Retirement Association (ACERA) for the year ended December 31, 2019. It provides an overview of the financial position and the combined results of operations for the pension plan and non-OPEB and Other Postemployment Benefits (OPEB). The narrative, in conjunction with the financial statements starting on page 20 and the notes to the financial statements beginning on page 23, presents ACERA's overall financial position, and the results of its operations. ACERA's funding is a combination of participating employer and member contributions and earnings on invested assets. The Chief Executive Officer's Letter of Transmittal starting on page 2 of this Comprehensive Annual Financial Report (CAFR) should be read along with the MD&A narrative.

(Note: Amounts in this section are rounded and may not add or agree to other sections of this CAFR.)

Financial Highlights

As of December 31, 2019, ACERA's net position, which represents funds restricted for paying current and long-term pension benefit obligations and non-vested OPEB for plan members and their beneficiaries, was $8.8 billion, a $1.2 billion increase compared to December 31, 2018. This 16% increase was primarily attributable to the increase in fair value of ACERA's investment portfolio during 2019.

As of December 31, 2019, the Net Pension Liability (NPL) was $2,140.7 million, compared to $2,764.0 million as of December 31, 2018. The $623.3 million decrease was primarily a result of the favorable investment return during calendar year 2019. The net investment gain of $1,165.8 million in 2019 was a 6% increase compared to the net investment loss of $216.3 million in 2018.

As of December 31, 2019, the Net OPEB Liability (NOL) was $112.9 million, compared to $232.9 million as of December 31, 2018. The $120.0 million decrease was primarily the result of favorable investment return during calendar year 2019 of about $193.7 million. Favorable investment results are allocated earnings to the Supplemental Retiree Benefits Reserve (SRBR), which are credited by semiannual transfers to the reserve as defined by Article 5.5 of the County Employees' Retirement Law of 1937.

As of December 31, 2018, the date of the pension plan actuarial funding and SRBR sufficiency actuarial valuations used for the 2019 CAFR, the actuarial investment rate of return assumption used was 7.25%. The inflation rate assumption was 3.00% with assumed payroll growth increase of 3.50%.

As of December 31, 2018, ACERA had $569.1 million in net deferred investment losses based on the actuarial value of assets. These deferred losses represent 7.5% of the [fair value][1] of assets, as of the December 31, 2018, actuarial valuation date. Unless offset by future investment gains or other favorable experience, the recognition of the $569.1 million market losses is expected to have an unfavorable impact on the Association's future funded percentage and contribution rate requirements.

Overview of the Financial Statements

This discussion and analysis serves as an introduction to ACERA's Basic Financial Statements, which comprise the following five components:

- Statement of Fiduciary Net Position
- Statement of Changes in Fiduciary Net Position
- Notes to the Basic Financial Statements
- Required Supplementary Information (RSI) and Notes to RSI
- Supplemental Schedules

The basic financial statements report the components of the fiduciary net position held in trust for benefits, the components of the changes in the fiduciary net position (additions and deductions), along with explanatory notes to the basic financial statements.

ACERA's basic financial statements have two reporting columns. The first column reports the pension plan and non-OPEB, and the second column reports the postemployment medical benefits. ACERA's pension benefits and the non-OPEB are valued together for the purpose of determining and reporting the NPL. In addition to the basic financial statements, this report contains required supplementary information and supplemental schedules intended to assess the historical context of ACERA's progress in meeting benefit obligations through funding of contributions and investment income.

The Statement of Fiduciary Net Position on page 20 provides a snapshot of account balances at year's end. It includes the assets available for future benefit payments as well as current liabilities outstanding at year's end.

ACERA did not have any transactions that met the criteria for deferred outflows of resources or deferred inflows of resources as defined in GASB Statement No. 63 and GASB Statement No. 65. As a result, those line items are not displayed on the 2019 Statement of Fiduciary Net Position.

The Statement of Changes in Fiduciary Net Position starting on page 21 provides a summary view of the additions to and deductions from the fiduciary net position that occurred over the course of the 2019 financial year.

The *Basic Financial Statements* include all assets and liabilities, using the accrual basis of accounting, in compliance with generally accepted accounting principles, similar to the accounting method used by most private-sector companies. All of the year's asset additions and deductions are taken into account regardless of when the corresponding cash is received or paid. All investment purchases and sales are reported as of the trade date. Investments are reported at current fair value and in accordance with GASB Statement No. 31. Both realized and unrealized investment gains and losses are recognized. Each depreciable component of capital assets is depreciated over its useful life.

1 Fair value replaced "market value", as originally written by actuary.

Notes to the Basic Financial Statements starting on page 23 provide additional information essential for a complete understanding of the basic financial statements.

Required Supplementary Information and Notes to Required Supplementary Information starting on page 58 illustrate the GASB Statement No. 67 financial reporting requirements in the Schedule of Changes in Net Pension Liability and Related Ratios, Schedule of Employer Contributions, Schedule of Investment Returns, and Notes to Required Supplementary Information for the Pension Plan and Non-OPEB. Also reported are the requirements of GASB Statement No. 74 in the Schedules of Changes in Net OPEB Liability and Related Ratios and Schedule of Employer Contributions, along with the Notes to the Required Supplementary Information for Postemployment Medical Benefits.

Supplemental Schedules of administrative expenses, investment expenses and payments to other consultants are presented on page 65.

Tables 1 and 2 starting below, present condensed information about ACERA's financial position and results of operations for the current year in comparison to the preceding year, and form the basis for this financial discussion.

Table 1: Fiduciary Net Position (Condensed)

As of December 31, 2019 and 2018 (Dollars in Millions)

	2019	2018	Increase (Decrease) Amount	Percent Change
ASSETS				
Current Assets	$ 171.1	$ 220.7	$ (49.6)	-22%
Investments at Fair Value	8,765.3	7,584.2	1,181.1	16%
Capital Assets, net	2.5	1.5	1.0	67%
Total Assets	**8,938.9**	**7,806.4**	**1,132.5**	**15%**
LIABILITIES				
Current Liabilities	149.6	213.8	(64.2)	-30%
Total Liabilities	**149.6**	**213.8**	**(64.2)**	**-30%**
NET POSITION				
Restricted - Held in Trust for Benefits	**$ 8,789.3**	**$ 7,592.6**	**$ 1,196.7**	**16%**

Table 2: Changes In Fiduciary Net Position (Condensed)
For the Years Ended December 31, 2019 and 2018 (Dollars in Millions)

	2019	2018	Increase (Decrease) Amount	Percent Change
ADDITIONS				
Member Contributions	$ 103.1	$ 94.7	$ 8.4	9%
Employer Contributions	298.5	269.7	28.8	11%
Net Investment Income (Loss)	1,358.2	(356.0)	1,714.2	482%
Miscellaneous Income	1.2	1.4	(0.2)	-14%
Transfer to Employers' Advance Reserve from SRBR for Employer Contributions to 401(h) Account	44.9	43.8	1.1	3%
Transfer to Employers' Advance Reserve from SRBR for Implicit Subsidy	6.9	5.8	1.1	19%
Transfer from Employers' Advance Reserve to SRBR for OPEB Related Administrative Expenses	1.4	1.2	0.2	17%
Total Additions	**1,814.2**	**60.6**	**1,753.6**	**2,894%**
DEDUCTIONS				
Retirement Benefit Payments	493.4	463.2	30.2	7%
Postemployment Medical Benefits	43.6	40.9	2.7	7%
Member Refunds	10.7	8.7	2.0	23%
Administration	16.6	16.5	0.1	1%
Transfer from SRBR to Employers' Advance Reserve for Employer Contributions to 401(h) Account	44.9	43.8	1.1	3%
Transfer from SRBR to Employers' Advance Reserve for Implicit Subsidy	6.9	5.8	1.1	19%
Transfer to SRBR from Employers' Advance Reserve for OPEB Related Administrative Expenses	1.4	1.2	0.2	17%
Total Deductions	**617.5**	**580.1**	**37.4**	**6%**
CHANGE IN NET POSITION	**1,196.7**	**(519.5)**	**1,716.2**	**330%**
NET POSITION - JANUARY 1	**7,592.6**	**8,112.1**	**(519.5)**	**-6%**
NET POSITION - DECEMBER 31	**$ 8,789.3**	**$ 7,592.6**	**$ 1,196.7**	**16%**

Analysis of Financial Position

Fiduciary net position held in trust for benefits equals assets less liabilities. Table 1, on page 14, displays the condensed information of the fiduciary net position, which as of December 31, 2019, totaled approximately $8.8 billion. This is a $1.2 billion or a 16% increase from the prior year, primarily a result of an increase in the fair value of ACERA's invested assets. The Investment Section, starting on page 67, provides further details about ACERA's investment performance.

Current Assets

The components of current assets are detailed on the Statement of Fiduciary Net Position on page 20. Total current assets decreased by $49.6 million from $220.7 million in 2018 to $171.1 million in 2019. This 22% decrease was mainly due to the decrease in securities lending cash collateral totaling $61.3 million, offset by the increases in cash and receivables.

Investments at Fair Value

ACERA's investments at fair value increased 16% from $7.6 billion in 2018 to $8.8 billion in 2019. The $1.2 billion increase was net of ACERA's $171.5 million cash draw in 2019 on the portfolio to pay retirement benefits and administrative costs.

Capital Assets, Net

Capital assets include equipment, furniture, information systems, and leasehold improvements. The value of capital assets increased from $1.5 million in 2018 to $2.5 million in 2019. The net increase of $1.0 million or 67% was due to the increase in capital expenditures for the Pension Administration System upgrade.

Total Assets

In all, total assets experienced a net increase of $1.1 billion, from $7.8 billion in 2018 to $8.9 billion in 2019. The increase in total investments at fair value accounted for most of the increase in total assets.

Current Liabilities

The components of ACERA's current liabilities are detailed in the Statement of Fiduciary Net Position on page 20. Current liabilities decreased by $64.2 million or 30% from $213.8 million in 2018 to $149.6 million in 2019. The net decrease is mainly attributed to the $61.3 million decrease in securities lending liability.

Analysis of Results of Operations

The change in fiduciary net position equals total additions less total deductions. Table 2, on page 15, displays the condensed information about ACERA's 2019 financial activity. From January 1 to December 31, 2019, ACERA's fiduciary net position increased by $1.2 billion. The increase was almost exclusively due to appreciation of the fair value of ACERA's invested assets.

Additions to Fiduciary Net Position

The primary funding sources for ACERA's member benefits are member contributions, employer contributions, and net investment income. Additions to and deductions from fiduciary net position include transfers to and from the employers' advance reserve and the supplemental retiree benefits reserve.

Total additions to ACERA's fiduciary net position for the years ended December 31, 2019, and 2018, were $1,814.2 million and $60.6 million, respectively. ACERA's net investment gain for 2019 was $1.4 billion, compared to 0.4 billion investment loss in 2018. See the Net Investment Income (Loss) section on page 17 for a more comprehensive discussion of this increase.

The December 31, 2018, actuarial valuation report recommended a contribution rate increase for employers. The Board of Retirement approved the increase to be in effect by September 2019. The aggregate member contribution rate remained 9.34% of payroll.

The aggregate employer contribution rate increased from 27.82% to 27.96% of payroll. This change was primarily due to (a) lower actual contributions than expected[1], (b)

1 Including scheduled delay in implementing contribution rates after the date of the valuation.

higher than expected salary increases for active members, (c) the net effect of amortizing the prior year's UAAL over a different than expected projected payroll[1]; offset somewhat by, (d) higher than expected return on investments (after smoothing), and (e) other actuarial gains[2]. Refer to the following member and employer contributions sections for further discussion.

Member Contributions

Total member contributions for 2019 were $103.1 million, up $8.4 million or 9% over 2018 total member contributions of $94.7 million. As previously stated, 2018 actuarial valuation contribution rates went into effect September 1, 2019.

Employer Contributions

Total employer contributions collected for 2019 were $298.5 million, an increase of 11% or $28.8 million over the $269.7 million in total contributions collected in 2018.

Net Investment Income (Loss)

Net investment income for 2019 was $1.4 billion. This increase in net investment income was primarily due to a net appreciation in the fair value of invested assets. The 2019 net appreciation of investments was $1.7 billion compared to a 2018 net depreciation of $0.4 billion.

Miscellaneous Income

Miscellaneous income for 2019 totaled $1.2 million, down $0.2 million or 14% from 2018. This decrease is mainly due to a decrease of class action securities litigation settlements.

Transfers between Employers' Advance Reserve and SRBR

Postemployment medical benefits are paid from employers' 401(h) accounts. Participating employers identify a portion of their contributions as 401(h) contributions. Employers funded $44.9 million and $43.8 million to their 401(h) accounts for years 2019 and 2018, respectively. See 401(h) Postemployment Medical Benefits Account on page 32.

In July 2011, ACERA applied the provisions of the 1937 Act (Section 31596.1) and allocated a portion of the 401(h) contributions towards administrative costs. As a result, $1.4 million and $1.2 million was transferred from the employers' advance reserve to SRBR for 2019 and 2018, respectively.

There was a $6.9 million transfer from the SRBR to the employers' advance reserve in 2019 to compensate Alameda County for the 2018 blended rate health care implicit subsidy. The implicit subsidy transfer increased by $1.1 million or 19% from the $5.8 million implicit subsidy transfer in 2018. This increase was primarily due to the difference between the County's blended and unblended medical insurance rates for 2018 versus 2017.

Deductions from Fiduciary Net Position

Total deductions are composed of four main categories, i.e., retirement benefits (including service retirement and disability payments, death benefits, non-OPEB burial benefits and supplemental COLA), postemployment medical benefits, member refunds, and administration expenses of the retirement system.

Total deductions from the fiduciary net position for 2019 were $617.5 million. This is $37.4 million or a 6% increase over the $580.1 million in total deductions for 2018. Service retirement and disability benefit payments alone increased 7.0% or $30.3 million over 2018. The 401(h) transfer increased $1.1 million or 3% for 2019, and as already stated the implicit subsidy transfer increased $1.1 million or 19% for 2019.

Retirement Benefit Payments

Retirement benefit payments in 2019 totaled $493.4 million, a $30.2 million or 7% increase over $463.2 million in 2018. The increase in benefit payments is primarily due to higher average benefits of retirees added to the retirement payroll compared to the lower average retirement allowance of those retirees removed from the retirement payroll.

1 The prior year's UAAL is amortized over a smaller than expected projected total payroll for Safety members and a slightly larger than expected projected total payroll for General members.

2 Including changes in membership demographics.

Postemployment Medical Benefits

Postemployment medical benefits paid from the 401(h) account in 2019 were $43.6 million, an increase of $2.7 million or 7% over the $40.9 million paid from the 401(h) account in 2018. This increase was due in part to higher non-Medicare health premiums and in part to an increase in new retirees. ACERA's maximum monthly medical benefit for 2019 was $558.00 per member. For retirees 65 years and older, enrolled in the Medicare Exchange individual plans, ACERA utilized Health Reimbursement Accounts (HRAs). Retirees 65 years and older, who were on the Medicare Exchange, received a maximum of $427.46 Monthly Medical Allowance (MMA).

Member Refunds

Member refunds originate from either a member separation from service (termination) or an active member death. Member refunds increased by $2.0 million or 23% from $8.7 million in 2018 to $10.7 million in 2019. The increase was primarily due to increases in termination refunds.

Administration Expense

Total administration expense for 2019 slightly increased to $16.6 million, from $16.5 million in 2018. Administration expenses cover the basic cost of operating the retirement system. Some expenses are subject to the statutory limit, as defined in the following paragraph, and others are excluded from the statutory limit.

In accordance with legal spending restrictions outlined in the County Employee Retirement Law of 1937 (1937 Act), ACERA's Board of Retirement adopts an operating expense and administrative budget, effective for the following year. The annual amount of administrative budget is subject to legal and budgetary restrictions. Note 11 to the Basic Financial Statements, page 56, further describes the legal limitations. Consequently, the administrative budget for 2019 was kept in compliance with the "37 Act" legal spending restrictions of 0.21% of the accrued actuarial liability of the retirement system.

Administrative expenses subject to the statutory limit increased by 2% or $0.2 million, from $13.0 million in 2018 to $13.2 million in 2019. The major categories of operating expenses subject to the statutory limit include personnel services, professional services, communications, and utilities, and other (i.e., depreciation, board of retirement operating expenses, insurance, miscellaneous, training, maintenance-equipment, and supplies).

Administrative expenses excluded from the statutory limit decreased slightly from $3.5 million in 2018 to $3.4 million in 2019. The categories of operating expenses not subject to the statutory limit include legal, technology, actuarial, investment and business continuity expenses.

Currently Known Facts and Events

Litigation: In the DSA v. ACERA lawsuit, the Deputy Sheriffs' Association and others alleged that in implementing AB 197 the ACERA Board violated the rights of legacy members to have various elements of compensation included in final compensation for purposes of calculating their retirement allowances. The case was combined with two similar lawsuits filed in Contra Costa and Merced, and a judgment was rendered in the trial court.

The decision in the trial court was appealed to the Court of Appeal, which issued a decision in January, 2018. Three parties to that lawsuit petitioned the California Supreme Court to accept review of the Court of Appeal decision, which was granted. The matter is now pending before the California Supreme Court, and the decision of the Court of Appeal was vacated. While awaiting a final decision from the California Supreme Court, ACERA continues to follow the direction of the trial court, and is not making any changes to the ACERA process until receiving direction from the California Supreme Court. ACERA anticipates a decision from the Supreme Court in 2020.

Litigation: In the AHS v. ACERA lawsuit, the Alameda Health System, a participating employer in ACERA, filed suit against ACERA and the County of Alameda objecting to ACERA's continued use of the percent of payroll method for calculating unfunded liability. The case is currently pending in the San Francisco Superior

Court and is being defended vigorously by ACERA.

Business Contnuity: Since early March 2020, ACERA has been responding to a pandemic of respiratory disease spreading from person to person caused by a novel (new) coronavirus. The disease has been named "coronavirus disease 2019" (abbreviated "COVID-19"). This situation poses a serious public health risk. The federal government is working closely with state and local governments, as well as public health partners, to respond to this situation. As Alameda County employees, ACERA staff have been operating under mandated alternative work guidelines associated with the Alameda County shelter-in-place order. It is currently known that this situation will extend through at least May 31, 2020, and probably longer. Please refer to the Subsequent Events Note #13 for further detail on the financial impact to ACERA.

Fiduciary Responsibilities

ACERA's Board of Retirement and management are fiduciaries of the retirement plan. Under the California Constitution and the 1937 Act, assets of the retirement plan can be used only for the exclusive benefit of the plan participants and their beneficiaries.

Requests for information

This report is designed to provide the Board of Retirement, the membership, participating employers, taxpayers, investment managers, vendors, and other stakeholders or interested parties with a general overview of ACERA's financial condition, financial activities, and funding status. Questions regarding any of the information provided in this report or requests for additional information should be addressed to:

ACERA
Fiscal Services Department
475 14th Street, Suite 1000
Oakland, California 94612-1900

You can also contact us by e-mail at info@acera.org or by phone at (510) 628-3000 during normal business hours. Our website www.acera.org contains a wealth of information and is always accessible.

Respectfully submitted,

Margaret M Allen

Margo Allen
Fiscal Services Officer
May 1, 2020

Basic Financial Statements

Statement of Fiduciary Net Position

As of December 31, 2019, with Comparative Totals as of December 31, 2018 (Dollars in Thousands)

	Pension Plan & Non-OPEB	Postemployment Medical Benefits	Total 2019	Total 2018
ASSETS				
Cash	$ 4,151	$ -	$ 4,151	$ 1,573
Securities Lending Cash Collateral	121,705	-	121,705	183,003
Receivables				
Contributions	18,311	-	18,311	17,422
Investment Receivables	17,044	-	17,044	15,986
Unsettled Trades - Investments Sold	3,361	-	3,361	1,203
Future Contracts - Equity Index	307	-	307	-
Foreign Exchange Contracts	5,129	-	5,129	101
Other Receivables	291	-	291	108
Total Receivables	**44,443**	**-**	**44,443**	**34,820**
Prepaid Expenses	763	-	763	1,293
Total Current Assets	**171,062**	**-**	**171,062**	**220,689**
Investments at Fair Value				
Short-Term Investments	231,759	-	231,759	159,673
Domestic Equity	500,700	-	500,700	499,759
Domestic Equity Commingled Funds	1,976,776	-	1,976,776	1,717,777
International Equity	1,185,022	-	1,185,022	1,502,436
International Equity Commingled Funds	1,189,559	-	1,189,559	427,396
Domestic Fixed Income	981,101	-	981,101	930,750
International Fixed Income	111,729	-	111,729	137,245
International Fixed Income Commingled Funds	148,935	-	148,935	135,450
Real Estate - Separate Properties	73,871	-	73,871	69,121
Real Estate - Commingled Funds	511,498	-	511,498	492,121
Real Assets	436,816	-	436,816	293,198
Absolute Return	801,739	-	801,739	696,825
Private Equity	583,085	-	583,085	522,443
Private Credit	32,707	-	32,707	-
Total Investments	**8,765,297**	**-**	**8,765,297**	**7,584,194**
Non-OPEB Assets	40,430	-	40,430	39,366
Due from Pension Plan	(935,126)	894,696	(40,430)	(39,366)
Capital Assets at Cost (Net of Accumulated Depreciation and Amortization)	2,532	-	2,532	1,486
Total Assets	**8,044,195**	**894,696**	**8,938,891**	**7,806,369**
LIABILITIES				
Securities Lending Liability	121,705	-	121,705	183,003
Unsettled Trades - Investments Purchased	6,750	-	6,750	6,583
Future Contracts - Equity Index	131	-	131	1,153
Equity Index Swaps	2,501	-	2,501	239
Foreign Exchange Contracts	2	-	2	3,651
Investment-Related Payables	11,867	-	11,867	12,363
Accrued Administration Expenses	2,358	-	2,358	2,276
Members Benefits & Refunds Payable	4,042	-	4,042	4,151
Retirement Payroll Deductions Payable	256	-	256	363
Total Liabilities	**149,612**	**-**	**149,612**	**213,782**
NET POSITION - Held in Trust for Benefits	**$ 7,894,583**	**$ 894,696**	**$ 8,789,279**	**$ 7,592,587**

The accompanying Notes to the Basic Financial Statements are an integral part of these Basic Financial Statements.

Statement of Changes in Fiduciary Net Position

For the Year Ended December 31, 2019, with Comparative Totals for the Year Ended December 31, 2018 (Dollars in Thousands)

	Pension Plan & Non-OPEB	Postemployment Medical Benefits	Total 2019	Total 2018
ADDITIONS				
Contributions				
Member	$ 103,117	$ -	$ 103,117	$ 94,736
Employer	253,669	44,858	298,527	269,684
Total Contributions	**356,786**	**44,858**	**401,644**	**364,420**
Investment Income				
From Investment Activities:				
Net Appreciation (Depreciation) in Fair Value of Investments	1,307,647	-	1,307,647	(417,757)
Dividends, Interest, & Other Investment Income	99,209	-	99,209	117,350
Total Income (Loss) from Investment Activities	**1,406,856**	**-**	**1,406,856**	**(300,407)**
Total Investment Expenses	(49,756)	-	(49,756)	(57,513)
Net Income (Loss) from Investment Activities	**1,357,100**	**-**	**1,357,100**	**(357,920)**
From Securities Lending Activities:				
Securities Lending Income	5,756	-	5,756	7,056
Securities Lending Expenses				
Borrower Rebates	(4,391)	-	(4,391)	(4,739)
Management Fees	(273)	-	(273)	(464)
Total Securities Lending Activity Expenses	**(4,664)**	**-**	**(4,664)**	**(5,203)**
Net Income from Securities Lending Activities	**1,092**	**-**	**1,092**	**1,853**
Earnings Allocated to Non-OPEB	2,462	-	2,462	3,180
Earnings Allocated	(57,666)	55,204	(2,462)	(3,180)
Total Net Investment Income (Loss)	**1,302,988**	**55,204**	**1,358,192**	**(356,067)**
Miscellaneous Income	1,231	-	1,231	1,426
Transfer to Employers' Advance Reserve from SRBR for Employer Contributions to 401(h) Account	44,858	-	44,858	43,777
Transfer to Employers' Advance Reserve from SRBR for Implicit Subsidy	6,899	-	6,899	5,801
Transfer from Employers' Advance Reserve to SRBR for OPEB Related Administrative Expense	-	1,354	1,354	1,224
Total Additions	**$ 1,712,762**	**$ 101,416**	**$ 1,814,178**	**$ 60,581**

The accompanying Notes to the Basic Financial Statements are an integral part of these Basic Financial Statements.

Statement of Changes in Fiduciary Net Position (Continued)

For the Year Ended December 31, 2019, with Comparative Totals for the Year Ended December 31, 2018
(Dollars in Thousands)

	Pension Plan & Non-OPEB	Postemployment Medical Benefits	Total 2019	Total 2018
DEDUCTIONS				
Benefits				
Service Retirement and Disability Benefits	$ 489,453	$ -	$ 489,453	$ 459,142
Death Benefits	2,609	-	2,609	2,761
Burial Benefits - Non-OPEB	217	-	217	196
Supplemental Cost of Living Allowance - Non-OPEB	1,181	-	1,181	1,135
Post Employment Medical Benefits	-	43,562	43,562	40,879
Total Benefit Payments	**493,460**	**43,562**	**537,022**	**504,113**
Member Refunds	10,725	-	10,725	8,709
Administration				
Administrative Expenses	11,873	1,354	13,227	13,003
Legal Expenses	1,610	-	1,610	1,577
Technology Expenses	921	-	921	942
Actuarial Expenses	308	-	308	357
Business Continuity Expenses	562	-	562	591
Total Administration	**15,274**	**1,354**	**16,628**	**16,470**
Transfer from SRBR to Employers' Advance Reserve for Employer Contributions to 401(h) Account	-	44,858	44,858	43,777
Transfer from SRBR to Employers' Advance Reserve for Implicit Subsidy	-	6,899	6,899	5,801
Transfer to SRBR from Employers' Advance Reserve for OPEB Related Administrative Expense	1,354	-	1,354	1,224
Total Deductions	**520,813**	**96,673**	**617,486**	**580,094**
CHANGE IN NET POSITION	**1,191,949**	**4,743**	**1,196,692**	**(519,513)**
NET POSITION - JANUARY 1	**6,702,634**	**889,953**	**7,592,587**	**8,112,100**
NET POSITION - DECEMBER 31	**$ 7,894,583**	**$ 894,696**	**$ 8,789,279**	**$ 7,592,587**

The accompanying Notes to the Basic Financial Statements are an integral part of these Basic Financial Statements.

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Notes to the Basic Financial Statements

(an integral part of the Basic Financial Statements)

1. Summary of Significant Accounting Policies

Reporting Entity

ACERA is an independent, public employees' retirement system with its own governing board. ACERA's financial statements are included in the County of Alameda's financial statements as a pension and other employee benefit fiduciary trust fund.

Basis of Accounting

ACERA follows generally accepted accounting principles in the United States and reporting guidelines set forth by the Governmental Accounting Standards Board (GASB). The major pronouncements that prescribe ACERA's defined benefit Pension Plan and Other Postemployment Benefits for financial reporting are GASB Statement No. 31, 40, 51, 53, 67, 72 and 74.

ACERA's (fiduciary trust fund) financial statements are prepared on the accrual basis of accounting. Employer and employee contributions are recognized when due, pursuant to formal commitments, as well as statutory or contractual requirements. Security purchases and sales are recognized in the financial statements as of the trade date. Retirement benefits and member refunds are recognized as liabilities when due and payable in accordance with the terms of the plan. Other expenses are recognized when the corresponding liabilities are incurred.

Investments

Investments are reported at fair value. Fair value for investments of publicly traded stocks and bonds and issues of the U.S. Government and its agencies is based on the last reported sale price as of the fiscal year end. Fair value of securities denominated in a foreign currency reflects exchange rates in effect at fiscal year-end. The fair value of ACERA's short-term investments held in external investment pools managed by the master custodian and securities lending agent is provided by the pool manager and is reported at net asset per share value for the pool. Fair value of investments in commingled funds of debt securities, equity securities, and real estate is based on the fund share price provided by the fund manager, which is based on net asset value. Fair value of investments in real estate separate properties is based on prices in a competitive market as determined by the investment manager relying on periodic appraisals and is reported net of the outstanding balance of associated mortgages. The fair value of private equity, private credit, absolute return, private real estate, and real assets is based on ACERA's pro rata share and determined by the fund's general partner based on a variety of valuation methods including current market multiples for comparable companies, recent sales of comparable companies, net present value of expected cash flows, appraisals and adjustments to prevailing public market values based on control and/or liquidity, as appropriate. All funds are audited annually by the funds' independent auditors.

Investment Income

Interest income is recognized as it accrues. Dividend income is recognized when the dividends are declared. Realized and unrealized gains and losses on investments are combined and reported together as the net appreciation (depreciation) in the fair value of investments.

Securities Lending Activity

Securities lending transactions are short-term collateralized loans of ACERA's securities for the purpose of generating additional investment income. For each lending transaction, ACERA receives either cash collateral or non-cash collateral.

The underlying securities out on loan are reported on the Statement of Fiduciary Net Position as if the lending transaction had not occurred.

Cash collateral held (or any security that can be sold or pledged without a default by the borrower) is separately reported on the Statement of Fiduciary Net Position in current assets. A corresponding liability of an equal amount (the obligation to return the cash collateral) is reported as a liability.

Non-cash collateral held is not reported on the Statement of Fiduciary Net Position nor is there a corresponding liability reported on this statement.

Derivatives

ACERA's investments include the following types of investment derivatives: equity index futures contracts, currency forward contracts, equity index swaps, and rights. ACERA enters into derivative contracts for investment purposes and to manage risks associated with its investment portfolio.

The fair value of exchange traded derivatives such as futures contracts, equity index swaps, and rights is based on quoted market prices. The fair value of non-exchange traded derivatives such as currency forward contracts and certain futures contracts is determined by an external pricing service using various proprietary methods.

The fair value of derivative contracts is reported in investments as assets or liabilities on the Statement of Fiduciary Net Position.

Collateral and Margin Account

For the equity index futures, there is an initial margin requirement to open a contract position as well as a collateral maintenance requirement that must be kept until the position is closed out.

ACERA reports the collateral for the equity index futures in short-term investments.

Capital Assets

Capital assets are carried at cost, net of accumulated depreciation or amortization. ACERA's capitalization threshold is an initial cost of $5,000 and two years of useful life. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the depreciable assets or over the term of the lease on leasehold improvements.

For each asset, ACERA recognizes one-half year of expense in the year the asset is placed in service and one-half year of expense in the year of retirement.

The estimated useful lives for the assets in each category are as follows:

	Years
Leasehold Improvements	27.5
Information System - Retirement	7.0
Office Furniture	7.0
Business Continuity Assets	5.0
Computer Hardware	5.0
Offsite Office Equipment	5.0
Electronic Document Management System	5.0
Information System - Accounting	3.0
Computer Software	3.0

Estimates

The preparation of financial statements in accordance with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Naturally, actual results may differ from estimates.

Income Taxes

ACERA operates as a Defined Benefit Pension Plan, qualified under section 401(a) of the Internal Revenue Code and is not subject to tax under current income tax laws. All assets accumulated for the payment of benefits may legally be used to pay benefits, including refunds of member contributions to any of the plan members or beneficiaries, as defined by the terms of the plan.

New Accounting Pronouncements

GASB Statement No. 87, *Leases*, was issued in June 2017. The objective of this Statement is to improve accounting and financial reporting for leases by governments to better meet the information needs of financial statement users. The Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It also establishes a single model for lease accounting based on the principle that leases are financings of the right to use an underlying asset. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. ACERA will adopt the provisions of Statement No. 87 for the fiscal year beginning January 1, 2020.

GASB Statement No. 91, *Conduit Debt Obligations*, was issued in May 2019. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with commitments extended by issuers, associated arrangements, and related note disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. Earlier application is encouraged. This Statement will not impact ACERA.

2. Plan Description

ACERA is an independent public employees' retirement system which operates a cost-sharing, multiple-employer, defined benefit pension plan serving participating employers. In addition, ACERA administers Other Postemployment Medical Benefits (OPEB) and Non-OPEB. ACERA began operations in its present form on January 1, 1948.

ACERA is governed by the California constitution, and state and federal laws, including but not limited to the 1937 Act, beginning at California Government Code Section 31450 et. seq., PEPRA and the bylaws and policies adopted by the Board of Retirement.

These laws and policies govern ACERA's plan structure and operation. The provisions of state and federal laws govern requirements concerning membership, governance, contributions, benefits, service, retirement eligibility, disability, cost-of-living adjustment, financial provisions, optional allowances, reciprocal benefits, administration expenses, etc.

ACERA is not affiliated with the California Public Employees' Retirement System (CalPERS).

ACERA meets member and beneficiary obligations through member contributions, participating employer contributions, and investment income. Contributions are prudently invested in accordance with the 1937 Act.

ACERA provides basic lifetime retirement, disability, and death benefits to members who meet the minimum age and length-of-service requirements. In addition, ACERA administers supplemental retiree postemployment medical, dental care, vision care, and cost-of-living adjustments programs. In this report, "basic" benefits refers to vested benefits provided for in accordance with the 1937 Act, whereas "supplemental" benefits refers to additional non-vested benefits paid at the discretion of the Board of Retirement and subject to available funds.

Board of Retirement

The Board of Retirement has sole and exclusive responsibility over plan assets and the administration of the retirement system to ensure prompt delivery of benefits and related services as provided in Article XVI of the California Constitution.

The Board of Retirement has nine members and two alternates. The Alameda County Board of Supervisors appoints four members, and four are elected by ACERA's membership. The County Treasurer serves as an ex-officio board member. One alternate member is elected by safety members and one alternate member is elected by retired members. The Board of Retirement is currently composed of the following members:

Board of Retirement

Type of Member	Elected / Appointed By	# Of Members
County Treasurer	Ex-Officio Member	1
County Resident	Appointed by Board of Supervisors	4
General Member	Elected by General Members	2
Safety Member	Elected by Safety Members	1
Retired Member	Elected by Retired Members	1
Alternate Retired Member	Elected by Retired Members	1
Alternate Safety Member	Elected by Safety Members	1

Board members, with the exception of the County Treasurer, serve a three-year term in office, with no term limits.

The Board of Retirement oversees the Chief Executive Officer in the performance of his duties in accordance with the law and ACERA's board policies.

Authority for Establishing and Amending Benefit Provisions

State and federal laws, as well as the California constitution, provide the authority for establishing ACERA's benefit provisions. In most cases, where the 1937 Act provides options concerning the allowance of credit for service, the offering of benefits, or the modification of benefit levels, the law generally requires approval of the employers' governing boards for the option to take effect.

Separately, in 1984, the Alameda County Board of Supervisors and the Board of Retirement approved the adoption of Article 5.5 of the 1937 Act. This adoption permitted the establishment of a Supplemental Retiree Benefits Reserve (SRBR) for ACERA.

Article 5.5 provides for the systematic funding of the SRBR and stipulates that its assets be used only for the benefit of retired members and their beneficiaries. The 1937 Act grants exclusive authority over the use of SRBR funds to the Board of Retirement. The SRBR provides funding for non-vested and non-pension benefits including supplemental COLA and retired member death benefit. Other non-vested retiree health benefits are provided in agreement with ACERA's participating employers through the use of Internal Revenue Code 401(h) accounts. These retiree health benefits include dental and vision care, Medicare Part B reimbursement, and the Monthly Medical Allowance (MMA). Employer contributions fund the 401(h) benefits. ACERA treats an equal amount of SRBR assets as employer contributions for pensions. The provision of all supplemental benefits is subject to annual review and authorization by the Board of Retirement.

Participating Employers

ACERA operates as a cost-sharing, multiple-employer, defined benefit plan for Alameda County (the "County"), and five other participating employers (which are special districts) located in the County, but not under the control of the County Board of Supervisors. In this report, the County and special districts are referred to as "participating employers". All risks and costs, including benefit costs, are shared by the participating employers.

The five other participating employers are:

- Superior Court of California for the County of Alameda
- Alameda Health System
- First 5 Alameda County
- Housing Authority of the County of Alameda
- Livermore Area Recreation and Park District

Alameda County Office of Education is no longer an active participating employer as the last active member under this employer retired on December 30, 2016. However, this employer still owes an unfunded actuarial accrued liability to ACERA as ACERA still pays retirement benefits to several of its retired members.

Plan Membership

With the exception of Alameda Health System, all full-time employees of participating employers who are appointed to permanent positions are statutorily required to become members of ACERA. With the passage of AB1008 in 2013, employees of newly acquired hospitals by Alameda Health System are not eligible for membership unless they are subject to an existing memorandum of understanding. Effective October 31, 2013, all newly hired unrepresented employees of any Alameda Health System facility are prohibited from membership.

Safety and General Members

ACERA has two membership types, Safety and General, which are based on job classifications:

- Safety members are employees working in active law enforcement, deferred firefighters, or positions that have been designated Safety positions by the Board of Retirement (e.g., Juvenile Hall Group Counselors and Probation Officers).
- General members are all other members.

Defined Benefit Pension Plan

ACERA's Membership

As of December 31, 2019

Members, Survivors, and Beneficiaries Now Receiving Benefits	
Service Retirement	7,880
Disability Retirement	960
Beneficiaries and Survivors	1,238
Subtotal	**10,078**
Active Members	
Active Vested Members	7,678
Active Non-vested Members	3,655
Subtotal	**11,333**
Deferred Members	2,851
Total Membership	**24,262**

Membership Status and Vesting

Members are considered to be active, as long as they remain employed full-time by a participating employer (or subsequently change to part-time employment).

Members become vested in retirement benefits upon completion of five years of credited service.

Service Retirement

ACERA's regular (service) retirement benefits are based on service credit, final average salary, and age at retirement, according to the applicable statutory formula. Members who qualify for service retirement are entitled to receive monthly service retirement benefits for life.

Non-Tier 4 vested General members may retire at age 50, with 5 years of service credit and a total of 10 years of qualifying membership, or at any age with 30 years of service, or at age 70, regardless of service credit.

Non-Tier 4 vested Safety members may retire at age 50, with 5 years of service credit and a total of 10 years of qualifying membership, or at any age, with 20 years of service, or at age 70, regardless of service credit.

Tier 4 General members may retire at age 52, with 5 years of service credit or at age 70, regardless of service credit.

Tier 4 Safety members may retire at age 50, with 5 years of service credit or at age 70, regardless of service credit.

Active Member Death Benefits

ACERA provides specified active member death benefits to beneficiaries and members' survivors.

The basic active member death benefit consists of a member's retirement contributions plus interest plus one month's pay for each full year of service (up to the maximum of six-month's pay). Other death benefits may be available based on years of service, marital status, and whether the member has minor children.

Tier 1, Tier 2, Tier 3, and Tier 4 Benefit Levels

The structure of the plan provides for four benefit levels or tiers within General membership and three tiers within Safety membership. The tiers differ mainly in the magnitude of contributions required and benefits received.

Generally, members with an entry date prior to July 1, 1983, belong to Tier 1, while those with an entry date on or after July 1, 1983, and before January 1, 2013, belong to Tier 2, and members with an entry date on or after January 1, 2013, belong to Tier 4.

Most active ACERA members belong to Tier 2. Alameda County Housing Authority members are mostly in Tier 1, but those hired between September 30, 2011, and January 1, 2013, belong to Tier 2. Relative to the Tier 1 members, active members in Tier 2 contribute somewhat less to the pension plan as a percent of compensation and will receive somewhat lower retirement benefits.

Effective October 1, 2008, Livermore Area Recreation and Park District (LARPD) implemented a General Tier 3 plan for current and new employees. Those LARPD members hired before October 1, 2008, who elect General Tier 3 membership, and those hired after October 1, 2008, but before January 1, 2013, will receive an enhanced benefit of 2.5% at 55, which is higher than the Tier 1 benefit (at most retirement ages) as a result of higher employer and employee contribution rates.

Effective October 17, 2010, and before January 1, 2013, there are three benefit formula options for Safety membership within Tier 2. Two benefit formulas of 2% at 50 and 3% at 55 were implemented for new Safety members with different contribution rates. The Safety members hired before October 17, 2010, are still under the benefit formula of 3% at 50.

In accordance with PEPRA, General and Safety members hired on or after January 1, 2013, belong to Tier 4. Tier 4 members are required to contribute at least 50% of the Normal Cost rate. Under the Tier 4 formulas, General members will receive a benefit of 2.5% at age 67 and Safety members will receive a benefit of 2.7% at age 57. Note 3, Contributions, starting on page 29 explains retirement plan contribution rates.

Integration with Social Security

The contributions and benefits associated with the federal Social Security program are completely separate from ACERA members' contributions and benefits. Most General members of ACERA are covered by Social Security, and most Safety members are not.

ACERA contributions and benefits are integrated with Social Security for non-Tier 4 members who are covered by Social Security. The purpose of integration is to reduce the degree in which ACERA's plan coverage overlaps Social Security coverage.

Basic Cost of Living Adjustment

Retirement allowances are indexed for inflation. Retirees receive automatic basic Cost-of-Living Adjustments (COLAs) based upon the Consumer Price Index (CPI) for the San Francisco Bay Area. The adjustments go into effect on April 1 each year. Under the 1937 Act, annual COLA increases are capped at 3% for Tier 1 and Tier 3, and 2% for Tier 2 and Tier 4 members. The expected impact of future basic COLA is a factor in setting the contribution rates for members and employers. In any year that the basic COLA adjustment for a retiree falls short of the CPI increase for that year due to the statutory cap, the shortfall is carried over and applied in a future year to the extent that the CPI falls short of the statutory cap in the future year.

The CPI calculation for 2019 was 4.5%. There was a maximum of 3.0% COLA increase granted for all Tier 1 and Tier 3 members. A maximum COLA increase of 2.0% was granted to all Tier 2 and Tier 4 members. Tier 1 and Tier 3 members will bank 1.5% as the 2019 COLA exceeds the 3.0% statutory cap. Tier 2 and Tier 4 members will bank 2.5% as the 2019 COLA exceeds the 2% statutory cap.

Postemployment Medical Benefits

ACERA administers a medical benefits program for eligible retired members. Benefits include monthly medical allowances and Medicare Part B premium reimbursements. Dental and vision coverages are also available for eligible retired members. These benefits are paid through a 401(h) account, in accordance with federal tax laws. The maximum levels of the monthly medical allowances are reviewed annually by the Board of Retirement.

Program Membership

Retired members with a minimum of ten years of service credit or those who retired due to a service connected disability are eligible to receive a monthly medical allowance benefit if they enroll in one of the ACERA-sponsored medical plans or Medicare exchange. Retired members eligible for the monthly medical allowance benefit may also be reimbursed for the lowest standard Medicare Part

B premium with proof of enrollment in Medicare Part B.

Members receiving a service retirement or a non-service connected disability, with ten or more years of ACERA service credit will be eligible to receive dental and vision allowances. The following are exemptions of the years-of-service eligibility requirements: (a) non-service connected disability recipients with less than ten years of ACERA service credit and with a retirement date effective prior to February 1, 2014; and, (b) all service connected disability recipients, regardless of years of service.

Non-OPEB

ACERA also provides non-health, postemployment benefits, such as supplemental COLA and a lump sum retired member death benefit.

Separate from the basic COLA, the Board of Retirement implemented an ad-hoc supplemental Cost-of-Living Adjustment (supplemental COLA) program effective January 1, 1998. The supplemental COLA is structured to maintain each retiree's purchasing power at no less than 85% of the purchasing power of the original benefit. Under this program, each retiree's current allowance is adjusted, as necessary, so that the adjusted allowance becomes at least 85% of the original benefit amount indexed with the CPI.

A lump sum retired member death benefit of $1,000 is provided to beneficiaries.

Program Membership

All retired members are eligible to receive supplemental COLA and retired member death benefit.

Actuarial Valuation

An annual actuarial funding valuation is performed for the pension plan. In addition, there is a separate annual actuarial valuation performed for Postemployment Medical Benefits and Non-OPEB. Note 6, Actuarial Valuation, starting on page 36 provides additional information about this topic.

3. Contributions

Pension Plan

Authority for Establishing and Amending Obligations to Make Contributions

The California constitution, as well as state and federal laws, establishes the basic obligations for participating employers and active members to make contribution payments to the pension plan. Member and employer contribution rates are based on recommendations made by an independent actuary and adopted by the Board of Retirement. These rates are based on membership type (General and Safety) and tier (Tiers 1, 2, 3, and 4).

Funding Objective

One of the funding objectives of the pension plan is to establish member and participating employer contribution rates that will remain as level as possible over time as a percentage of payroll, unless plan benefit provisions are changed. The funding for retirement benefits arises from three sources: member contributions, employer contributions, and the earnings on invested assets.

Member Contributions and Refunds

Active members are required by statute to contribute toward pension plan benefits. The non-Tier 4 member contribution rates are formulated on the basis of age at the date of entry and actuarially calculated benefits. The 1937 Act authorizes participating employers to pay all or a portion of an employee's retirement contribution obligation on the employee's behalf. These employer payments are called contribution offsets. Member contributions and credited interest are refundable upon termination of membership. Note 4, Reserves, starting on page 31 explains semi-annual interest crediting. The employer-paid contribution offsets may or may not be refundable.

Pursuant to PEPRA Section 7522.30, Tier 4 members are required to contribute 50% of the normal cost rate. The code also prohibits participating employers from paying any portion of the 50% share of member contributions on the employee's behalf.

Employer Contributions

The pension plan provides lifetime retirement and disability benefits to its members. Participating employers are required by statute to contribute the necessary amounts to fund these estimated benefits not otherwise funded by member contributions or expected investment earnings.

Employer contribution rates vary from year to year and depend on the established level of benefits, the rate of return on investments, and the cost of administering benefits.

Member Rates Based on Age-at-Date-of-Entry

The ranges of current non-Tier 4 member contribution rates based on age-at-date-of-entry are shown as follows (effective September 2019). Generally, each pair of percentages ranges from youngest to oldest within each category.

In November 2012, the Board of Retirement approved the use of a single, flat contribution rate, regardless of the age at entry for Tier 4 members.

Current Member Contribution Rates

Effective September 2019

Tier 1: (entry date prior to July 1, 1983)	
General	7.86% - 16.28%
Safety 3% @ 50	15.92% - 24.16%
Tier 2: (entry date July 1, 1983, and before January 1, 2013)	
General	5.41% - 11.42%
Safety 3% @ 50	13.47% - 19.81%
Tier 2: (entry date October 17, 2010, and before January 1, 2013)	
Safety 2% @ 50	10.01% - 16.07%
Safety 3% @ 55 (with less than 5 years of vesting service)	15.33% - 21.58%
Safety 3% @ 55 (with 5 or more years of vesting service)	13.33% - 19.58%
Tier 3: (LARPD only - entry date prior to January 1, 2013)	
General	9.24% - 17.35%
Tier 4: (entry date January 1, 2013 or later)	
General	8.80%
Safety	15.58%

For non-Tier 4 members covered by Social Security, the contribution rates shown apply to biweekly salary over $161 (a one-third reduction in the rates applies to the first $161 of biweekly salary). The one-third reduction in the rates for the first $161 of biweekly salary does not apply to Tier 4 member contributions.

Postemployment Medical Benefits and Contributions

In accordance with federal tax law, postemployment medical benefits and related administrative expenses are paid through a 401(h) account with contributions from the participating employers. There is no requirement and no guarantee that the employers will continue to contribute to the 401(h) account. If authorized by the Board of Retirement, ACERA treats an equal amount of SRBR assets as employer contributions available for paying pension benefits. ACERA's Board of Retirement has no authority to demand future payments from employers to fund the 401(h) account. Consequently, these benefits can only be paid as long as assets are available. When assets are fully depleted, no postemployment medical benefits will be paid by ACERA. In compliance with 1937 Act Section 31618.5, employers allocate a portion of their contribution to the 401(h) account for administrative costs related to providing benefits in addition to contributions for the postemployment medical benefits.

Pension Obligation Bonds

In 1995 and 1996, Alameda County issued pension obligation bonds and contributed the net bond proceeds to the ACERA pension plan. ACERA received aggregate net proceeds of $591 million from these bonds. Alameda Health System, First 5 Alameda County, and the Superior Court of California for the County of Alameda were part of the County of Alameda when the pension obligation bonds were issued. They subsequently separated and became discretely presented component units or special districts of the County of Alameda. The net bond proceeds contributions allow ACERA to provide "pension obligation bond credits" to these employers (thus reducing contributions otherwise payable) over the period of time used by ACERA to amortize its Unfunded Actuarial Accrued Liability (UAAL). These employers received pension obligation bond credits of approximately $56.4 million in the year ended December 31, 2019.

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4. Reserves

Reserves represent components of the fiduciary net position. The annual change in ACERA's reserves equals the annual change in the fiduciary net position.

While a member is active, member and employer contributions associated with that member are accumulated in two separate components of reserves—the member reserve and employers' advance reserve. When a member retires, ACERA makes a one-time transfer of the associated contributions plus credited interest from these two reserve components into the retired member reserve, of an amount equal to the estimated lifetime benefits.

Actuarial Asset Smoothing

Net investment income reported on the Statement of Changes in Fiduciary Net Position affects the reserves indirectly through an actuarial asset "smoothing" process approved by the Board of Retirement. This process is intended to minimize the impact of short-term investment gains or losses. Smoothing of asset gains or losses is conducted semi-annually in conjunction with interest crediting, with calculation periods ending June 30 and December 31. It involves spreading the difference between actual and expected market returns over ten successive semi-annual periods to determine the actuarial value of assets.

Semi-annual Interest Crediting

ACERA updates reserve balances on a semi-annual basis as of June 30 and December 31 each year. At these times, ACERA carries out a multi-step process to calculate new reserve balances as specified in Article 5.5 of the 1937 Act. The amount of "net earnings" to be credited for the semi-annual period is calculated based on the actuarial smoothing process described earlier. To the extent that net earnings are available, interest is credited to all components of the reserves, with the exception of the market stabilization reserve and the contingency reserve. Interest credited is based upon the actuarial assumed interest rate (or the actual rate if lower). This is defined as "Regular Earnings."

In June 2014, the Board of Retirement approved the use of the contingency reserve to fund the interest shortfall, whenever the Regular Earnings during the 6-month interest crediting period are less than the assumed rate of return, but not negative.

If there are investment earnings above the target investment return rate, 50% is credited to the SRBR and the remaining 50% is credited proportionally to all other reserves (except for the contingency reserve and the market stabilization reserve).

Components of Reserves

The Member Reserve represents the total accumulated member contributions of current active and inactive (deferred) members. Additions include member contributions and credited interest; and deductions include refunds of member contributions along with credited interest and transfers to the retired member reserve made when a member retires.

The Employers' Advance Reserve represents the total net accumulated employer contributions for future retirement payments to active and deferred members. Additions include contributions from the employers and credited interest; and deductions include transfers to the retired member reserve made when each member retires or payment of benefits upon the death of an active member. Employer contribution rates are actuarially determined taking into account other events such as a member electing a refund of contributions. Therefore, a refund of member contributions should not have an adverse impact on the accumulation of funds in the employers' advance reserve.

According to Section 31618.5 of the 1937 Act, to the extent that an employer contributes to the 401(h) account to pay the cost of administering postemployment medical benefits, there is an annual transfer from the employers' advance reserve to the supplemental retiree benefits reserve for an amount equal to the postemployment medical benefit related administrative expenses. For the year ended December 31, 2019, the transferred amount was $1.4 million.

The Retired Member Reserve represents funds accumulated to pay retirement benefits to retired members. This reserve represents the total net accumulated transfers from the member reserve and the employers' advance reserve (both made at the time a member retires), and credited interest, reduced by payments to retired members, beneficiaries, and survivors.

The Supplemental Retiree Benefits Reserve (SRBR) was established on January 1, 1985, under Article 5.5 of the 1937 Act. The SRBR represents funds required by statute to be set aside from regular earnings and investment earnings above the assumed rate of return to provide supplemental benefits to retirees. The reserves table on page 33 shows the amounts of the SRBR currently available to pay for non-vested benefits. The Board of Retirement decides on an annual basis what member benefits to pay from the SRBR.

When there are funds available in the SRBR, the Board of Retirement can approve a transfer of an amount equal to the participating employers' 401(h) contributions and 401(h) administrative cost contributions from the SRBR to the employers' advance reserve. The Board of Retirement may also approve a transfer from the SRBR to the employers' advance reserve to reimburse the employers' payment of implicit subsidy to pay the full cost of postemployment medical benefits. Non-vested benefits currently funded by the SRBR are described in the following two paragraphs.

The 401(h) Postemployment Medical Benefits Account is used to pay the medical allowances, Medicare Part B reimbursement, dental and vision, and the associated administrative cost. The account is set up under the provisions of Internal Revenue Code section 401(h), which provides for payment of benefits on a tax-free basis. Each year participating employers decide whether to contribute the needed funds and to identify them as 401(h) account contributions. For the year ended December 31, 2019, the employers funded $44.9 million of 401(h) contributions, including $43.5 million for estimated cost of postemployment medical benefits and $1.4 million for administrative cost of the 401(h) account.

The Non-OPEB Reserve is used to pay for the Supplemental COLA and the retired member death benefit. For the year ended December 31, 2019, $1.2 million of Supplemental COLA and $0.2 million of retired member death benefits were paid. The reserve is increased through interest crediting of regular earnings and investment earnings above the assumed rate of return.

The Contingency Reserve represents reserves accumulated to satisfy the statutory requirement of establishing a reserve against deficiencies in future interest crediting. The size of the reserve is determined semi-annually by the Board of Retirement. The 1937 Act stipulates that the contingency reserve cannot exceed 3.0% of total assets and that, if the reserve falls below 1.0% of total assets, earnings from subsequent periods shall fund the reserve until the reserve level is at least 1.0% of total assets. Effective with the June 30, 2014, interest crediting cycle, the Board of Retirement set the contingency reserve to be a minimum of 1.0% of total assets, and authorized the use of funds in the contingency reserve to cover interest shortfalls whenever earnings during the 6-month interest crediting period are less than the assumed rate of return, but not negative.

The Market Stabilization Reserve Account represents the deferred balance of investment gains or losses not yet realized in the interest crediting process. This balance arises from the five-year actuarial smoothing process for investment earnings. The market stabilization reserve account balance thus represents the difference between (1) the aggregate amounts initially deferred (smoothed) from the ten most recent semi-annual periods, and (2) the amounts subsequently recognized for semi-annual interest crediting from these same ten periods.

Allocation of Earnings to Reserves for 2019

ACERA had $1.3 billion gains from investment activities net of administrative expenses for the year ended December 31, 2019. The contingency was adjusted to 1% of total assets and subsequently reduced to zero to fund the interest crediting shortfall for both six-month interest crediting periods at June 30 and December 31, 2019. The reduction left the Contingency Reserve at 0.0% of total assets at the end of 2019.

The market stabilization reserve account increased by $829.8 million during 2019 as a result of applying the actuarial five-year smoothing process and the actuarial value corridor limits. All other reserve accounts (excluding the contingency and market stabilization reserves) received interest crediting of approximately $513.0 million.

Reserves

As of December 31, 2019 (Dollars in Thousands)

	Pension and Non-OPEB	Postemployment Medical Benefits	Total
Member Reserve	$ 1,581,322	$ -	$ 1,581,322
Employers' Advance Reserve	1,159,079	-	1,159,079
Retired Member Reserve	4,853,064	-	4,853,064
SRBR	40,430	884,280	924,710
401(h) Account	-	10,416	10,416
Contingency Reserve	-	-	-
Market Stabilization Reserve Account	260,688	-	260,688
Total Reserves	**$ 7,894,583**	**$ 894,696**	**$ 8,789,279**

5. Net Pension Liability

The components of the Net Pension Liability were as follows:

Net Pension Liability

(Dollars in Thousands)

	December 31, 2019	December 31, 2018
Total Pension Liability	$ 9,959,792	$ 9,535,149
Plan's Fiduciary Net Position[1]	7,819,099	6,771,147
Net Pension Liability	**$ 2,140,693**	**$ 2,764,002**
Plan's Fiduciary Net Position as a Percentage of the Total Pension Liability	78.51%	71.01%

1 *For 2019, the Plan's Fiduciary Net Position amount shown ($7,819,099) includes the net fair value of assets ($8,789,279), less OPEB-related SRBR assets ($970,180). The OPEB-related SRBR assets include $877,769 in the SRBR-OPEB reserve (after reducing the reserve by the $6,511 SRBR implicit subsidy transfer), and $10,416 in the 401(h) reserve, plus a proportionate share of one half of the deferred market gains (after adjustment to replenish the balance in the Contingency Reserve) commensurate with the size of the OPEB to total SRBR and 401(h) reserve to valuation and 401(h) reserve ($81,995). For 2018, the Plan's Fiduciary Net Position amount shown ($6,771,147) includes the net fair value of assets ($7,592,587) less OPEB-related SRBR assets ($821,440). The OPEB-related SRBR assets include $873,183 in the SRBR-OPEB reserve (after reducing the reserve by the $6,940 SRBR implicit subsidy transfer), and $9,830 in the 401(h) reserve, less a proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of the OPEB and 401(h) reserves ($61,573). Note: The amounts may not total properly due to rounding.*

The Net Pension Liability (NPL) was measured as of December 31, 2019 and 2018. The Plan's Fiduciary Net Position was valued as of the measurement date while the Total Pension Liability was determined based upon rolling forward the Total Pension Liability (TPL) from actuarial valuations as of December 31, 2018 and 2017, respectively.

The Total Pension Liability and the Plan's Fiduciary Net Position include liabilities and assets for non-OPEB. The assets for non-OPEB are held in the SRBR to pay non-vested Supplemental COLA and the retired member death benefit.

Actuarial Assumptions

The Total Pension Liabilities (TPL) as of December 31, 2019, and December 31, 2018, were determined using actuarial valuations as of December 31, 2018, and December 31, 2017, respectively.

The actuarial assumptions used to develop the December 31, 2019, and December 31, 2018, TPLs are based on the results of an experience study for the period December 1, 2013 through November 30, 2016, applied to all periods in the measurement. They are the same assumptions used in the December 31, 2018, and 2017, funding valuations for ACERA, respectively.

Key Assumptions Used in the Measurement

Valuation Date	December 31, 2019	December 31, 2018
Inflation	3.00%	3.00%
Salary Increases	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation
Investment Rate of Return	7.25% , net of pension plan investment expense, including inflation	7.25% , net of pension plan investment expense, including inflation
Other Assumptions Based on Actuarial Experience Study of	December 1, 2013 through November 30, 2016	December 1, 2013 through November 30, 2016

Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments[1] was determined in 2017 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 (approved by the Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses are shown in the following table. This information was used in the derivation of the long-term expected investment rate of return assumption for the December 31, 2019 actuarial valuation. This information will be subject to change every three years based on the results of an actuarial experience study.

Target Asset Allocation and Projected Arithmetic Real Rate of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Large Cap Equity	22.40%	5.75%
Domestic Small Cap Equity	5.60%	6.37%
Developed International Equity	19.50%	6.89%
Emerging Markets Equity	6.50%	9.54%
U.S. Core Fixed Income	11.25%	1.03%
High Yield Bonds	1.50%	3.99%
International Bonds	2.25%	0.19%
TIPS	2.00%	0.98%
Real Estate	8.00%	4.47%
Commodities	3.00%	3.78%
Hedge Funds	9.00%	4.30%
Private Equity	9.00%	7.60%
Total	**100.00%**	

Discount Rate

The discount rate used to measure the Total Pension Liability was 7.25% as of December 31, 2019, and December 31, 2018. Article 5.5 of the Statute, which authorizes the allocation of 50% of excess earnings to the SRBR, does not allow for the use of a different investment return assumption for funding than is used for interest crediting. In order to reflect the provisions of Article 5.5, future allocations to the SRBR have been treated as an additional outflow against the Plan's Fiduciary Net Position in the GASB crossover test[2]. It is estimated that the additional outflow would average approximately 0.60% of assets over time, based on the results of the actuarial stochastic modeling of the 50% allocation of future excess earnings to the SRBR.

The projection of cash flows used to determine the discount rate assumes plan member contributions will be made at the current contribution rates and that employer

1 Note that the investment return assumption for funding purposes was developed net of both investment and administrative expenses; however, the same investment return assumption was used for financial reporting purposes, and it was considered gross of administrative expenses for financial reporting purposes. (This resulted in an increase in the margin for adverse deviation when using that investment return assumption for financial reporting.)

2 The purpose of the GASB crossover test is to determine if the full expected return (or 7.25% in this case) can be used as the discount rate to determine the TPL and the NPL. That is, if there is no crossover point where the projected benefit payments would exceed the Plan's Fiduciary Net Position, then the full expected return assumption can be used. ACERA does pass the crossover test, which means that the full 7.25% investment rate of return assumption can be used as the discount rate to determine the TPL and the resulting NPL.

contributions will be made at rates equal to the actuarially determined contribution rates[1] plus additional future contributions that would follow from the future allocation of excess earnings to the SRBR. Projected employer contributions that are intended to fund the service costs for the future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the pension 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 Total Pension Liability as of both December 31, 2019, and December 31, 2018.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the Net Pension Liability as of December 31, 2019, calculated using the discount rate of 7.25%, as well as what the Net Pension Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

As of December 31, 2019 (Dollars in Thousands)

	1% Decrease	Current Discount Rate	1% Increase
	(6.25%)	(7.25%)	(8.25%)
Net Pension Liability	$ 3,433,616	$ 2,140,693	$ 1,075,689

Money-Weighted Rate of Return

The annual money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested. For the year ended December 31, 2019, the annual money-weighted rate of return on the total investments (pension plan and OPEB) was 18.10%. For trend information, refer to the Schedule of Investment Returns under the RSI section on page 59.

6. Actuarial Valuation

ACERA retains an independent actuarial firm to conduct actuarial valuations of the pension plan, postemployment medical benefits, and non-OPEB to monitor ACERA's funding status and to establish the contribution rate requirements for the pension plan.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and health care cost trends. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Pension Plan

The purpose of the valuation is to reassess the magnitude of ACERA's benefit commitments in comparison with the assets currently available to support those commitments. As a result, employer and member contribution rates are adjusted accordingly. For the pension plan, the actuarial assumptions have been selected to estimate, as closely as possible, what the actual cost of the plan will be so as to permit an orderly method for setting aside contributions in the present to provide benefits in the future, and to maintain equity among generations of participants and taxpayers.

Contribution requirements are determined under the entry age cost method. This method is designed to collect contributions as a level percentage of pay. Any actuarial gains or losses that occur under this method are amortized as a level percentage of pay. To minimize the impact of short-term investment gains or losses, the Board of Retirement adopted an asset smoothing process described starting on page 31 under Actuarial Asset Smoothing.

1 For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

There are no legal or contractual maximum contribution rates under the 1937 Act that would affect the projection of benefits for financial reporting purposes.

ACTUARIAL METHODS AND ASSUMPTIONS - Pension Plan

The status and funding progress for the pension plan is calculated based on the following actuarial methods and assumptions.

Valuation Date	12/31/2018
Actuarial Cost Method	Entry Age
Amortization Method	Level percent of payroll
Amortization of UAAL (Prior to January 1, 2012)	Closed 30 years decreasing period
Remaining Amortization Period (Prior to January 1, 2012)	14 years
Amortization of New UAAL (On or after January 1, 2012)	Plan amendments are amortized over separate decreasing 15-year periods. Early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods. Assumption and method changes are amortized over separate decreasing 20-year periods. Experience gains/losses are amortized over separate decreasing 20-year periods.
Asset Valuation Method	Actuarial Value of Assets is determined by phasing in any difference between actual and expected market return semi-annually over a five-year period.
Valuation Value of Assets	The Actuarial Value of Assets reduced by the value of the non-valuation reserves.
Actuarial Assumptions	Interest Rate: 7.25% Inflation Rate: 3.00% Across-the-Board Salary Increases: 0.50% Salary Increases: General 8.30% - 3.90% and Safety 11.30% - 4.30% Demographic: refer to page 108
Postemployment Benefit Increases	3.00% of Tier 1 and Tier 3 retirement income 2.00% of Tier 2 and Tier 4 retirement income

Postemployment Medical Benefits

If participating employers continue to make contributions to the 401(h) account, and the Board of Retirement continues to treat equal amounts of SRBR assets as contributions for pensions, then the postemployment medical benefits are 87.6% funded assuming that the current benefit continues in perpetuity.

Actuarial calculations reflect a long-term perspective and employ methods and assumptions that are designed to reduce short-term volatility.

Under the actuarial assumed rate of 7.25% per year for future investment earnings, it is anticipated that available assets will be sufficient to fund postemployment medical benefits through year 2040.

ACTUARIAL METHODS AND ASSUMPTIONS - Postemployment Medical Benefits

The status and funding progress for the postemployment medical benefits is calculated based on the following actuarial methods and assumptions.

Valuation Date	12/31/2018
Actuarial Cost Method	Entry Age
Asset Valuation Method	Same as Pension Plan
Actuarial Assumptions	Same as Pension Plan
Health Care Cost Trend Rates:	
Non-Medicare Plan	Graded down from 7.00%[1] by 1.45% the first year, then 0.25% per year until it reaches 4.50%
Medicare Advantage Plan	Graded down from 6.50%[1] by 1.15% the first year, then 0.25% per year until it reaches 4.50%
Dental and Vision	4.00%
Medicare Part B	4.00%
Postemployment Benefit Increases:	
Dental, Vision, and Medicare Part B	Subsidies are assumed to increase at 100% of the health care cost trend rates for these benefits.
Monthly Medical Allowance (MMA)	Subsidies are assumed to increase at 50% of the health care cost trend rates for MMA benefits or 3.125%, graded down to the ultimate rate of 2.25% over 7 years.

1 Before adjusting the first-year rate by 1.20% for non-Medicare trend and 0.90% for Medicare trend to reflect the reinstatement of the Health Insurance Tax (HIT). The adjusted starting rates are 8.20% for non-Medicare trend and 7.40% for Medicare trend.

Non-OPEB

Actuarial calculations reflect a long-term perspective and employ methods and assumptions that are designed to reduce short-term volatility.

Under the actuarial assumed rate of 7.25% per year for future investment earnings, it is anticipated that available assets will be sufficient to fund the Supplemental COLA and retired member death benefit program through year 2036.

ACTUARIAL METHODS AND ASSUMPTIONS - Non-OPEB

The status and funding progress for the Non-OPEB is calculated based on the following actuarial methods and assumptions.

Valuation Date	12/31/2018
Actuarial Cost Method	Entry Age
Asset Valuation Method	Same as Pension Plan
Actuarial Assumptions	Same as Pension Plan
Postemployment Benefit Increases:	
Supplemental COLA Benefits	Payable when the current allowance from the pension plan drops below 85% of the original pension plan benefit indexed with CPI. Benefits are assumed to increase by the difference between inflation and the cost-of-living benefit guaranteed in the pension plan (3.00% for Tier 1 and Tier 3; and 2.00% for Tier 2, Tier 2C, Tier 2D, and Tier 4), subject to other limitations.

7. Postemployment Medical Benefits and Net OPEB Liability

Plan Description

ACERA administers a non-vested medical benefits program for eligible retired members. Retirees can also purchase medical benefits for eligible dependents on an out-of-pocket basis. The postemployment medical, dental and vision benefits and the related administrative costs are paid through a 401(h) account funded by the participating employers' 401(h) account contributions.

The plan provides the following postemployment benefits:

- Health care subsidy in the form of monthly medical allowance,
- Medicare Part B reimbursement, and
- Dental and vision subsidies.

These benefits are paid in the form of a monthly medical allowance. The allowance is subject to annual reauthorization by the Board of Retirement.

Plan Membership

The OPEB plan membership data as of December 31, 2018, was used in the measurement of the Total OPEB Liability as of December 31, 2019.

Demographic Data as of December 31, 2018	
Retired members receiving medical benefits	6,575
Retired members receiving dental and vision benefits	7,741
Vested terminated members entitled to, but not receiving benefits	430
Active members	11,336

Benefits Provided

The County negotiates the medical contracts with the providers covering both active and retired members. This arrangement results in "blended" medical premium rates that allow early retirees under 65 years of age, not yet Medicare-eligible, to purchase medical insurance from one of these providers at rates lower than otherwise available (an "implicit subsidy"). ACERA and the County collectively determined that the total amount of implicit subsidy for the blended medical premium rate for the year 2018 was $6.9 million. SRBR assets in this amount were treated as a pension contribution in 2019 upon the Board of Retirement's approval to compensate the County for the implicit subsidy. The implicit subsidy amount for 2019 has not yet been determined.

Outside of the County negotiated group plans, retirees over the age of 65 have the option to purchase individual Medicare insurance through a Medicare exchange. ACERA utilizes Health Reimbursement Accounts (HRAs) to facilitate the monthly medical allowance for these members.

Benefit Eligibility

Only ACERA's retirees are eligible to receive the medical, dental and vision subsidies; dependents are ineligible to receive these benefits. Retirees eligible for monthly medical allowance are also eligible for reimbursement of Medicare Part B premiums. The 2019 maximum monthly allowance for group plans was $558.00 and $427.46 for members enrolled in the individual plans through the Medicare exchange. The maximum monthly combined dental and vision subsidy was $48.39 in 2019.

The actual amount of the monthly medical allowance for each retiree depends on the retiree's number of years of service. A minimum of 10 years of service is required for service retirement and non-duty disability retirement. There is no minimum service requirement for duty disability retirees. The subsidies are 50% for retirees with 10-14 years of service, 75% for retirees with 15-19 years of service, and 100% for retirees with 20+ years of service.

Covered Retirees

Retirees currently enrolled in the medical, dental, and vision plans through the program are as follows:

As of December 31, 2019

Number of Subsidized Retirees	
Medical	5,103
Medicare Exchange	1,584
Medicare Part B	5,573
Dental and Vision	7,840

Contributions and Reserves

There are no legal or contractual contribution requirements for the OPEB plan. Please refer to Note 3 starting on page 29 for details.

Reserve requirements of the SRBR are disclosed under Note 4 starting on page 31.

Investments

ACERA's OPEB plan is unique in that there are no direct contributions to invest for this plan. Funding for the OPEB plan relies entirely on semi-annual earnings allocations from the total fund to the Supplemental Retiree Benefits Reserve (SRBR) as mandated by Article 5.5 of the 1937 Act. ACERA's total fund includes assets of the pension plan and SRBR. The OPEB assets are accumulated in the 401(h) account and the SRBR OPEB reserve account. Therefore, references to investment target allocations, long-term expected rate of return, and discount rate all apply to the total fund.

The total fund's annual money-weighted rate of return on investments, net of investment expenses is reported on page 59 of the RSI.

Net OPEB Liability

The components of the Net OPEB Liability were as follows:

(Dollars in Thousands)

	December 31, 2019	December 31, 2018
Total OPEB Liability	$ 1,083,114	$ 1,054,337
Plan's Fiduciary Net Position[1]	970,180	821,440
Net OPEB Liability	**$ 112,934**	**$ 232,897**
Plan's Fiduciary Net Position as a Percentage of the Total OPEB Liability	89.57%	77.91%

1 For 2019, the Plan's Fiduciary Net Position shown ($970,180) includes the OPEB-related SRBR reserve of $877,769 (after reducing the reserve by the SRBR implicit subsidy transfer of $6,511) and 401(h) reserve ($10,416), plus the proportionate share of one-half of the net deferred investment gain that is commensurate with the size of the OPEB SRBR reserve to total SRBR and 401(h) reserve to valuation and 401(h) reserve ($81,995), after first replenishing the Contingency Reserve from $0 to $89.4 million (1% of total assets). For 2018, the Plan's Fiduciary Net Position amount shown ($821,440) includes the SRBR and 401(h) account ($889,953), less the SRBR implicit subsidy transfer ($6,940), less the proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of the OPEB reserve ($61,573). Note that amounts may not total properly due to rounding..

The Net OPEB Liability was measured as of December 31, 2019 and 2018. The Plan's Fiduciary Net Position was valued as of the measurement date, while the Total OPEB Liability was determined by rolling forward the Total OPEB Liability as of December 31, 2018 and 2017, respectively.

Plan Provisions

The plan provisions used in the measurement of the Net OPEB Liability as of December 31, 2019 and 2018 are the same as those used for the SRBR sufficiency valuation as of December 31, 2018 and 2017, respectively.

Actuarial Assumptions

The actuarial assumptions used for the December 31, 2019, and December 31, 2018 valuations were based on the results of the experience study for the period from December 1, 2013 through November 30, 2016 that were approved by the Board effective with the December 31, 2017, valuation and the health care trend assumptions recommended for the upcoming sufficiency study for the SRBR as of December 31, 2019. The assumptions used in the December 31, 2019, SRBR OPEB actuarial valuation for ACERA were applied to all periods included in the measurement.

Key Assumptions Used in the Measurement

Valuation Date	December 31, 2019	December 31, 2018
Investment Rate of Return	7.25% , net of OPEB investment expense, including inflation	7.25% , net of OPEB investment expense, including inflation
Inflation	3.00%	3.00%
Health Care Premium Trend Rates[1,2]		
Non-Medicare medical plan	Graded from 6.75% to ultimate 4.50% over 9 years	Graded from 7.00% to ultimate 4.50% over 10 years
Medicare medical plan	Graded from 6.25% to ultimate 4.50% over 7 years	Graded from 6.50% to ultimate 4.50% over 8 years
Dental/Vision	4.00%	4.00%
Medicare Part-B	4.50%	4.00%
Other Assumptions Based on Actuarial Experience Study of	December 1, 2013 through November 30, 2016	December 1, 2013 through November 30, 2016

1 The trend rates shown above for 2020 as of the December 31, 2019, measurement do not include a one-time reduction of 1.20% to the first year non-Medicare trend of 6.75% and 0.90% to the first year Medicare trend of 6.25% to reflect the recent repeal of the Health Insurance Tax (HIT) taking effect in 2021.

2 The trend rates shown above for 2019 as of the December 31, 2018, measurement are before reflecting a one-time adjustment to reflect the impact of the Health Insurance Tax (HIT). The weighted average increase amongst all carriers is approximately 1.20% for non-Medicare and 0.90% for Medicare plans.

Long-Term Expected Rate of Return

The long-term expected rate of return on OPEB plan investments[1] was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and 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 and by adding expected inflation and subtracting expected investment expenses and a risk margin. This information will change every three years based on the results of an actuarial experience study.

The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption for the December 31, 2019, valuation are summarized in the following table. This information is subject to change every three years.

Target Asset Allocation and Projected Arithmetic Real Rate of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Large Cap Equity	22.40%	5.75%
Domestic Small Cap Equity	5.60%	6.37%
Developed International Equity	19.50%	6.89%
Emerging Markets Equity	6.50%	9.54%
U.S. Core Fixed Income	11.25%	1.03%
High Yield Bonds	1.50%	3.99%
International Bonds	2.25%	0.19%
TIPS	2.00%	0.98%
Real Estate	8.00%	4.47%
Commodities	3.00%	3.78%
Hedge Funds	9.00%	4.30%
Private Equity	9.00%	7.60%
Total	**100.00%**	

1 Note that the investment return assumption for SRBR sufficiency testing (and pension plan funding) purposes was developed net of both investment and administrative expenses; however, the same investment return assumption was used for financial reporting purposes, and it was considered gross of administrative expenses for financial reporting purposes. (This resulted in an increase in the margin for adverse deviation when using that investment return assumption for financial reporting.)

Discount Rate

The discount rate used to measure the Total OPEB Liability was 7.25% as of December 31, 2019, and December 31, 2018. The projection of cash flows used to determine the discount rate assumed benefits are paid out of the current OPEB SRBR assets. Based on those assumptions, the SRBR OPEB 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 the OPEB plan investments was applied to all periods of projected benefit payments to determine the Total OPEB Liability as of December 31, 2019 and December 31, 2018.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the Net OPEB Liability as of December 31, 2019, calculated using the discount rate of 7.25%, as well as what the Net OPEB Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

As of December 31, 2019 (Dollars in Thousands)

	1% Decrease	Current Discount Rate	1% Increase
	(6.25%)	(7.25%)	(8.25%)
Net OPEB Liability	$ 252,175	$ 112,934	$ (2,659)

Sensitivity of the Net OPEB Liability to Changes in the Health Care Cost Trend Rate

The following presents the Net OPEB liability as of December 31, 2019, calculated using the trend rate as well as what the Net OPEB Liability would be if it were calculated using a trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

As of December 31, 2019 (Dollars in Thousands)

	1% Decrease[1]	Current Trend Rates[1]	1% Increase[1]
	(6.25%)	(7.25%)	(8.25%)
Net OPEB Liability	$ (15,481)	$ 112,934	$ 271,128

1 Current trend rates: 6.75% graded down to 4.50% over 9 years for Non-Medicare medical plan costs; 6.25% graded down to 4.50% over 7 years for Medicare medical plan costs, 4.00% for all years for Dental, Vision costs, and 4.50% for all years for Medicare Part B costs. The medical trend rates shown above for 2020 (6.75% and 6.25% for non-Medicare and Medicare plans, respectively) do not include a one-time reduction of 1.20% to the non-Medicare plan trend of 6.75% and 0.90% to the Medicare plan trend of 6.50% to reflect the recent repeal of the Health Insurance Tax (HIT) taking effect in 2021.

8. Deposits and Investments

The 1937 Act gives the Board of Retirement exclusive control over ACERA's investment portfolio. Except as otherwise restricted by the California constitution or other laws, the 1937 Act allows the Board of Retirement to prudently invest, or delegate the authority to invest the investment portfolio through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction.

The Board of Retirement investment authority granted under the 1937 Act was also incorporated into the state constitution as the California Pension Protection Act of 1992 (Article 16, Section 17 of the California Constitution), which requires the Board, its officers, and employees to discharge their duties with respect to ACERA and the investment portfolio under the following rules:

- "The members of the retirement board shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system.

- The members of the retirement board shall discharge their duties with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- The members of the retirement board shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so."

Deposits

Operational cash accounts held with a financial institution are swept daily into a pooled money market fund, which invests in repurchase agreements and U.S. treasury bills and notes.

Investments

ACERA's asset classes include domestic equity, international equity, domestic fixed income, international fixed income, real estate, private equity, absolute return, private credit and real assets. Investments in any asset class may be held in direct form, commingled/pooled form, or both.

As of December 31, 2019, sixteen investment managers managed the stock and fixed income securities portfolios, twelve investment managers were used for real estate investments, twenty-six investment managers were used for private equity, eight investment managers were used for absolute return, one investment manager was used for private credit and seven investment managers were used for real assets investments.

Available cash held by investment managers is swept daily into a pooled short-term investment fund managed by the custodial bank. This short-term investment fund holds short-term obligations and deposits, including U.S. treasury and agency obligations, corporate bonds, commercial paper, repurchase agreements, certificates of deposit, bankers' acceptances, time deposits, and floating-rate notes.

Likewise, cash collateral received in connection with the securities lending program in which ACERA participates is held in a separate short-term investment pool.

These two investment pools are each held in a trust fund sponsored by State Street Bank and Trust Company, the investment custodian, and the securities lending agent. They are regulated by the Federal Reserve, Comptroller of the Currency, the Massachusetts Commissioner of Banks, and the U.S. Department of Labor.

The value of the underlying instruments in these investments pools is adjusted to fair value. The fair value of ACERA's position in these investment pools is not materially different from the value of the pool shares.

Governmental Accounting Standards Board, Statement No. 72 (GASB 72), *Fair Value Measurement and Application*, generally requires investments to be measured at fair value, using the appropriate valuation techniques under the circumstances and for which sufficient data are available to measure the fair value. The three approaches to measuring fair value are:

1. Market Approach (actual market transactions for identical or similar items);
2. Cost Approach (the current cost to replace the service capacity of an asset); and
3. Income Approach (discounting the current value of the future cash flows).

The quality of the data (inputs) used to determine fair value can vary. Some inputs are directly or indirectly observable (independently verifiable). Other inputs are unobservable. GASB 72 establishes a three-tier hierarchy of inputs used to measure fair value consisting of:

1. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that a government can access at the measurement date. Level 1 investments include public equity securities and other publicly traded securities such as widely held domestic and international stocks, certain derivatives or U.S. Treasury securities.

2. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly. These inputs can include quoted prices for similar assets or liabilities in active or inactive markets, or market-corroborated inputs. Fair values may be based on market multiples techniques and/or matrix pricing techniques. Level 2 investments include fixed or variable-income securities, commingled funds, certain derivatives and other assets that are valued using market information.
3. Level 3 inputs are unobservable inputs for an asset or liability. Included in this level are corporate bonds that are restricted and do not trade readily. The fair value of investments in real estate separate properties which is based on prices in a competitive market as determined by the investment manager relying on periodic appraisals is also included in Level 3 investments.

GASB 72 allows a government entity to use Net Asset Value (NAV) per share (or its equivalent) for an investment in a nongovernmental entity that does not have a readily determined fair value. Investments measured at NAV without determinable fair value are excluded from the level of fair value hierarchy. Selected additional disclosures are required for investments measured at NAV such as fair value measurement, government's unfunded commitments related to the investment type, general description of the terms and conditions upon which a government may redeem investments, and an estimate of when the redemption restriction might lapse for investments restricted from redemption. For private equity type investments, ACERA relies on the audited financial statements of its partnerships. The inputs used by the general partner include some or all of the following: the original transaction price, recent private transactions in the same or similar instruments, completed or pending third-party transactions in comparable businesses, recapitalizations and other transactions across the capital structure, public market valuation multiples for similar offerings in the equity or debt capital markets, as well as changes in the investment's earnings before interest, taxes, depreciation and amortization, cash flows, implied yields and leverage ratios.

Investments and Derivatives Measured at Fair Value - Pension Plan

As of December 31, 2019 (Dollars in Thousands)

Investments by Fair Value Level	Total	Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Cash Equivalents				
Government Issues	$ 88,917	$ 88,917	$ -	$ -
STIF-Type Instruments	129,797	-	129,797	-
Total Cash Equivalents	**218,714**	**88,917**	**129,797**	**-**
Fixed Income Securities				
Asset-Backed Securities	22,896	-	22,896	-
Auto Loan Receivables	18,158	-	18,158	-
Commercial Mortgage-Backed Securities	73,149	-	73,149	-
Convertible Bonds	6,843	-	6,843	-
Corporate Bonds	462,397	-	462,331	66
Credit Card Receivables	7,507	-	7,507	-
FHLMC	52,166	-	52,166	-
FNMA	76,983	-	76,983	-
GNMA I	1,653	-	1,653	-
GNMA II	12,346	-	12,346	-
Government Issues	357,558	301,720	55,838	-
Municipal Bonds	1,574	-	1,574	-
Mutual Funds	26,106	-	26,106	-
Non-Security Assets	122,429	(400)	122,829	-
Total Fixed Income Securities	**1.241,765**	**301,320**	**940,379**	**66**
Equity Securities				
Non-U.S. Equity	1,303,505	1,184,402	119,103	-
Pooled Investments	3,047,852	2,927,474	120,378	-
U.S. Equity	500,700	500,695	5	-
Total Equity Securities	**4,852,057**	**4,612,571**	**239,486**	**-**
Real Estate				
Properties	73,871	-	-	73,871
Total Real Estate	**73,871**			**73,871**
Collateral from Securities Lending	121,705	-	121,705	-
Total Investments by Fair Value Level	**6,508,112**	**$ 5,002,808**	**$ 1,431,367**	**$ 73,937**
Investments Measured at Net Asset Value (NAV)				
Real Assets	436,816			
Private Equity	583,085			
Absolute Return	801,739			
Real Estate	511,498			
Private Credit	32,707			
Total Investments Measured at NAV	**2,365,845**			
Total Investments	**$ 8,873,957**			
Derivatives				
Swaps	$ (2.501)	$ -	$ (2,501)	$ -
Futures	176	176	-	-
Forwards and Spot Contracts	5,127	5,127	-	-
Total Derivatives	**$ 2,802**	**$ 5,303**	**$ (2,501)**	**$ -**

Investments Measured at the NAV

As of December 31, 2019 (Dollars in Thousands)

	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Real Assets[1]	$ 436,816	$ 123,419	Not Eligible or Bi-Weekly	N/A or 2 Days
Private Equity[2]	583,085	552,771	Not Eligible	N/A
Absolute Return[3]	801,739	31,188	Not Eligible, or Between Daily and Quarterly	N/A or Between 1 day and 90 Days
Real Estate[4]	511,498	68,729	Not Eligible or Quarterly	N/A or up to 90 days
Private Credit[5]	32,707	48,000	Not Eligible up to 7 years	N/A
Total Investments Measured at NAV	**$ 2,365,845**	**$ 824,107**		

1 *Real Assets – The Real Assets portfolio consists of 7 funds investing in private infrastructure and natural resources, publically traded infrastructure and natural resources equities, and commodity futures. The investments in the private infrastructure and natural resources sectors are in six separate commingled, limited partnerships. These vehicles are valued at net asset value on a quarterly basis. Due to contractual limitations, none of these vehicles are eligible for redemption for up to 12 years. The Real Assets portfolio is invested in a separately managed account that holds shares in three commingled vehicles. The valuation of this account occurs daily. Redemptions are allowed bi-weekly with two days' notice.*

2 *The Private Equity portfolio consists of 49 funds, which invest primarily in buyout, debt-related, special situations, and venture capital opportunities. The fair value of these funds is determined using net asset value represented in the audited financial statements plus/minus the latest quarterly cash flows. These funds are not eligible for redemption but rather distribute capital proceeds over the funds' lifespans in either cash or "in-kind" shares of the funds' portfolio companies. Distributions to the funds' investors occur over the span of approximately 8 to 15 years.*

3 *Absolute Return – The Absolute Return portfolio consists of 9 funds that include a variety of commingled, liquid and illiquid idiosyncratic strategies and one fund of hedge funds account. There are three illiquid limited partnerships. These vehicles are valued at net asset value on a quarterly basis. Due to contractual limitations, two of these vehicles are not eligible for redemption for up to 6 years, while the third vehicle can be terminated by majority Limited Partners vote or by the General Partner. There are six hedge fund model limited partnerships and limited liability companies, including the fund of hedge fund account. Valuations occur monthly. Redemptions can occur between daily and quarterly with a range of one day to 90-days' notice.*

4 *Real Estate – The Real Estate portfolio consists of 15 funds and a separate building (1), which also serves as ACERA's headquarters. The Real Estate funds in the portfolio invest primarily in U.S. commercial real estate (office, industrial, retail, multi-family, and other). These funds are designed as commingled funds or as limited partnerships (private equity structure). The investments that are structured as private equity or limited partnerships are not eligible for redemption but rather distribute proceeds over the funds' lifespan as distribution or return of capital. The primary objectives of the real estate portfolio are income and appreciation; distribution income is typically made on a quarterly basis throughout the lives of the funds. The fair value of these funds is determined using third-party appraisals every three years or an internal appraisal. Net asset values are typically reported one quarter in arrears, plus/minus the latest quarter's cash flows (capital calls and distributions). The commingled accounts are eligible for redemption typically up to 90 days notice. These commingled funds are also subject to a withdrawal queue.*

5 *Private Credit – The Private Credit Portfolio is comprised of 1 Fund. This fund is an illiquid limited partnership and is valued at net asset value on a quarterly basis. Due to contractual limitations, this fund is not eligible for redemption for up to seven years. Private Credit investments are typically performing senior secured, first or second lien loans secured against the assets of a company.*

Derivatives

ACERA has the following types of derivatives: futures contracts-equity index, currency forward contracts, total return swaps, and rights. An equity index futures contract represents an agreement to purchase or sell an equity index for a given price at a specified future date. Currency forward contracts generally serve to hedge or offset, the impact of foreign currency exchange rate fluctuations on the reported U.S. dollar fair value of investments denominated in foreign currencies. A total return swap is a swap agreement in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of an underlying asset, usually an equity index, loans, or bonds. Rights allow the holder the option to buy securities for a given price within a specified time period.

The following Investment Derivatives schedule reports the fair value balances, changes in fair value, and notional amounts of derivatives outstanding as of and for the year ended December 31, 2019, classified by type. For financial reporting purposes, all ACERA derivatives are classified as investment derivatives.

Investment Derivatives

For Year Ended December 31, 2019 (Dollars in Thousands)

Derivative Type	Classification	Notional Value/Shares	Fair Value	Changes in Fair Value[2]
Currency Forward Contracts	Receivable/Liability[1]	$ 371,608	$ 5,129	$ (1,650)
Future Contracts - Long	Futures	869	-	10,688
Future Contracts - Short	Futures	(40)	-	(5,129)
Total Return Swaps Bond	Swaps	39,254	(2,622)	(7,447)
Total Return Swaps Equity	Swaps	(7,172)	121	3,200
Rights	Equity	2	5	14
Total			**$ 2,633**	**$ (324)**

1 *Currency forward contracts are reported in Foreign Exchange Contracts, which includes spot contracts which are not derivatives.*

2 *Change in fair value includes realized and unrealized gains and losses on derivatives and are reported as Net Appreciation (Depreciation) in Fair Value of Investments on the Statements of Changes in ACERA's Net Assets.*

Securities Lending Activity

The Board of Retirement policies authorize ACERA to participate in a securities lending program. Securities lending transactions are short-term collateralized loans of ACERA's securities for the purpose of generating additional investment income. ACERA has a securities lending agreement in place that authorizes the securities lending agent to lend ACERA's securities to broker-dealers and banks pursuant to a loan agreement. For securities on loan, ACERA receives either cash or non-cash collateral. ACERA invests the cash collateral in a pooled short-term investment fund maintained by the securities lending agent and receives earnings on it in exchange for paying a loan rebate fee to the borrower. In the case of non-cash collateral, the borrower pays ACERA a loan premium.

For the year ended December 31, 2019, on behalf of ACERA, the securities lending agent lent ACERA's securities (government bonds, corporate stocks, corporate bonds, international equities, and international fixed income) to borrowers under the securities lending agreement and ACERA received cash (U.S. and foreign currency), securities issued or guaranteed by the United States government, and sovereign debt or irrevocable bank letters-of-credit as collateral.

ACERA did not have the ability to pledge or sell collateral securities delivered absent a borrower default (therefore, such non-cash collateral is not reported on the Statement of Fiduciary Net Position).

Borrowers were required to deliver collateral for each loan equal to:

- Loaned securities denominated in U.S. dollars or sovereign debt issued by foreign governments, with a margin of at least 102% of the fair value of the loaned securities; or
- Loaned securities not denominated in U.S. dollars, or whose primary trading market was not located in the United States, with a margin of at least 105% of the fair value of the loaned securities.

Moreover, borrowers were required to maintain the designated margin percentage of collateral on a daily basis.

ACERA did not impose any restrictions for the year ended December 31, 2019, on the amount of the loans that the securities lending agent made on its behalf. In the event the borrower failed to return the loaned securities, the securities lending agent indemnified ACERA by agreeing to purchase replacement securities. If the collateral was inadequate to replace the securities lent, the securities lending agent supplemented the amount of cash collateral. If the borrower failed to pay ACERA for any income distributions on loaned securities, the securities lending agent will also supplement the income amount due to ACERA. There were no losses during the year ended December 31, 2019, resulting from a default of the borrowers or the securities lending agent.

For the year ended December 31, 2019, ACERA and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders in a short-term investment pool managed by the securities lending agent. For the 2019 fiscal year, the short-term investment fund is separated into two investment pools: (a) a liquidity pool and (b) a duration pool. As of December 31, 2019, the Quality D Short –Term investment fund liquidity pool had an average duration of 31 days and an average weighted final maturity of 96 days for U.S. dollars collateral. The Quality D Short-Term investment fund duration pool had an average duration of 18 days and an average weighted final maturity of 1,650 days for U.S. dollars collateral. For the year ended December 31, 2019, ACERA had some credit risk exposure to borrowers because, the value of the securities on loan to the borrower exceeded the value of borrower collateral held.

As of December 31, 2019, ACERA had securities on loan with a total fair value of $150.67 million; however, the cash collateral held against the loaned securities was $146.96 million which is less than the total fair value of loaned securities by $3.71 million.

Deposit, Investment, and Derivative Risks

GASB Statements No. 40 (GASB 40) and No. 53 (GASB 53) require the disclosure of specific risks that apply to ACERA's deposits, investments, and derivatives. They identify the following risks:

- Custodial Credit Risk—Deposits and Investments;
- Concentration of Credit Risk;
- Credit Risk—Investments and Derivatives;
- Interest Rate Risk;
- Fair Value Highly Sensitive to Changes in
- Interest Rates; and,
- Foreign Currency Risk

Investment Policies

GASB 40 requires the disclosure of deposit or investment policies (or the lack thereof) that relate to investment and custodial risks.

ACERA has chosen to manage the investment risks described by GASB 40 and GASB 53 by contractually requiring each portfolio investment manager to abide by restrictive investment guidelines specifically tailored to that individual manager rather than adopting across-the-board investment policies with respect to these investment risks. The guidelines stipulate the investment style, performance objective, performance benchmarks, and portfolio characteristics.

For example, in the case of foreign currency risk, the policy guidelines for the U.S. dollars equity portfolios differ from those for the non-U.S. dollars equity portfolios. Likewise, in the case of credit risk, the guidelines for one fixed income manager stipulate a minimum acceptable credit rating for each debt instrument while the guidelines for a different fixed income portfolio merely require that the average credit ratings for a certain fair value percentage of the portfolio meet a minimum requirement.

Each separate account manager is likewise subject to a "manager standard of care" that establishes a fiduciary relationship requiring the manager to act prudently and solely in the best interest of ACERA.

Separately, ACERA's guidelines also require each manager's investment return performance to compare favorably with the performance of the relevant passive market index such as the Barclays Capital Aggregate Bond Index.

ACERA's investment staff continually monitors all investment managers for compliance with the respective guidelines.

Custodial Credit Risk—Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, ACERA will not be able to recover deposits nor be able to recover collateral securities that are in the possession of an outside party. ACERA has no general policy on custodial credit risk for deposits.

By necessity, ACERA maintains operational cash deposits to support day-to-day cash management requirements. As of December 31, 2019, cash held with a financial institution in a pooled money market fund amounted to $4.21 million, of which $0.25 million was insured and $3.96 million was uninsured and uncollateralized subject to custodial credit risk.

Custodial Credit Risk—Investments

The custodial credit risk for investments is the risk that, in the event of the failure of a counterparty to a transaction, ACERA will not be able to recover the value of investment securities that are in the possession of an outside party. The individual investment guidelines for each investment manager require that managed investments be held and maintained with the master custodian in the name of ACERA. The master custodian may rely on sub-custodians. The custodial requirement does not apply to real estate investments, investments in commingled pools, and private equity and alternative investments. As of December 31, 2019, ACERA had no investments that were exposed to custodial credit risk.

Custodial Credit Risk—Derivatives

ACERA's investments include collateral associated with derivatives activity. As of December 31, 2019, net collateral for derivatives was $1.4 million. Each account was uninsured and uncollateralized, and subject to custodial credit risk.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of ACERA's investment in a single issuer of securities. The individual investment guidelines for each fixed income manager restrict concentrations greater than 5% in the securities of any one issuer (excluding direct obligations of the U.S. and/or eligible foreign governments, and those explicitly guaranteed by the U.S. and/or eligible foreign governments). As of December 31, 2019, ACERA had no investments in a single issuer that equaled or exceeded 5% of the fiduciary net position.

Credit Risk—Investments

Credit risk is the risk that the issuer of a debt security or other counterparty to an investment will not fulfill its obligations. The individual investment guidelines for each fixed income investment manager describe applicable restrictions on credit risk. The credit risk restrictions by investment portfolio are as follows:

The credit quality ratings of a security, (e.g., from Moody's or S&P) give an indication of the degree of credit risk for that security.

The Credit Risk Analysis schedule on page 50 discloses credit ratings of ACERA's debt investments by type and for each external investment pool as of December 31, 2019.

Credit Risk Analysis

As of December 31, 2019 (Dollars in Thousands)

	Adjusted Moody's Credit Rating[1]									
	Total	Aaa	Aa	A	Baa	Ba	B	Caa	Ca and Below	Not Rated
Debt Investments By Type										
Collateralized Mortgage Obligations	$ 73,148	$ 3,378	$ 767	$ 12,622	$ 26,124	$ 14,735	$ 3,800	$ 1,153	$ -	$ 10,569
Convertible Bonds	6,843	353	-	2,578	1,044	-	-	-	-	2,868
Corporate Bonds	462,397	54,211	8,882	34,627	148,147	83,636	15,591	14,398	3,058	99,847
Federal Home Loan Mortgage Corp.[2]	52,164	5,068	4,612	2,166	16,743	3,335	6,530	4,773	-	8,937
Federal National Mortgage Assn.[2]	76,984	10,809	1,400	14,180	27,636	14,378	2,313	-	-	6,268
Government National Mortgage Assn. I, II[2]	13,999	-	-	656	6,872	-	4,257	2,214	-	-
Government Issues[2]	357,558	10,036	34,918	9,437	146,191	43,912	56,892	-	-	56,172
Municipal Bonds	1,574	-	-	-	-	1,574	-	-	-	-
Other Asset Backed Securities	48,562	9,431	1,453	7,888	12,287	1,903	402	430	1,368	13,400
Subtotal Debt Investments	1,093,229	93,286	52,032	84,154	385,044	163,473	89,785	22,968	4,426	198,061
External Investment Pools of Debt Securities										
Securities Lending Cash Collateral Fund										
Liquidation Pool[3]	120,768	-	-	-	-	-	-	-	-	120,768
Duration Pool[3]	884	-	-	-	-	-	-	-	-	884
Master Custodian Short-Term Investment Fund[3]	129,797	-	-	-	-	-	-	-	-	129,797
Subtotal External Investment Pools	**251,449**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**251,449**
Total	**$1,344,678**	**$ 93,286**	**$ 52,032**	**$ 84,154**	**$ 385,044**	**$ 163,473**	**$ 89,785**	**$ 22,968**	**$ 4,426**	**$ 449,510**

1 *Adjusted Moody's Credit Rating: This schedule displays the fair value of investments by credit rating in increasing magnitude of risk. Investments are classified by Moody's credit rating, or by the Moody's rating that corresponds to the Standard & Poor's (S&P) credit rating if the investment has a S&P rating but not a Moody's rating. Also whenever both ratings for an investment exist and the S&P rating for the investment indicates a greater degree of risk than the Moody's rating, then the investment's Moody's credit rating is adjusted, solely for the purpose of this disclosure, to the Moody's rating corresponding to the greater degree of risk.*

2 *The investments in the following debt instruments–i.e., Federal Home Loan Mortgage Corp., Federal National Mortgage Assn., Government National Mortgage Assn. and Government Issues, that are Not Rated are implicitly guaranteed by the U.S. Government.*

3 *The external investment pools are not rated.*

Credit Risk—Derivatives

ACERA is exposed to credit risk on investment derivatives that are traded over the counter and are reported in asset positions. Derivatives exposed to credit risk include currency forward contracts, and synthetic futures (which are included in futures contracts-equity index). To minimize credit risk exposure, ACERA's investment managers continually monitor credit ratings of counterparties. Should there be a counterparty failure, ACERA would be exposed to the loss of the fair value of derivatives that are in asset positions and any collateral provided to the counterparty, net of the effect of applicable netting arrangements. ACERA has no general investment policy with respect to netting arrangements or collateral requirements. Netting arrangements legally provide ACERA with a right of set-off in the events of bankruptcy or default by the counterparty. ACERA's investment managers may have collateral posting provisions associated with currency forward contracts. In the event of counterparty failure, ACERA would be exposed to loss of collateral provided to the counterparty. Collateral provided by the counterparty to ACERA reduces its credit risk exposure. The collateral associated with investments derivatives is disclosed on page 49 under Custodial Credit Risk—Derivatives.

The following Credit Risk—Derivatives schedule discloses the counterparty credit ratings of ACERA's investment derivatives in asset positions by type, as of December 31, 2019. These amounts represent the maximum loss that would be recognized if all counterparties fail to perform as contracted, without respect to any collateral or other security, or netting arrangement.

Credit Risk Analysis – Investment Derivatives Subject to Credit Risk

As of December 31, 2019
(Dollars in Thousands)

Adjusted Moody's Credit Rating[1]	Fair Value	%
Aa	$ 1,801	24%
A	4,542	62%
BBB	1,053	14%
Subtotal Derivatives in Asset Position	**7,396**	100%
Derivatives in Liability Position	(4,768)	
Total Derivatives in Asset/ (Liability) Position	**$ 2,628**	

See footnote 1 on page 50.

As of December 31, 2019, the $7.4 million maximum exposure of derivatives credit risk was reduced by ($4.8) million of liabilities included in netting arrangements, resulting in a net exposure to credit risk of $2.6 million (rounded).

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment.

ACERA has investments in three fixed income portfolios containing individual debt securities as well as investments in external investment pools containing debt securities. All of these investments are subject to interest rate risk. ACERA has no general policy on interest rate risk for the fixed income portfolios or for the investments in external pools. ACERA manages interest rate risk for the three fixed-income portfolios by setting limits on portfolio duration for each portfolio. The duration restrictions by investment portfolio (with portfolio style) are as follows:

The following Interest Rate Risk Analysis—Duration schedule discloses the duration of ACERA's debt investments by type and the duration of each of the external investment pools of debt securities. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present values of cash flows, weighted for those cash flows as a percentage of the investment's full price. The Master Custodian Short-Term Investment Fund had an average weighted maturity of 42 days as of December 31, 2019.

Interest Rate Risk Analysis – Duration

As of December 31, 2019 (Dollars in Thousands)

Debt Investments by Type	Fair Value	Duration in Years
Collateralized Mortgage Obligations	$ 73,149	3.4
Convertible Bonds	6,843	3.8
Corporate Bonds	462,397	6.2
Federal Home Loan Mortgage Corp.	52,165	2.6
Federal National Mortgage Assn.	76,983	2.2
Government National Mortgage Assn. I, II	13,999	0.6
Government Issues	357,558	8.2
Municipal Bonds	1,574	8.1
Other Asset Backed Securities	48,561	2.0
Total of Debt Investments	**$ 1,093,229**	
External Investment Pools of Debt Securities	**Fair Value**	**Duration**
Securities Lending Cash Collateral Fund		
Liquidity Pool	$ 120,768	31 days
Duration Pool	884	18 days
Master Custodian Short-Term Investment Fund	129,797	-
Total External Investment Pools	**$ 251,449**	

Fair Value Highly Sensitive to Changes in Interest Rates

The Interest Rate Risk Analysis table below discloses the degree to which ACERA's investments are sensitive to interest rate changes due simply to the remaining term to maturity. In contrast, ACERA's investments with fair values that are highly sensitive to interest rates due to other factors are disclosed on the Interest Rate Risk Analysis - Highly Sensitive schedule below. ACERA has no general investment policy with respect to investments with fair values that are highly sensitive to changes in interest rates.

Interest Rate Risk Analysis – Highly Sensitive

As of December 31, 2019 (Dollars in Thousands)

Investment Type	Investment Description	Interest Rates	Fair Value
Collateralized Mortgage Obligations	Various debt related Securities	2.36% to 5.09%	$ 996
Corporate Bonds	Various debt related Securities	1.00% to 44.25%	43,821
Government Issues	Various debt related Securities	1.62% to 53.03%	67,555
Other Asset Backed	Invitation Homes Trust	3.74%	125

Investment with Fair Values Highly Sensitive to Changes in Interest Rates

Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment or deposit. ACERA has no general investment policy with respect to foreign currency risk.

Foreign Currency Risk—Investments

The Foreign Currency Risk Analysis schedule on page 54 shows the fair value of investments that are exposed to this risk by currency denomination and investment type. This provides an indication of the magnitude of foreign currency risk for each currency.

Foreign Currency Risk—Equity Index Swaps and Futures

Equity index swaps and futures contracts-equity index are derivatives. An equity index swap represents an agreement between two parties to swap two sets of equity index values. An equity index futures contract represents an agreement to purchase or sell an equity index for a given price at a specified future date.

For those equity index swaps and futures contracts-equity index which are dollar-denominated securities issued by foreign countries, there is an exposure to a foreign currency risk.

Foreign Currency Risk—Foreign Exchange Contracts

Foreign exchange contracts are subject to foreign currency risk. Foreign exchange contracts include currency forward contracts and spot contracts. Currency forward contracts are derivatives and are described in the derivatives section of this note. Spot contracts are generally used when ACERA is required to make or receive payments in a foreign currency. Spot contracts are agreements to buy or sell a certain amount of foreign currency at the current market rate, for settlement in two business days.

The dollar impact that foreign exchange contracts have on foreign currency risk is equal to the foreign currency settlement amounts translated in the same manner as the investments (i.e. spot exchange rate at the end of the year). The impact appears in the column labeled Foreign Currency on the schedule on page 54. The Net Exposure column of the schedule indicates the net foreign currency risk, i.e., the gross risk associated with the investments less the risk hedged by the outstanding foreign exchange contracts.

Foreign Currency Risk Analysis

Fair Value of Investments Exposed to Foreign Currency Risk by Currency

As of December 31, 2019 (Dollars in Thousands)

Trade Currency Name	Investment Type											
	Common Stock	Corporate Bonds	Foreign Currency	Government Issues	Collaterized Mortgage Obligations	Total Return Swap	Currency Swap	Limited Partner-ship	Mutual Funds	Real Estate Investment Trust	Rights	Net Exposure
Argentine Peso	$ -	$ 570	$ 154	$ 583	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,307
Australian Dollar	22,803	-	123	16,506	-	5	1,416	-	-	1,636	-	42,489
Brazilian Real	7,979	-	19	608	-	-	-	-	-	-	4	8,610
Canadian Dollar	35,914	-	178	-	-	(2)	583	-	-	4,966	-	41,639
Chilean Peso	-	-	-	-	-	-	(136)	-	-	-	-	(136)
Czech Koruna	-	-	-	-	-	-	118	-	-	-	-	118
Danish Krone	32,082	-	5	-	-	-	(23)	-	-	-	-	32,064
Euro Currency	337,337	-	262	-	2,018	(2,215)	(80)	15,721	-	794	-	353,837
Hong Kong Dollar	78,703	-	91	-	-	-	(6)	-	-	1,255	-	80,043
Indonesian Rupiah	12,668	-	-	-	-	-	72	-	-	-	-	12,740
Japanese Yen	214,373	-	(16)	-	-	-	14	-	-	728	-	215,099
Malaysian Ringgit	67	-	-	10,272	-	-	-	-	-	-	-	10,339
Mexican Peso	438	(2)	-	20,451	-	-	(33)	-	-	-	-	20,854
New Israeli Sheqel	247	-	1	-	-	-	4	-	-	-	-	252
New Taiwan Dollar	12,667	-	24	-	-	-	-	-	-	-	-	12,691
New Zealand Dollar	1,553	-	1	-	-	-	797	-	-	-	-	2,351
Norwegian Krone	4,390	1,478	-	1,303	-	-	731	-	-	-	-	7,902
Philippine Piso	729	-	1	-	-	-	-	-	-	-	-	730
Polish Zloty	659	-	-	5,282	-	-	33	-	-	-	-	5,974
Pound Sterling	197,699	-	590	-	-	-	1,502	-	86	600	-	200,477
Singapore Dollar	19,347	-	189	-	-	-	11	-	-	287	-	19,834
South African Rand	4,527	-	-	414	-	-	-	-	-	-	-	4,941
South Korean Won	6,897	-	-	-	-	-	480	-	-	-	-	7,377
Swedish Krona	25,312	-	25	-	-	(136)	247	-	-	-	-	25,448
Swiss Franc	64,509	-	43	-	-	(153)	(601)	-	-	-	-	63,798
Thailand Baht	720	-	(1)	-	-	-	-	-	-	-	-	719
Turkish Lira	2,376	-	-	-	-	-	-	-	-	-	-	2,376
Grand Total	**$1,083,996**	**$ 2,046**	**$ 1,689**	**$ 55,419**	**$ 2,018**	**$(2,501)**	**$ 5,129**	**$ 15,721**	**$ 86**	**$10,266**	**$ 4**	**$1,173,873**

Real Estate

Real Estate Investment Income – Separate Properties

For the Year Ended December 31, 2019
(Dollars in Thousands)

Real Estate Investment Income		
Real Estate Income	$	5,918
Less Operating Expenses		(2,566)
Real Estate Net Income	$	**3,352**

There is no outstanding real estate related debt associated with the separate properties as of December 31, 2019.

9. Capital Assets

ACERA's capital assets include equipment and furniture, electronic document management system, information systems, leasehold improvements, and construction in progress. See the following table for details.

Capital Assets and Accumulated Depreciation

For the Year Ended December 31, 2019 (Dollars in Thousands)

	January 1, 2019	Additions	Deletions / Transfers	December 31, 2019
CAPITAL ASSETS - DEPRECIABLE				
Equipment and Furniture	$ 3,032	$ 52	$ -	$ 3,084
Electronic Document Management System	4,163	-	-	4,163
Information Systems	10,457	-	-	10,457
Leasehold Improvements	2,585	-	-	2,585
Subtotal	**20,237**	**52**	**-**	**20,289**
CAPITAL ASSETS - NON DEPRECIABLE				
Construction-in-Progress	-	1,113	-	1,113
Total Capital Assets (Cost)	**20,237**	**1,165**	**-**	**21,402**
ACCUMULATED DEPRECIATION AND AMORTIZATION				
Equipment and Furniture	(2,996)	(24)	-	(3,020)
Electronic Document Management System	(4,163)	-	-	(4,163)
Information Systems	(10,457)	-	-	(10,457)
Leasehold Improvements	(1,135)	(95)	-	(1,230)
Total Accumulated Depreciation and Amortization	**(18,751)**	**(119)**	**-**	**(18,870)**
CAPITAL ASSETS - NET OF ACCUMULATED DEPRECIATION AND AMORTIZATION	**$ 1,486**	**$ 1,046**	**$ -**	**$ 2,532**

10. Leases

ACERA leases office space from Oakland 14th St. Office, a title holding corporation formed by ACERA. The original lease term was extended for seven years and shall expire on 12/31/2021, with an option to renew for five additional years. Under the terms of the lease agreement, ACERA's base rent is abated. However, ACERA is required to pay its proportionate share of building operating expenses as defined in the lease. ACERA's share of these operating expenses was approximately $56,000 for the year ended December 31, 2019.

In addition, ACERA leases photocopy machines, printers and water coolers to support operations. All current leases will expire in 2023. Equipment rental expenses were approximately $60,000 for the year ended December 31, 2019. The future estimated minimum rental payments for these leases are as follows:

Future Minimum Rental Payments

As of December 31 (Dollars in Thousands)

Year		Amount
2020	$	57
2021		58
2022		56
2023		53
Total	$	224

11. Administration Expense

ACERA's Board of Retirement annually adopts an operating expense budget covering expenses to be incurred in the following fiscal year. The operating budget includes the administration expense budget which is subject to the statutory limit based on exclusions specified in the 1937 Act.

ACERA has adopted the provisions of the 1937 Act which allows ACERA to exclude actuarial, investment, legal, business continuity and technology direct costs from administration expenses. Since investment related expenses were offset against investment income, the remaining exclusions totaled $3.4 million for 2019.

ACERA also conforms to the provision of the 1937 Act that limits the administration cap to 0.21 percent of the Accrued Actuarial Liability (AAL). ACERA uses the AAL as of December 31 of the year in which the budget is adopted for this purpose.

A schedule of Administration Expense is included in the Supplemental Schedules on page 65.

Application of Statutory Limit on Administration Expense

For the Year Ended December 31, 2019 (Dollars in Thousands)

Total Accrued Actuarial Liability as of December 31, 2018	$	10,565,618
Limit: Maximum Allowable fraction of Total Accrued Actuarial Liability (0.21%) times Total Accrued Actuarial Liability	$	22,188
Portion of Administrative Expenses for the Fiscal Year subject to the Statutory Limit		13,227
Excess of Limit over Portion of Administration Expense Subject to Limit	$	8,961
Portion of Administration Expense Subject to Limit as a Percentage of Accrued Actuarial Liability		0.13%

12. Related Party Transactions

By necessity, ACERA is involved in various business transactions with the County, the primary plan sponsor. These include reimbursement to the County for the salary and benefits of ACERA staff members paid through the County and reimbursement to the Alameda County Human Resources Department for personnel consulting services and for administering ACERA's retired members' health benefits. Also, under the Board of Retirement policy, ACERA reimburses the County for a portion of the salary and benefits of each County employee elected to the Board of Retirement. Lastly, ACERA reimburses the County for the cost of services provided in the following areas: insurance/risk management, information technology, and telecommunications.

Also, ACERA leases office space from Oakland 14th St. Office, a title holding company controlled by ACERA. Note 10—Leases describes this arrangement.

Related Party Transactions

For the Year Ended December 31, 2019
(Dollars in Thousands)

Reimbursed Cost of ACERA		
Staff Members	$	13,697
Reimbursed Costs of County Services		1,169
State Mandated Benefit Replacement Program IRC 415(m)		709
County Personnel Services		77
Partial Salary/Benefits Reimbursement for Elected Board Members		347
Total	**$**	**15,999**

13. Subsequent Events

Management has evaluated subsequent events through June XX, 2020, the date the financial statements are available to be issued, and has determined that no adjustments are necessary to the amounts reported in the accompanying financial statements. However, we've included the following market volatility disclosure which will affect ACERA's future financial statements.

On March 11, 2020 when the World Health Organization (WHO) officially declared the COVID-19 as a global pandemic.

Since the declaration of the WHO and the beginning of the pandemic, the named health crisis has penetrated and negatively impacted all aspects of our economy, including the stock market. We have experienced extreme stock market volatilities, sometimes to the tune of a couple of thousand points daily. ACERA's Total Fund, as a long-term investor in the market has experienced similar volatilities, and therefore, a certain amount of unrealized losses for the period ending March 31, 2020, (i.e. a preliminary unrealized loss of about $1.2 B for the three months ending 3/31/2020). For example, the preliminary performance of the Total Fund as of the 3/31/2020 had a 1 year return of -6.5%, outperforming its Policy Index of -7.55%, but down from the 1 year return of 18.7% that the Fund had achieved for the calendar year of 2019.

Since March 17th, 2020, ACERA Investment staff has been working closely with its Investment consultants and managers in monitoring the financial health of the Total Fund regularly. For example, the Chief Investment Officer meets with the primary general consultant on a weekly basis, while all of the investment team members and the Chief Investment Officer will also have regularly scheduled meetings, at least once a week. Specifically, they continue to conduct and report daily rebalancing to ACERA's leadership team which in turn will report the same to the Board, if warranted. At this time and after consulting with our consultants, staff has communicated to the Board at our last Board meeting on 4/16/2020 that staff is not prepared to recommend asset allocation changes to the Total Fund.

Required Supplementary Information (RSI)

Pension Plan and Non-OPEB

Schedule of Changes in Net Pension Liability and Related Ratios

For the Years Ended December 31 (Dollars in Thousands)

	2019	2018	2017	2016	2015	2014	2013
Total Pension Liability (TPL)[1]							
Service Cost[2]	$ 215,625	$ 209,890	$ 187,409	$ 175,642	$ 172,585	$ 167,120	$ 166,639
Interest	688,655	659,592	636,556	603,168	579,500	542,377	522,203
Changes of benefit terms	-	-	-	-	-	-	-
Differences between expected and actual experience	24,548	13,710	17,516	(68,176)	(31,965)	(85,379)	(61,362)
Changes of assumptions	-	-	316,728	150,677	-	431,863	-
Benefit payments, including refunds of member contributions	(504,185)	(471,943)	(445,288)	(422,223)	(401,298)	(378,689)	(359,938)
Net Change in Total Pension Liability	**424,643**	**411,249**	**712,921**	**439,088**	**318,822**	**677,292**	**267,542**
Total Pension Liability - Beginning	**9,535,149**	**9,123,900**	**8,410,979**	**7,971,891**	**7,653,069**	**6,975,777**	**6,708,235**
Total Pension Liability - Ending (a)	**$9,959,792**	**$9,535,149**	**$ 9,123,900**	**$ 8,410,979**	**$ 7,971,891**	**$ 7,653,069**	**$ 6,975,777**
Plan's Fiduciary Net Position (FNP)							
Contributions - employer[3]	$ 298,527	$ 269,684	$ 247,064	$ 241,729	$ 224,607	$ 213,255	$ 191,180
Contributions - member	103,117	94,736	89,326	85,736	82,949	79,714	76,230
Net investment income	1,165,767	(216,308)	1,065,908	423,718	49,021	318,245	736,914
Benefit payments, including refunds of member contributions	(504,185)	(471,943)	(445,288)	(422,223)	(401,298)	(378,689)	(359,938)
Administrative expense	(15,274)	(15,246)	(14,571)	(14,618)	(14,262)	(13,855)	(13,634)
Other	-	-	-	-	-	-	-
Net Change in Plan's Fiduciary Net Position	**1,047,952**	**(339,077)**	**942,439**	**314,342**	**(58,983)**	**218,670**	**630,752**
Plan's Fiduciary Net Position[4] - Beginning	**6,771,147**	**7,110,224**	**6,167,785**	**5,853,443**	**5,912,426**	**5,693,756**	**5,063,004**
Plan's Fiduciary Net Position[4] - Ending (b)	**$7,819,099**	**$6,771,147**	**$ 7,110,224**	**$ 6,167,785**	**$ 5,853,443**	**$ 5,912,426**	**$ 5,693,756**
Net Pension Liability (NPL) - Ending (a) - (b)	**$2,140,693**	**$2,764,002**	**$ 2,013,676**	**$ 2,243,194**	**$ 2,118,448**	**$ 1,740,643**	**$ 1,282,021**
FNP as a Percentage of the TPL	**78.51%**	**71.01%**	**77.93%**	**73.33%**	**73.43%**	**77.26%**	**81.62%**
Covered Payroll[5]	**$1,081,587**	**$1,046,034**	**$ 995,178**	**$ 947,568**	**$ 945,858[6]**	**$ 886,925**	**$ 853,350**
NPL as a Percentage of Covered Payroll	**197.92%**	**264.24%**	**202.34%**	**236.73%**	**223.97%**	**196.26%**	**150.23%**

1 Total pension liability is not available for years prior to December 31, 2013. Information will be presented in future years as it becomes available.

2 The service cost is always based on the previous year's valuation, meaning the December 31, 2019 measurement date values are based on the valuation as of December 31, 2018.

3 Employer contributions are on a net basis after (i) considering the total cash contributions made by the employers, (ii) reducing by the employer contributions made to the 401(h) account, and (iii) increasing by the amount of transfer from the SRBR to the Employer Advance Reserve for employer contributions made to the 401(h) account in (ii).

4 For 2019, the Plan's Fiduciary Net Position amount shown ($7,819,099) includes the net fair value of assets ($8,789,279), less OPEB-related SRBR assets ($970,180). The OPEB-related SRBR assets include $877,769 in the SRBR-OPEB reserve (after reducing the reserve by the $6,511 SRBR implicit subsidy transfer), and $10,416 in the 401(h) reserve, plus a proportionate share of one half of the deferred market gains (after adjustment to replenish the balance in the Contingency Reserve) commensurate with the size of the OPEB to total SRBR and 401(h) reserve to valuation and 401(h) reserve ($81,995). For 2018, the Plan's Fiduciary Net Position amount shown ($6,771,147) includes the net fair value of assets ($7,592,587) less OPEB-related SRBR assets ($821,440). The OPEB-related SRBR assets include $873,183 in the SRBR-OPEB reserve (after reducing the reserve by the $6,940 SRBR implicit subsidy transfer), and $9,830 in the 401(h) reserve, less a proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of the OPEB and 401(h) reserves ($61,573). Note: The amounts may not total properly due to rounding.

5 For years ended December 31, 2017 and later, covered payroll represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For the years ended before December 31, 2017, covered payroll was referred to as covered-employee payroll and only Compensation Earnable and Pensionable Compensation that would possibly go into the determination of retirement benefits are included.

6 The covered payroll for the year 2015 includes 1 additional pay period.

Schedule of Employer Contributions

Last Ten Fiscal Years (Dollars in Thousands)

Year Ended December 31	Actuarially Determined Contributions (ADC)	Contributions in Relation to ADC	Contribution Deficiency (Excess)	Covered Payroll[1]	Contributions as a Percentage of Covered Payroll
2010	$ 147,543	$ 147,543	$ -	$ 839,617	$ 17.57%
2011	162,879	162,879	-	837,482	19.45%
2012	179,649	179,649	-	845,933	21.24%
2013	191,180	191,180	-	853,350	22.40%
2014	213,255	213,255	-	886,925	24.04%
2015	224,607	224,607	-	945,858[2]	23.75%
2016	241,729	241,729	-	947,568	25.51%
2017	247,064	247,064	-	995,178	24.83%
2018	269,684	269,684	-	1,046,034	25.78%
2019	298,527	298,527	-	1,081,587	27.60%

1 For years ended December 31, 2017 and later, covered employee payroll represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For the years ended before December 31, 2017, covered payroll was referred to as covered-employee payroll and only Compensation Earnable and Pensionable Compensation that would possibly go into the determination of retirement benefits are included.

2 The covered payroll for the year 2015 includes 1 additional pay period.

Schedule of Investment Returns

Last Ten Fiscal Years[1] (As of December 31)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Annual Money-Weighted Rate of Return, net of Investment Expense	18.10%	-4.44%	19.02%	7.16%	-0.10%	4.27%	19.87	N/A	N/A	N/A

1 Information prior to 2013 is not available. Ten years of information will be presented when it becomes available.

Postemployment Medical Benefits

Schedule of Changes in Net OPEB Liability and Related Ratios

For the Years Ended December 31 (Dollars in Thousands)

	2019	2018	2017
Total OPEB Liability[1]			
Service Cost[2]	$ 27,678	$ 31,577	$ 26,991
Interest	73,843	73,427	69,879
Changes of benefit terms	-	-	-
Differences between expected and actual experience	(41,706)	(27,712)	(21,627)
Changes of assumptions	12,524	(11,430)	58,973
Benefit payments	(43,562)	(40,879)	(37,904)
Net Change in Total OPEB Liability	**28,777**	**24,983**	**96,312**
Total OPEB Liability - Beginning	**1,054,337**	**1,029,354**	**933,042**
Total OPEB Liability - Ending (a)	**$ 1,083,114**	**$ 1,054,337**	**$ 1,029,354**
Plan's Fiduciary Net Position (FNP)			
Contributions - employer[3]	N/A	N/A	N/A
Contributions - member	N/A	N/A	N/A
Net investment income	$ 193,656	$ (138,333)	$ 243,189
Benefit payments	(43,562)	(40,879)	(37,904)
Administrative expense	(1,354)	(1,224)	(1,204)
Other	-	-	-
Net Change in Plan's Fiduciary Net Position	**148,740**	**(180,436)**	**204,081**
Plan's Fiduciary Net Position - Beginning[4]	**821,440**	**1,001,876**	**797,795**
Plan's Fiduciary Net Position - Ending (b)[4]	**$ 970,180**	**$ 821,440**	**$ 1,001,876**
Net OPEB Liability - Ending (a) - (b)	**$ 112,934**	**$ 232,897**	**$ 27,478**
FNP as a Percentage of the Total OPEB Liability	**89.57%**	**77.91%**	**97.33%**
Covered-Employee Payroll[5]	**N/A**	**N/A**	**N/A**
Net OPEB Liability as a Percentage of Covered-Employee Payroll	**N/A**	**N/A**	**N/A**

1 Total OPEB liability is not available for years prior to December 31, 2017. Information will be presented in future years as it becomes available.

2 The service cost is always based on the previous year's valuation, meaning the December 31, 2019 measurement date values are based on the valuation as of December 31, 2018.

3 Employer contributions are on a net basis. Benefits are funded by employer contributions to the 401(h) account and similar amounts are transferred from the SRBR to the Employer Advance Reserve to backfill the employer contributions that would have otherwise been made to the Retirement Plan.

4 For 2019, the Plan's Fiduciary Net Position shown ($970,180) includes the OPEB-related SRBR reserve of $877,769 (after reducing the reserve by the SRBR implicit subsidy transfer of $6,511) and 401(h) reserve ($10,416), plus the proportionate share of one-half of the net deferred investment gain that is commensurate with the size of the OPEB SRBR reserve to total SRBR and 401(h) reserve to valuation and 401(h) reserve ($81,995), after first replenishing the Contingency Reserve from $0 to $89.4 million (1% of total assets). For 2018, the Plan's Fiduciary Net Position amount shown ($821,440) includes the SRBR and 401(h) account ($889,953), less the SRBR implicit subsidy transfer ($6,940), less the proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of the OPEB reserve ($61,573). Note that amounts may not total properly due to rounding.

5 Covered-employee payroll is not shown as contributions to the OPEB plan are not based on a measure of pay. Covered-employee payroll represents Compensation Earnable and Pensionable Compensation. Only Compensation Earnable and Pensionable Compensation that would go into the determination of retirement benefits would otherwise be included.

Schedule of Employer Contributions

Last Ten Fiscal Years (Dollars in Thousands)

Year Ended December 31	Actuarially Determined Contributions (ADC)[1]	Contributions in Relation to ADC[1]	Contribution Deficiency (Excess)	Covered-Employee Payroll[2]	Contributions as a Percentage of Covered-Employee Payroll
2010	N/A	N/A	$ -	N/A	N/A
2011	N/A	N/A	-	N/A	N/A
2012	N/A	N/A	-	N/A	N/A
2013	N/A	N/A	-	N/A	N/A
2014	N/A	N/A	-	N/A	N/A
2015	N/A	N/A	-	N/A	N/A
2016	N/A	N/A	-	N/A	N/A
2017	N/A	N/A	-	N/A	N/A
2018	N/A	N/A	-	N/A	N/A
2019	N/A	N/A	-	N/A	N/A

1 *Benefits are funded by employer contributions to the 401(h) account and similar amounts are transferred from the SRBR to the Employer Advance Reserve to backfill the employer contributions that would have otherwise been made to the Retirement Plan.*

2 *Covered-employee payroll is not shown as contributions to the OPEB plan are not based on a measure of pay. Covered-employee payroll represents Compensation Earnable and Pensionable Compensation. Only Compensation Earnable and Pensionable Compensation that would go into the determination of retirement benefits would otherwise be included.*

The Schedule of Investment Returns for the total fund is reported on page 59 of the RSI

Notes to Required Supplementary Information

PENSION PLAN AND NON-OPEB

Actuarial Assumptions

The Total Pension Liabilities (TPLs) as of the measurement dates were calculated by rolling forward the liabilities from prior years' actuarial valuations. The actuarial assumptions used to develop the TPLs are the same assumptions used for the respective funding valuations. The key assumptions used for rolling forward the TPL to December 31, 2019, are as follows:

Inflation	3.00%
Salary Increases	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation
Investment Rate of Return	7.25%, net of pension plan investment expense, including inflation

Methods and Assumptions Used to Establish Actuarially Determined Contribution (ADC) Rates

Actuarially determined contribution rates for the first six months of calendar year 2019 (or the second half of fiscal year 2018-2019) are calculated based on the December 31, 2017, valuation. Actuarially determined contribution rates for the last six months of calendar year 2019 (or the first half of fiscal year 2019-2020) are calculated based on the December 31, 2018, valuation.

Valuation Date	December 31, 2018	December 31, 2017
Actuarial Cost Method	Entry Age Actuarial Cost Method	Entry Age Actuarial Cost Method
Amortization Method	Level percentage of payroll (3.50% payroll growth assumed)	Level percentage of payroll (3.50% payroll growth assumed)
Remaining Amortization Period	Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011 (and 14 years remaining as of December 31, 2018). On or after January 1, 2012, any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods. Early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods. Assumption and method changes are amortized over separate decreasing 20-year periods. Experience gains/losses are also amortized over separate decreasing 20-year periods.	Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011 (and 15 years remaining as of December 31, 2017). On or after January 1, 2012, any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods. Early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods. Assumption and method changes are amortized over separate decreasing 20-year periods. Experience gains/losses are also amortized over separate decreasing 20-year periods.
Asset Valuation Method	The actuarial value of assets is determined by recognizing any difference between the actual and the expected market return over 10 six-month interest crediting periods. The actuarial value of assets is further adjusted, if necessary, to be within 40% of the fair value of assets. The valuation value of asset is the actuarial value of assets reduced by the value of the non-valuation reserves.	

Actuarial Assumptions:	December 31, 2018	December 31, 2017
Investment rate of return	7.25%, net of pension plan investment expense, including inflation	7.25%, net of pension plan investment expense, including inflation
Inflation rate	3.00%	3.00%
Real across-the-board salary increases	0.50%	0.50%
Projected salary increases	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation
Cost of living adjustments	3.00% of retirement income for General Tiers 1 and 3, and Safety Tier 1. 2.00% of retirement income for General Tiers 2 and 4, and Safety Tiers 2, 2C, 2D, and 4.	3.00% of retirement income for General Tiers 1 and 3, and Safety Tier 1. 2.00% of retirement income for General Tiers 2 and 4, and Safety Tiers 2, 2C, 2D, and 4.
Other assumptions	Same as those used in the December 31, 2018 funding actuarial valuation	Same as those used in the December 31, 2017 funding actuarial valuation

Postemployment Medical Benefits

The actuarial assumptions used for the postemployment medical benefits valuation were consistent with those applied to the pension plan with the exception of Health Care Cost Trend Rate assumptions which are specific to the postemployment medical benefits.

The Total OPEB Liabilities as of the measurement dates were calculated by rolling forward the liabilities from prior years' sufficiency valuation. The key assumptions used for rolling forward the total OPEB liability to December 31, 2019, are as follows:

Investment Rate of Return	7.25% net of OPEB plan investment expense, including inflation
Inflation	3.00%
Health Care Premium Trend Rates	
Non-Medicare medical plan	Graded from 6.75% to ultimate 4.50 over 9 years
Medicare medical plan	Graded from 6.25% to ultimate 4.50 over 7 years
Dental and vision	4.00%
Medicare Part B reimbursement	4.50%
Other Assumptions	Based on the experience study for the period December 1, 2013 through November 30, 2016

Supplemental Schedules

Administration Expense

For the Year Ended December 31, 2019
(Dollars in Thousands)

Personnel Services	
Staff Wages	$ 6,632
Fringe Benefits	3,539
Temporary Services	374
Total Personnel Services	**10,545**
Professional Services	
Computer Services	374
Audit	110
Total Professional Services	**484**
Communications	
Printing	54
Postage	50
Communication	60
Total Communications	**164**
Rental/Utilities	
Office Space	41
Equipment Leasing	46
Total Rental/Utilities	**87**
Other	
Depreciation and Amortization	83
Board Operating Expenses	410
Insurance	814
Miscellaneous	398
Training	144
Maintenance-Equipment	75
Supplies	23
Total Other	**1,947**
Subtotal: Administrative Expense Subject to Statutory Limit	13,227
Actuarial Expenses	308
Business Continuity	562
Legal Expenses	1,610
Technology Expenses	921
Subtotal: Administration Expense Excluded from Statutory Limit[1]	3,401
TOTAL ADMINISTRATION EXPENSE	$ 16,628

1 Legal expenses, business continuity, and technology include an allocation of administration overhead expenses.

Investment Expenses

For the Year Ended December 31, 2019
(Dollars in Thousands)

Investment Manager Fees[1]	$ 44,433
Brokerage Commissions	1,000
Investment Allocated Costs	2,700
Investment Consultants	1,177
Other Investment Expenses	(106)
Investment Custodians	552
Total Investment Expenses	**$ 49,756**

1 The Investment Section of this report provides details of Investment Manager Fees by type of investment manager.

Payments to Other Consultants[1]

For the Year Ended December 31, 2019
(Dollars in Thousands)

Actuarial & Audit Services	$ 494
Human Resources Consulting	77
Legal Services	410
Other Specialized Services	570
Total Payments to Consultants	**$ 1,551**

1 These are payments to outside consultants other than investment advisors. See the table above for fees paid to investment professionals.

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NEW BUSINESS

7.C. Discussion and possible motion to adopt the Actuarial Valuation as of December 31, 2019.

ACERA

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: Draft Actuarial Valuation and Review as of December 31, 2019

Executive Summary

Staff and Segal Consulting (Segal) presented the draft Actuarial Valuation and Review as of December 31, 2019, at the April 16, 2020, Board of Retirement meeting. Subsequent to the Board meeting, staff conducted a participating employers meeting on April 29, 2020, via Zoom meetings to present and discuss the following highlights of the referenced valuation:

The UAAL increased from $2,137.1 million in 2018 to $2,195 million in 2019. This increase in the UAAL was primarily due to the following factors:

a) Lower than expected return on investments (after smoothing);
b) Higher than expected salary increases for active members;
c) Loss due to actual contributions lower than expected[1];
d) Other actuarial losses, **offset somewhat by**; and
e) The expected decrease due to contributions made to pay down the UAAL.

The aggregate employer contribution rate[2] has increased from 27.96% to 28.56%. This change was primarily due:

a) Lower than expected return on investments (after smoothing);
b) Amortizing the prior year's UAAL over a smaller than expected total projected payroll;
c) Higher than expected individual salary increases for active members;
d) Loss due to actual contributions lower than expected[1]; and,
e) Other actuarial losses[3].

The aggregate employee member contribution rate increased from 9.33% of payroll to 9.34% of payroll due to changes in membership demographics.

Having received no subsequent questions or concerns from any of the participating employer groups, staff is prepared to move forward with a board adoption request for the Actuarial Valuation and Review as of December 31, 2019.

[1] Including scheduled delay in implementing contribution rates after date of valuation

[2] For employers with active member payroll.

[3] Including changes in membership demographics.

Recommendation
Staff recommends that the Board of Retirement adopt the Actuarial Valuation and Review as of December 31, 2019, including the new employer and employee contribution rates.

Attachment:
ACERA's draft Actuarial Valuation and Review as of December 31, 2019

Alameda County Employees' Retirement Association

Actuarial Valuation and Review

As of December 31, 2019

Segal

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April 7, 2020

Board of Retirement
Alameda County Employees' Retirement Association
475 14th Street, Suite 1000
Oakland, CA 94612

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of December 31, 2019. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2020-2021.

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 Eva Yum, FSA, MAAA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion 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

Andy Yeung, ASA, EA, MAAA, FCA Vice President and Actuary	Eva Yum, FSA, EA, MAAA Senior Actuary

EK/

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report was prepared by Segal to present a valuation of the Alameda County Employees' Retirement Association ("the Plan") as of December 31, 2019. 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 Plan assets to cover the estimated cost of settling the Plan's 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 November 30, 2019, provided by the Retirement Association;
- The assets of the Plan as of December 31, 2019, provided by the Retirement Association;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the December 31, 2019 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board for the December 31, 2019 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.[1] 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 adopted by the Board on September 18, 2014 (and reconfirmed by the Board on October 18, 2018). Details of the funding policy are provided in *Section 4, Exhibit I* on page 101.

A schedule of current amortization balances and payments may be found in *Section 3, Exhibit H* on page 82. A graphical projection of the Unfunded Actuarial Accrued Liability (UAAL) amortization balances and payments has been included in *Section 3, Exhibit I* on page 88.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2020 through June 30, 2021.

[1] The contribution requirement for an employer with active member payroll is expressed as a level percentage of payroll for that employer. The contribution requirement for the Alameda County Office of Education with no active member payroll is expressed as a level dollar amount.

Valuation Highlights

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1. In the December 31, 2018 valuation, the ratio of the Valuation Value of Assets (VVA) to Actuarial Accrued Liabilities (AAL) was 77.2%. In this December 31, 2019 valuation, the funded ratio has increased slightly to 77.6%. The funded ratio if measured on a Market Value of Assets (MVA) basis increased from 71.8% as of December 31, 2018 to 79.4% as of December 31, 2019. The change in the VVA funded ratio was primarily the result of an expected increase due to contributions made to pay down the unfunded liability, offset somewhat by a slight loss on the Valuation Value of Assets from the recognition of past investment losses after smoothing. The change to the MVA funded ratio was primarily the result of the gain on the Market Value of Assets during 2019. 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 or the amount of future contributions.

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2. The Association's UAAL as of December 31, 2018 was $2,137.1 million. In this year's valuation, the UAAL has increased to $2,195.0 million. The increase in the UAAL was primarily due to (a) lower than expected return on investments (after smoothing), (b) higher than expected salary increases for active members, (c) the loss due to actual contributions lower than expected[1], and (d) other actuarial losses, offset somewhat by (e) the expected decrease due to contributions made to pay down the UAAL. A reconciliation of the Association's UAAL is provided in *Section 2, Subsection E*. A schedule of the current UAAL amortization amounts may be found in *Section 3, Exhibit H*. Note that a graphical projection of the UAAL amortization bases and payments has been included in *Section 3, Exhibit I.*

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3. The aggregate employer rate[2] calculated in this valuation has increased from 27.85% of payroll to 28.56% of payroll. This change was primarily due to (a) lower than expected return on investments (after smoothing), (b) the effect of amortizing the prior year's UAAL over a smaller than expected total projected payroll, (c) higher than expected individual salary increases for active members, (d) actual contributions lower than expected[1] and (e) other actuarial losses[3]. A reconciliation of the Association's aggregate employer rate is provided in *Section 2, Subsection F*.

   A schedule of the projected contributions by each participating employer is provided in *Section 4, Exhibit IV*. Under the Board of Retirement's current actuarial funding policy, the UAAL is paid off by the employers in the General Tiers 1, 2, and 4 membership group in proportion to their payroll (with the exception of the Alameda County Office of Education and the Livermore Area Recreation and Parks District, as discussed in item 7 below).

   Employer rates for AHS/Court/First 5 are higher than the County's rates to reflect that only the County has received a reimbursement for the implicit retiree health benefit subsidy paid by the County for 2019 and in the prior years. The $6.5 million (an estimated amount provided by ACERA for the implicit retiree health benefit subsidy paid by the County for 2019) and the

[1] Including scheduled delay in implementing contribution rates after the date of the valuation.
[2] For employers with active member payroll.
[3] Including changes in membership demographics.

unused credit from prior years' transfers (the balance of prior transfers was about $71.7 million[1] as of December 31, 2019) have been recognized over separate 20-year periods.

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4. The aggregate member rate calculated in this valuation increased from 9.33% of payroll as of December 31, 2018 to 9.34% of payroll as of December 31, 2019 due to changes in membership demographics. A reconciliation of the Association's aggregate member rate is provided in *Section 2, Subsection F*.

   The individual member rates have been updated to reflect the valuation as of December 31, 2019. The detailed member rates are provided in *Section 4, Exhibit III* of this report.

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5. As indicated in *Section 2, Subsection B* of this report, the total unrecognized net investment gain as of December 31, 2019 is $260.7 million (in the previous valuation, this amount was a $569.1 million net loss). This net investment gain will be recognized in the determination of the Actuarial Value of Assets for funding purposes in the next few years, and will offset any investment losses that may occur after December 31, 2019. This implies that if the Association earns the assumed net rate of investment return of 7.25% per year on a **market value basis**, it will result in investment gains on the Actuarial Value of Assets in the next few years. So, if the actual market return is equal to the assumed 7.25% rate and all other actuarial assumptions are met, the contribution requirements would generally decrease in the next few years.

   The net deferred gain of $260.7 million represents 3.0% of the Market Value of Assets as of December 31, 2019. Unless offset by future investment losses or other unfavorable experience, the recognition of the $260.7 million deferred market gain is expected to have an impact on the Association's future funded percentage and contribution rate requirements. Under a simplified approach, which takes into account the size of the valuation and the SRBR reserves, this potential impact may be illustrated as follows:

   a. If a proportion of the net deferred gain that is commensurate with the size of the valuation reserves were recognized immediately in the valuation value of assets, the funded percentage would increase from 77.6% to 79.4%.
   b. If a proportion of the net deferred loss that is commensurate with the size of the valuation reserves were recognized immediately in the valuation value of assets, the aggregate employer rate[2] would decrease from 28.56% to about 27.5% of payroll.

6. Similar to what we disclosed in our December 21, 2018 valuation report, the 7.25% investment return assumption that the Board approved on December 21, 2017 for determining the liabilities for funding purposes and used for establishing the employer and member contribution rates in this report has continued to be developed without considering the impact of any future 50/50 excess earnings allocation. This is based on our understanding that Article 5.5 of the Statute, which authorizes the allocation of 50% of excess earnings to the SRBR, does not allow for the use of a different investment return for funding than is used for

[1] See *Section 4, Exhibit V* for a schedule of the outstanding balances of the unused credit.
[2] For employers with active member payroll.

interest crediting. This would appear in effect to preclude the prefunding of the SRBR through the use of an assumption lower than the market earnings assumption of 7.25%.

As required by the Actuarial Standard of Practice (ASOP) No. 4 (“Measuring Pension Obligations and Determining Pension Plan Costs or Contributions”), we performed a stochastic model, as detailed in our 2013-2016 experience study report, to estimate the impact of the 50% allocation of future excess earnings to the SRBR. The results of our model indicated that the 50/50 allocation of future excess earnings would have about the same impact as an “outflow” (i.e., assets not available to fund the benefits included in this valuation) that would average approximately 0.60% of assets over time. **For informational purposes only**, when we applied the results of our stochastic model to this valuation, we have estimated that such an annual outflow would increase the AAL measured in this valuation using a 7.25% investment return assumption from $9.80 billion to $10.51 billion (for a difference of $0.71 billion) and would increase the employer’s UAAL contribution rate by about 4% - 5% of payroll.

7. The Board adopted the Declining Employer Payroll Policy on October 18, 2018 and determined that the policy applies to the Alameda County Office of Education (ACOE) and the Livermore Area Recreation and Parks District (LARPD) Tier 1 members who were included as part of the General cost group in prior valuations. As a result, an unfunded actuarial accrued liability (UAAL) was allocated to each of these two employers as of December 31, 2017.

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8. The Actuarial Standards Board approved Actuarial Standard of Practice No. 51 (ASOP 51) regarding risk assessment, which was first effective with ACERA’s December 31, 2018 actuarial valuation. ASOP 51 requires actuaries to identify risks that “may reasonably be anticipated to significantly affect the plan’s future financial condition”. Investment risk, asset/liability mismatch risk, interest rate risk, longevity and other demographic risks and contribution risk are also cited as examples in ASOP 51. The standard does not require the actuary to evaluate the likelihood 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 assessment can be qualitative or quantitative (e.g., based on numerical demonstrations). The actuary may use non-numerical methods for assessing risks that might take the form of commentary about potential adverse experience and the likely effect on future results. While the standard does not require that every valuation include a quantitative risk assessment, the actuary may recommend that a more detailed risk assessment be performed. When making that decision, the actuary will take into account such factors as the Plan’s design, maturity, size, funded status, asset allocation, cash flow, possible insolvency and current market conditions.

   A copy of the risk assessment report including the analysis recommended by Segal in consultation with ACERA staff will be available later in 2020.

9. Segal strongly recommends an actuarial funding method 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.

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10. The actuarial loss from investment and other experience is $99.6 million, or 1.0% of actuarial accrued liability.

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11. The net experience loss from sources other than investments and contributions was 0.3% of the actuarial accrued liability. About half of the loss was due to higher than expected individual salary increases for actives.

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12. The rate of return on the market value of assets was 17.86% for the 2019 plan year. The return on the valuation value of assets was 6.33% for the same period due to the recognition of prior years' investment gains and losses. This resulted in an actuarial loss when measured against the assumed rate of return of 7.25% This actuarial investment loss increased the average employer contribution rate by 0.41% of payroll. Given the low fixed income interest rate environment, target asset allocation and expectations of future investment returns for various classes, we advise the Board to continue to monitor actual and anticipated investment returns relative to the assumed long-term rate of return on investments of 7.25%.

13. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution 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 December 31, 2019 will be provided separately. In addition to being based on a different measurement date, the accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the actuarially determined contribution in this valuation is expected to be used as the actuarially determined contribution (ADC) for GASB financial reporting.

14. This actuarial report as of December 31, 2019 is based on financial data as of that date and demographic data as of November 30, 2019. Changes subsequent to that date are not reflected and will affect future actuarial costs of the plan.

Summary of Key Valuation Results

		December 31, 2019		December 31, 2018	
		Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)	Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Employer Contribution Rates:[2]	**County Only**				
	• General Tier 1	22.90%	$1,738	22.31%	$1,693
	• General Tier 2	21.92	85,631	21.40	83,600
	• General Tier 4	21.43	46,119	20.83	44,828
	• Safety Tier 1	83.07	632	80.60	613
	• Safety Tier 2	63.66	73,163	62.34	71,648
	• Safety Tier 2C	64.94	2,023	63.63	1,981
	• Safety Tier 2D	63.31	9,918	61.60	9,651
	• Safety Tier 4	60.49	25,729	59.20	25,180
	County Combined	30.98	244,953	30.26	239,194
	AHS, Court & First 5 Only				
	• General Tier 1	23.77	373	23.13	362
	• General Tier 2	22.79	44,301	22.22	43,192
	• General Tier 4	22.30	29,861	21.65	28,991
	Housing Only				
	• General Tier 1	28.97	834	28.34	816
	• General Tier 2	27.99	63	27.43	61
	• General Tier 4	27.50	394	26.86	384
	LARPD Only[3]				
	• General Tier 1	38.07	237	33.62	209
	• General Tier 3	43.82	794	38.41	696
	• General Tier 4	36.60	694	32.14	610
	All Categories Combined	**28.56**	**322,504**	**27.85**	**314,515**

1 Based on December 31, 2019 projected annual compensation.
2 For employers with active member payroll. The UAAL contribution for ACOE, expressed as a level dollar amount, is $89 K when made on April 1, 2021.
3 For LARPD, the combined rate is 39.83% as of December 31, 2019 and 34.98% as of December 31, 2018.

Section 1: Actuarial Valuation Summary

		December 31, 2019		December 31, 2018	
		Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)	Total Rate[2]	Estimated Annual Dollar Amount[1] ($ in '000s)
Average Member Contribution Rates:	• General Tier 1	9.43%	$1,193	9.47%	$1,198
	• General Tier 2	7.70	45,065	7.70	45,065
	• General Tier 3	14.41	261	14.13	256
	• General Tier 4	8.85	31,191	8.80	31,015
	• Safety Tier 1	9.96	76	10.12	77
	• Safety Tier 2	15.81	18,170	15.82	18,182
	• Safety Tier 2C	13.48	420	13.52	421
	• Safety Tier 2D	16.09	2,521	16.07	2,518
	• Safety Tier 4	15.42	6,559	15.58	6,627
	All Categories Combined	**9.34**	**105,456**	**9.33**	**105,359**

[1] Based on December 31, 2019 projected annual compensation.
[2] Average rates have been recalculated by applying the individual entry age based member rates determined in the December 31, 2018 valuation to the Association membership as of December 31, 2019.

Summary of Key Valuation Results (continued)

		December 31, 2019 ($ in '000s)	December 31, 2018 ($ in '000s)
Actuarial Accrued Liability as of December 31:	• Retired members and beneficiaries	$6,006,226	$5,696,148
	• Inactive vested members	260,753	243,463
	• Active members	3,528,040	3,436,786
	• Total Actuarial Accrued Liability[1]	$9,795,019	$9,376,397
	• Normal Cost for plan year beginning December 31	$224,598	$218,336
Assets as of December 31:	• Valuation Value of Assets (VVA)[2]	$7,599,977	$7,239,327
	• Market Value of Assets (MVA)[3]	7,774,898	6,734,526
	• Valuation Value of Assets as a percentage of Market Value of Assets	97.8%	107.4%
Funded status as of December 31:	• Unfunded Actuarial Accrued Liability on Valuation Value of Assets basis	$2,195,042	$2,137,070
	• Funded percentage on VVA basis	77.6%	77.2%
	• Unfunded Actuarial Accrued Liability on Market Value of Assets basis	$2,020,121	$2,641,871
	• Funded percentage on MVA basis	79.4%	71.8%
	• Amortization period[4]	Varies	Varies
Key assumptions:	• Net investment return	7.25%	7.25%
	• Price Inflation	3.00%	3.00%
	• Payroll growth increase	3.50%	3.50%

1 Excludes liabilities held for SRBR and other non-valuation reserves.
2 Excludes Reserve for Interest Fluctuations (Contingency Reserve) if positive, Supplemental Retirees Benefit Reserve, and 401(h) Reserve.
3 The Market Value of Assets as of December 31, 2019 equals the Valuation Value of Assets plus one-half of the deferred market gains after adjustment to include the balance in the Contingency Reserve. The Market Value of Assets as of December 31, 2018 equals the Valuation Value of Assets plus a proportion of the deferred market losses after netting out the balance in the Contingency Reserve that is commensurate with the size of the valuation reserves.
4 New UAAL established on each valuation after December 31, 2011 are amortized as follows: plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods.

Summary of Key Valuation Results (continued)

		December 31, 2019	December 31, 2018	Change From Prior Year
Demographic data as of December 31:	**Active Members:**			
	• Number of members	11,336	11,349	-0.1%
	• Average age	47.1	47.0	0.1
	• Average service	11.3	11.4	-0.1
	• Total projected compensation	$1,129,175,000	$1,093,735,000	3.2%
	• Average projected compensation	$99,610	$96,373	3.4%
	Retired Members and Beneficiaries:			
	• Number of members:			
	– Service retired	7,888	7,628	3.4%
	– Disability retired	951	924	2.9%
	– Beneficiaries	1,239	1,231	0.6%
	– Total	10,078	9,783	3.0%
	• Average age	71.9	71.7	0.2
	• Average monthly benefit[1]	$4,111	$3,983	3.2%
	Inactive Vested Members:			
	• Number of members[2]	2,821	2,568	9.9%
	• Average Age	47.3	47.9	-0.6
	Total Members:	24,235	23,700	2.3%

[1] Excludes monthly benefits payable from the SRBR.
[2] Includes inactive members due a refund of member contributions.

Important Information About Actuarial Valuations

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

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

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

Section 1: Actuarial Valuation Summary

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

The actuarial valuation is prepared at the request of the Association. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan. Future contribution requirements may differ from those determined in the valuation because of: • Differences between actual experience and anticipated experience; • Changes in actuarial assumptions or methods; • Changes in statutory provisions; and • Differences between the contribution rates determined by the valuation and those adopted by the Board.
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.

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: 2010 – 2019

Year Ended December 31	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
2010	10,879	1,785	7,558	9,343	0.86	0.69
2011	10,724	1,796	7,906	9,702	0.90	0.74
2012	10,800	1,835	8,175	10,010	0.93	0.76
2013	10,877	1,902	8,566	10,468	0.96	0.79
2014	11,025	1,995	8,813	10,808	0.98	0.80
2015	11,071	2,027	8,990	11,017	1.00	0.81
2016	11,111	2,263	9,242	11,505	1.04	0.83
2017	11,323	2,447	9,479	11,926	1.05	0.84
2018	11,349	2,568	9,783	12,351	1.09	0.86
2019	11,336	2,821	10,078	12,899	1.14	0.89

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

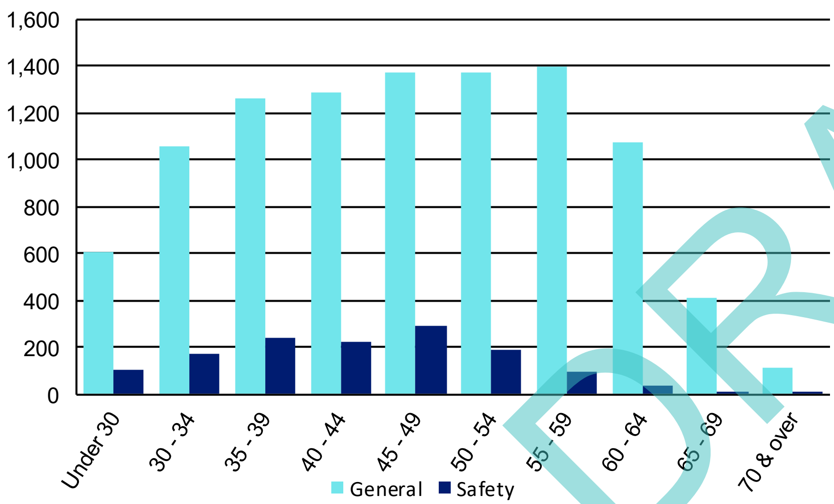
Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 11,336 active members with an average age of 47.1, average years of service of 11.3 and average compensation of $99,610. The 11,349 active members in the prior valuation had an average age of 47.0, average service of 11.4 and average compensation of $96,373.

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

Distribution of Active Members as of December 31, 2019

Actives by Age



Average age	47.1
Prior year average age	47.0
Difference	0.1

Actives by Years of Service

Average years of service	11.3
Prior year average years of service	11.4
Difference	-0.1

Inactive Members

In this year's valuation, there were 2,821 members with a vested right to a deferred or immediate vested benefit or entitled to a refund of their member contributions, versus 2,568 members in the prior valuation.

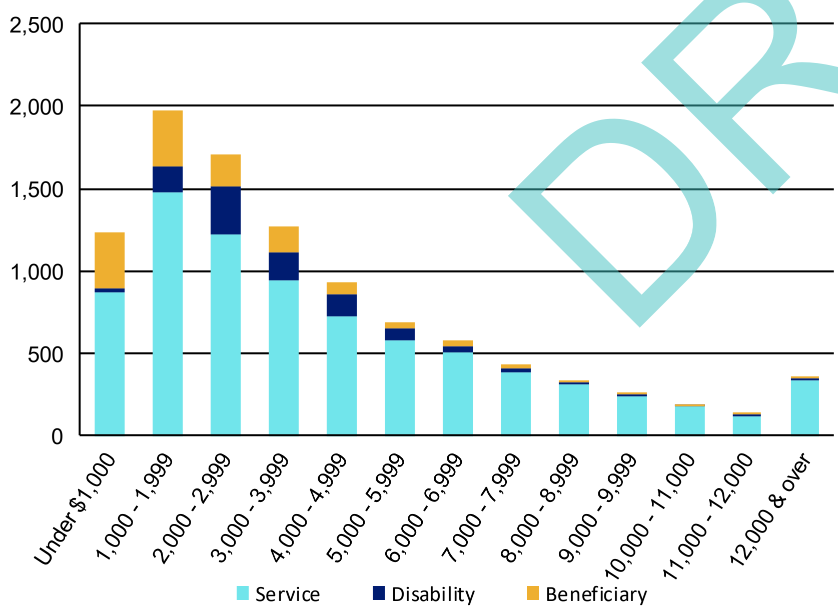
Retired Members and Beneficiaries

As of December 31, 2019, 8,839 retired members and 1,239 beneficiaries were receiving total monthly benefits of $41,427,406. For comparison, in the previous valuation, there were 8,552 retired members and 1,231 beneficiaries receiving monthly benefits of $38,968,811. These monthly benefits exclude supplemental COLA benefits payable from the Supplemental Retirees Benefit Reserve (SRBR).

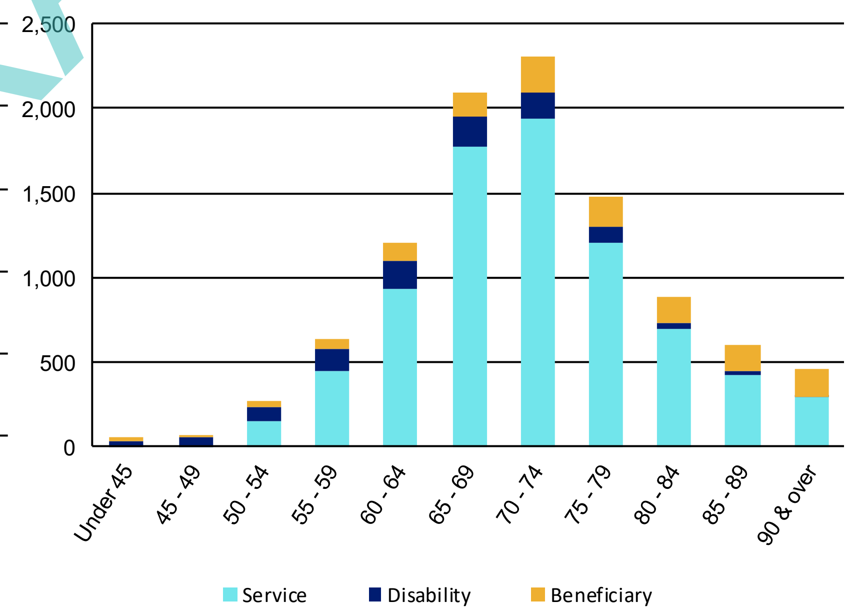
As of December 31, 2019, the average monthly benefit for retired members is $4,344, compared to $4,221 in the previous valuation. The average age for retired members is 71.3 in the current valuation, compared with 71.2 in the prior valuation. For beneficiaries as of December 31, 2019, the average monthly benefit is $2,448, compared to $2,329 in the previous valuation. The average age for beneficiaries is 75.5 in the current valuation, compared with 75.2 in the prior valuation.

Distribution of Retired Members and Beneficiaries as of December 31, 2019

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: 2010 – 2019

	Active Members			Retired Members and Beneficiaries		
Year Ended December 31	Count	Average Age	Average Service	Count	Average Age	Average Monthly Amount
2010	10,879	47.4	11.6	7,558	70.4	$3,067
2011	10,724	47.7	11.8	7,906	70.5	3,190
2012	10,800	47.6	11.8	8,175	70.6	3,332
2013	10,877	47.3	11.5	8,566	70.7	3,442
2014	11,025	47.3	11.5	8,813	70.9	3,549
2015	11,071	47.3	11.6	8,990	71.1	3,648
2016	11,111	47.3	11.6	9,242	71.3	3,757
2017	11,323	47.1	11.4	9,479	71.6	3,880
2018	11,349	47.0	11.4	9,783	71.7	3,983
2019	11,336	47.1	11.3	10,078	71.9	4,111

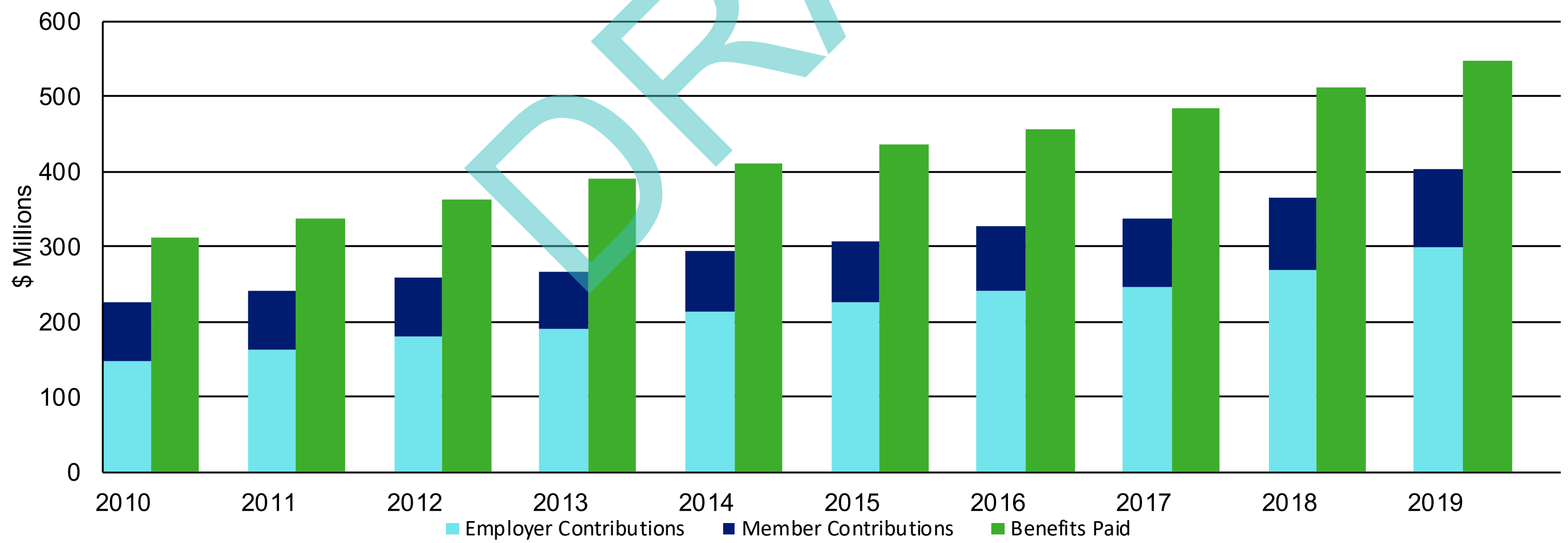
B. Financial information

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 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 Paid for Years Ended December 31, 2010 – 2019



Determination of Actuarial Value of Assets for Year Ended December 31, 2019

1	**Market value of assets**						**$8,789,279,051**
2	Calculation of unrecognized return						
	Six Month Period		**Actual**	**Expected**	**Investment**	**Percent**	**Deferred**
	From	**To**	**Return[1]**	**Return[1]**	**Gain (Loss)**	**Deferred**	**Return**
a)	1/1/2015	6/30/2015	$210,088,252	$263,436,620	$(53,348,368)	0%	$0
b)	7/1/2015	12/31/2015	(230,048,258)	262,185,431	(492,233,689)	10	(49,223,369)
c)	1/1/2016	6/30/2016	75,639,795	251,178,961	(175,539,165)	20	(35,107,833)
d)	7/1/2016	12/31/2016	379,000,419	251,534,721	127,465,699	30	38,239,710
e)	1/1/2017	6/30/2017	658,890,554	263,335,665	395,554,890	40	158,221,956
f)	7/1/2017	12/31/2017	634,431,651	285,557,601	348,874,050	50	174,437,025
g)	1/1/2018	6/30/2018	86,346,238	306,788,550	(220,442,312)	60	(132,265,387)
h)	7/1/2018	12/31/2018	(457,457,856)	293,029,561	(750,487,417)	70	(525,341,192)
i)	1/1/2019	6/30/2019	854,836,642	274,040,816	580,795,826	80	464,636,660
j)	7/1/2019	12/31/2019	487,958,159	302,301,626	185,656,533	90	167,090,880
k)	Total unrecognized return[2]						$260,688,449
3	Calculation of Preliminary Actuarial Value of Assets						
a)	Preliminary Actuarial Value of Assets: **(1) - (2k)**						$8,528,590,602
b)	Preliminary Actuarial Value as a Percentage of Market Value: **(3a) ÷ (1)**						97.0%
4	Adjustment to be within 40% corridor						0
5	**Final Actuarial value of assets: (3a) + (4)**						**$8,528,590,602**
6	Non-valuation reserves and deductions						
a)	Reserve for Interest Fluctuations (Contingency Reserve), but no less than $0						$0
b)	Supplemental Retirees Benefit Reserve (SRBR)						924,709,823
c)	Other Non-Valuation Reserve (401(h) Reserve)						10,415,538
d)	SRBR Transfer to Employer Advance Reserve						-6,510,876
e)	Subtotal						$928,614,485
7	**Final Valuation Value of Assets: (5) – (6e)**						**$7,599,976,117**

Note: Results may be slightly off due to rounding.

[1] The actual return on a market value basis is calculated by taking the difference between the ending and beginning Market Value of Assets over the last six month period and adjusting that difference for the non-investment cash flows. Those cash flows include contributions received and benefit payments made during that six month period. The amount subject to smoothing is determined as the actual market return earned during the last six month period that was in excess/below the expected return.

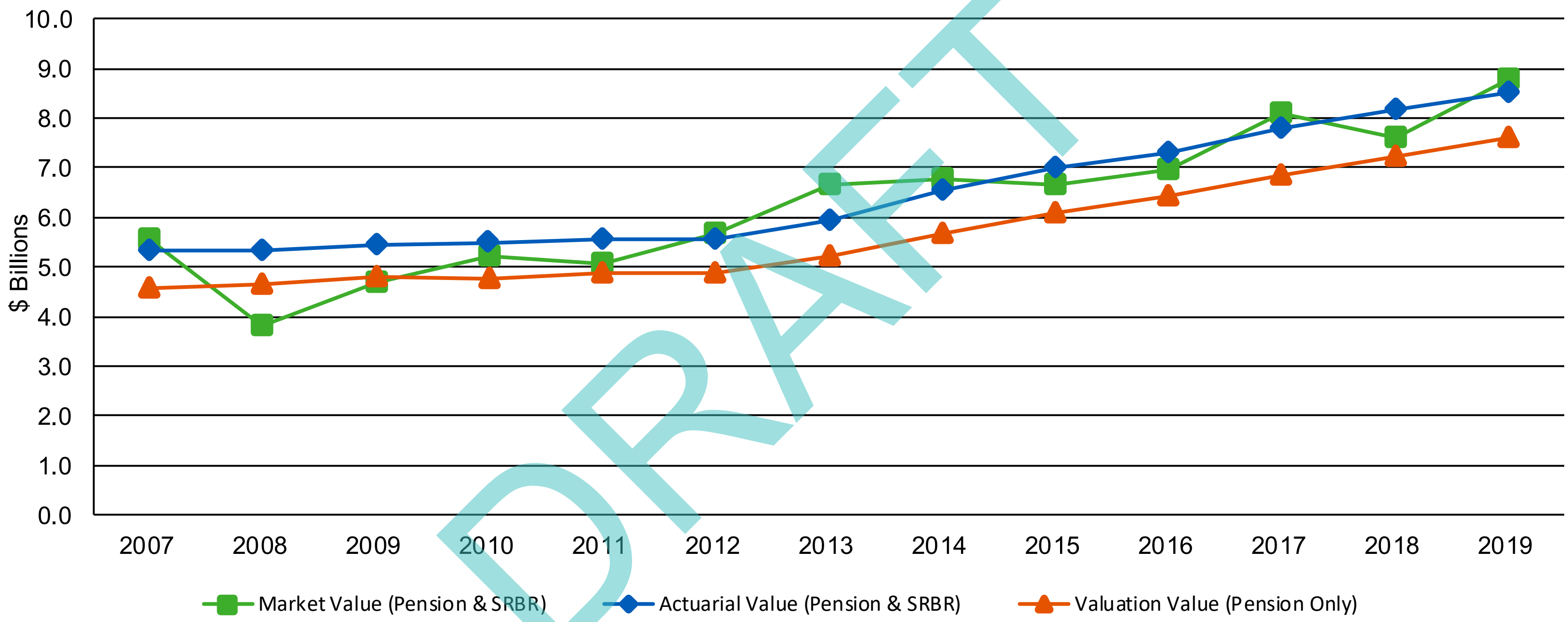
[2] Deferred return as of December 31, 2019 recognized in each of the next five years:

(a)	Amount recognized on December 31, 2020	$49,152,251
(b)	Amount recognized on December 31, 2021	120,736,884
(c)	Amount recognized on December 31, 2022	(6,008,069)
(d)	Amount recognized on December 31, 2023	78,241,730
(e)	Amount recognized on December 31, 2024	18,565,653
(f)	Total unrecognized return as of December 31, 2019	$260,688,449

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 asset value 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 December 31, 2007 – 2019



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.

The total loss is $99.6 million, which includes $65.9 million from investment losses, a loss of $7.4 million from contribution experience and $26.3 million in losses from all other sources. The net experience variation from individual sources other than investments and contributions was 0.3% 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 December 31, 2019

1	Net loss from investments[1]	$(65,905,000)
2	Net loss from contributions	(7,359,000)
3	Net loss from other experience[2]	(26,336,000)
4	**Net experience loss: 1 + 2 + 3**	**$(99,600,000)**

[1] Details on next page.
[2] See *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 17.86% for the year ended December 31, 2019.

For valuation purposes, the assumed rate of return on the valuation value of assets is 7.25%. The actual rate of return on a valuation basis for the 2019 plan year was 6.33%. Since the actual return for the year was less than the assumed return, the Plan experienced an actual loss during the year ended December 31, 2019 with regard to its investments.

Investment Experience for Year Ended December 31, 2019

		Market Value	Actuarial Value	Valuation Value
1	Net investment income	$1,342,794,799	$512,986,851	$455,280,174
2	Average value of assets	7,519,535,411	8,088,654,910	7,188,756,112
3	Rate of return: 1 ÷ 2	17.86%	6.34%	6.33%
4	Assumed rate of return	7.25%	7.25%	7.25%
5	Expected investment income: 2 x 4	$545,166,317	$586,427,481	$521,184,818
6	**Actuarial gain/(loss): 1 - 5**	**$797,628,482**	**$(73,440,630)**	**$(65,904,644)**

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: 2010 – 2019

	Market Value Investment Return[1]		Actuarial Value Investment Return[1]		Valuation Value Investment Return[1]	
Year Ended December 31	Amount	Percent	Amount	Percent	Amount	Percent
2010	$635,617,239	13.72%	$122,091,092	2.26%	$36,890,575	0.77%
2011	(53,810,165)	(1.04)%	164,671,046	3.03%	149,447,325	3.15%
2012	698,682,557	13.91%	91,936,980	1.67%	76,720,113	1.59%
2013	1,095,188,215	19.53%	533,248,385	9.73%	410,409,663	8.48%
2014	266,028,241	4.04%	710,015,277	12.05%	548,585,891	10.61%
2015	(19,960,005)	(0.30)%	569,295,018	8.78%	489,086,474	8.68%
2016	454,641,033	6.91%	452,144,779	6.53%	436,958,056	7.24%
2017	1,293,322,206	18.77%	640,343,891	8.85%	495,891,253	7.77%
2018	(371,111,618)	(4.62)%	507,081,208	6.56%	508,199,399	7.50%
2019	1,342,794,799	17.86%	512,986,851	6.34%	455,280,174	6.33%
Most recent five-year average return		**7.31%**		**7.41%**		**7.50%**
Most recent ten-year average return		**8.54%**		**6.53%**		**6.17%**

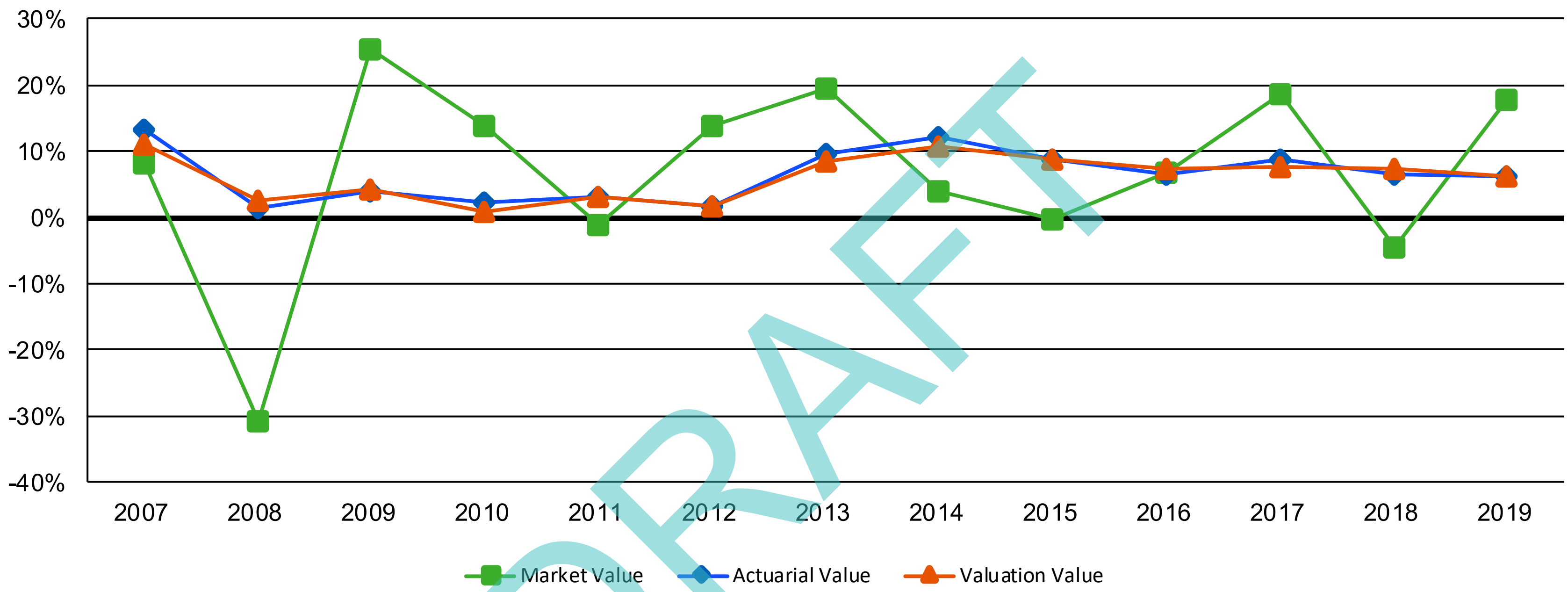
Note: Each year's yield is weighted by the average asset value in that year.

[1] Net of administrative and investment expenses.

Section 2: Actuarial Valuation Results

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 Value Rates of Return for Years Ended December 31, 2007 – 2019



Contributions

Contributions for the year ended December 31, 2019 totaled $401.6 million, compared to the projected amount of $408.7 million. This resulted in a loss of $7.4 million for the year, when adjusted for timing.

Non-investment experience

Other 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 December 31, 2019 amounted to $26.3 million, which is 0.3% of the actuarial accrued liability. About half of the loss was due to higher than expected individual salary increases for actives. See *Subsection E* for a detailed development of the unfunded actuarial accrued liability.

D. Other Changes in the Actuarial Accrued Liability

Actuarial assumptions

There are no assumption changes reflected in this report.

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

Plan Provisions

There were no changes in plan provisions since the prior valuation.

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

E. Development of Unfunded Actuarial Accrued Liability

Development for Year Ended December 31, 2019
Total Plan

1	**Unfunded actuarial accrued liability at beginning of year**		**$2,137,070,000**
2	Total normal cost at middle of year		218,336,000
3	Expected employer and member contributions		(408,747,000)
4	Interest		148,783,000
5	Expected unfunded actuarial accrued liability		$2,095,442,000
6	Changes due to:		
	a) Investment return less than expected	$65,905,000	
	b) Actual contributions less than expected[1]	7,359,000	
	c) Individual salary increases higher than expected	13,106,000	
	d) Other experience loss	13,230,000	
	Total changes		$99,600,000
7	**Unfunded actuarial accrued liability at end of year**		**$2,195,042,000**

Note: The sum of items 6c through 6d equals the “Net loss from other experience” shown in *Section 2, Subsection C.*

[1] Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll different than expected during 2019.

E. Development of Unfunded Actuarial Accrued Liability (continued)

Development for Year Ended December 31, 2019
General (Excluding LARPD & Office of Education) Only

1	**Unfunded actuarial accrued liability at beginning of year**		**$1,269,655,000**
2	Total Normal cost at middle of year		158,675,000
3	Expected employer and member contributions		(271,836,000)
4	Interest		88,429,000
5	Expected unfunded actuarial accrued liability		$1,244,923,000
6	Changes due to:		
	a) Investment return less than expected	$49,318,000	
	b) Actual contributions less than expected[1]	4,402,000	
	c) Individual salary increases higher than expected	12,636,000	
	d) Other experience loss	8,011,000	
	Total changes		$74,367,000
7	**Unfunded actuarial accrued liability at end of year**		**$1,319,290,000**

[1] Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll different than expected during 2019.

E. Development of Unfunded Actuarial Accrued Liability (continued)

Development for Year Ended December 31, 2019
General (Office of Education) Only

1	**Unfunded actuarial accrued liability at beginning of year**		**$1,516,000**
2	Total Normal cost at middle of year		0
3	Expected employer and member contributions		(750,000)
4	Interest		69,000
5	Expected unfunded actuarial accrued liability		$835,000
6	Changes due to:		
	a) Investment return less than expected	$30,000	
	b) Actual contributions less than expected	0	
	c) Individual salary increases higher than expected	0	
	d) Other experience loss[1]	80,000	
	Total changes		$110,000
7	**Unfunded actuarial accrued liability at end of year**		**$945,000**

[1] Due primarily to fewer than expected deaths among continuing retirees.

E. Development of Unfunded Actuarial Accrued Liability (continued)

Development for Year Ended December 31, 2019
General (LARPD) Only

1	**Unfunded actuarial accrued liability at beginning of year**		**$13,501,000**
2	Total Normal cost at middle of year		1,075,000
3	Expected employer and member contributions		(2,169,000)
4	Interest		943,000
5	Expected unfunded actuarial accrued liability		$13,350,000
6	Changes due to:		
	a) Investment return less than expected	$408,000	
	b) Actual contributions less than expected[1]	348,000	
	c) Individual salary increases higher than expected	216,000	
	d) Other experience loss	8,000	
	Total changes		$980,000
7	**Unfunded actuarial accrued liability at end of year**		**$14,330,000**

[1] Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll different than expected during 2019.

E. Development of Unfunded Actuarial Accrued Liability (continued)

Development for Year Ended December 31, 2019
Safety Only

1	**Unfunded actuarial accrued liability at beginning of year**		**$852,398,000**
2	Total Normal cost at middle of year		58,586,000
3	Expected employer and member contributions		(133,992,000)
4	Interest		59,342,000
5	Expected unfunded actuarial accrued liability		$836,334,000
6	Changes due to:		
	a) Investment return less than expected	$16,149,000	
	b) Actual contributions less than expected[1]	2,609,000	
	c) Individual salary increases higher than expected	254,000	
	d) Other experience loss	5,131,000	
	Total changes		$24,143,000
7	**Unfunded actuarial accrued liability at end of year**		**$860,477,000**

[1] Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll different than expected during 2019.

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 December 31, 2019, the average recommended employer contribution is 28.56% of compensation.

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

The contribution requirement as of December 31, 2019 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 December 31

		2019		2018	
		Amount ($ in '000s)	**% of Projected Compensation**	**Amount ($ in '000s)**	**% of Projected Compensation**
1	Total normal cost	$224,598	19.89%	$218,336	19.96%
2	Expected member normal cost contributions	105,456	9.34%	102,139	9.34%
3	Employer normal cost: (1) - (2)	$119,142	10.55%	$116,197	10.62%
4	Actuarial accrued liability	9,795,019		9,376,397	
5	Valuation value of assets	7,599,977		7,239,327	
6	Unfunded actuarial accrued liability (UAAL): (4) - (5)	$2,195,042		$2,137,070	
7	Payment on UAAL	203,362	18.01%	189,661	17.34%
8	Projected compensation	1,129,175		1,093,735	
9	**Total average recommended employer contribution: (3) + (7)**	**$322,504**	**28.56%**	**$305,858**	**27.96%**

Note: Contributions are assumed to be paid at the middle of the year.

Reconciliation of Average Recommended Employer Contribution Rate

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

Reconciliation from December 31, 2018 to December 31, 2019
Total Plan

	Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Average Recommended Employer Contribution as of December 31, 2018[2]	**27.85%**	**$314,515**
• Effect of investment return less than expected	0.41%	4,630
• Effect of actual contributions less than expected[3]	0.05%	565
• Effect of individual salary increases higher than expected	0.06%	678
• Effect of amortizing prior year's UAAL over a smaller than expected total projected payroll	0.09%	1,016
• Effect of changes in member demographics on Normal Cost	0.01%	113
• Effect of other losses	0.09%	987
Total change	0.71%	7,989
Average Recommended Employer Contribution as of December 31, 2019	**28.56%**	**$322,504**

[1] Based on December 31, 2019 projected compensation.
[2] Determined by applying the recommended employer contribution rates as of December 31, 2018 to the projected compensation as of December 31, 2019 by cost group, membership class and tier.
[3] Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll during 2019 different than expected.

Reconciliation of Average Recommended Employer Contribution Rate (continued)

Reconciliation from December 31, 2018 to December 31, 2019
General (Excluding LARPD & Office of Education) Only

	Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Average Recommended Employer Contribution as of December 31, 2018[2]	**21.51%**	**$203,927**
• Effect of investment return less than expected	0.37%	3,507
• Effect of actual contributions less than expected[3]	0.03%	284
• Effect of individual salary increases higher than expected	0.08%	758
• Effect of amortizing prior year's UAAL over a smaller than expected total projected payroll	0.01%	95
• Effect of changes in member demographics on Normal Cost	0.01%	95
• Effect of other losses	0.07%	648
Total change	0.57%	5,387
Average Recommended Employer Contribution as of December 31, 2019	**22.08%**	**$209,314**

1 Based on December 31, 2019 projected compensation.
2 Determined by applying the recommended employer contribution rates as of December 31, 2018 to the projected compensation as of December 31, 2019 by cost group, membership class and tier.
3 Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll during 2019 different than expected.

Reconciliation of Average Recommended Employer Contribution Rate (continued)

Reconciliation from December 31, 2018 to December 31, 2019
General (LARPD) Only

	Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Average Recommended Employer Contribution as of December 31, 2018[2]	**34.98%**	**$1,515**
• Effect of investment return less than expected	0.65%	28
• Effect of actual contributions less than expected[3]	0.58%	25
• Effect of individual salary increases higher than expected	0.47%	20
• Effect of amortizing prior year's UAAL over a smaller than expected total projected payroll[4]	2.80%	121
• Effect of changes in member demographics on Normal Cost	0.36%	16
• Effect of other gains	(0.01)%	0[5]
Total change	4.85%	210
Average Recommended Employer Contribution as of December 31, 2019	**39.83%**	**$1,725**

[1] Based on December 31, 2019 projected compensation.
[2] Determined by applying the recommended employer contribution rates as of December 31, 2018 to the projected compensation as of December 31, 2019 by cost group, membership class and tier.
[3] Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll during 2019 different than expected.
[4] Nine actives members in the December 31, 2018 valuation data were classified as either retired or vested terminated members in the December 31, 2019 valuation data; two new active members were added. This net reduction in the number of active members resulted in a reduction in projected compensation from $4,687,000 as of December 31, 2018 to $4,331,000 as of December 31, 2019 (versus an expected projected compensation of $4,851,000 for a reduction of about 12%).
[5] Less than $1,000 when rounded.

Reconciliation of Average Recommended Employer Contribution Rate (continued)

Reconciliation from December 31, 2018 to December 31, 2019
Safety Only

	Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Average Recommended Employer Contribution as of December 31, 2018[2]	**61.62%**	**$109,073**
• Effect of investment return less than expected	0.65%	1,151
• Effect of actual contributions less than expected[3]	0.11%	195
• Effect of individual salary increases higher than expected	(0.03)%	(53)
• Effect of amortizing prior year's UAAL over a smaller than expected total projected payroll	0.47%	832
• Effect of changes in member demographics on Normal Cost	(0.05)%	(89)
• Effect of other losses	0.20%	356
Total change	1.35%	2,392
Average Recommended Employer Contribution as of December 31, 2019	**62.97%**	**$111,465**

1 Based on December 31, 2019 projected compensation.
2 Determined by applying the recommended employer contribution rates as of December 31, 2018 to the projected compensation as of December 31, 2019 by cost group, membership class and tier.
3 Includes impact of delay in rate implementation and difference between Normal Cost and UAAL contributions due to actual payroll during 2019 different than expected.

Reconciliation of Average Recommended Member Contribution Rate

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

Reconciliation from December 31, 2018 to December 31, 2019

	Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Average Recommended Member Contribution as of December 31, 2018	**9.33%**	**$105,359**
• Effect of changes in member demographics	0.01%	97
Average Recommended Member Contribution as of December 31, 2019	**9.34%**	**$105,456**

By Membership and Tier

	General Tier 1	General Tier 2	General Tier 3	General Tier 4
Average Recommended Member Contribution as of December 31, 2018	**9.47%**	**7.70%**	**14.13%**	**8.80%**
• Effect of changes in member demographics	-0.04%	0.00%	0.28%	0.05%
Average Recommended Member Contribution as of December 31, 2019	**9.43%**	**7.70%**	**14.41%**	**8.85%**

	Safety Tier 1	Safety Tier 2	Safety Tier 2C	Safety Tier 2D	Safety Tier 4
Average Recommended Member Contribution as of December 31, 2018	**10.12%**	**15.82%**	**13.52%**	**16.07%**	**15.58%**
• Effect of changes in member demographics	-0.16%	-0.01%	-0.04%	0.02%	-0.16%
Average Recommended Member Contribution as of December 31, 2019	**9.96%**	**15.81%**	**13.48%**	**16.09%**	**15.42%**

[1] Based on December 31, 2019 projected compensation.

Recommended Employer Contribution Rates[1]

County Only	Basic (December 31, 2019 Actuarial Valuation)	COLA (December 31, 2019 Actuarial Valuation)	Total (December 31, 2019 Actuarial Valuation)	Estimated Annual Dollar Amount[2] ($ in '000s) (December 31, 2019 Actuarial Valuation)	Basic (December 31, 2018 Actuarial Valuation)	COLA (December 31, 2018 Actuarial Valuation)	Total (December 31, 2018 Actuarial Valuation)	Estimated Annual Dollar Amount[2] ($ in '000s) (December 31, 2018 Actuarial Valuation)
General Tier 1 Members								
Normal Cost	7.57%	2.75%	10.32%	$783	7.55%	2.73%	10.28%	$780
UAAL (Before POB Credit)	13.96%	4.69%	18.65%	1,415	13.53%	4.53%	18.06%	1,370
Pension Obligation Bond Credit	-3.64%	-1.56%	-5.20%	-394	-3.64%	-1.57%	-5.21%	-395
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-66	-0.82%	0.00%	-0.82%	-62
Total Contributions	**17.02%**	**5.88%**	**22.90%**	**$1,738**	**16.62%**	**5.69%**	**22.31%**	**$1,693**
General Tier 2 Members								
Normal Cost	7.74%	1.60%	9.34%	$36,487	7.77%	1.60%	9.37%	$36,604
UAAL (Before POB Credit)	13.96%	4.69%	18.65%	72,857	13.53%	4.53%	18.06%	70,552
Pension Obligation Bond Credit	-3.64%	-1.56%	-5.20%	-20,314	-3.64%	-1.57%	-5.21%	-20,353
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-3,399	-0.82%	0.00%	-0.82%	-3,203
Total Contributions	**17.19%**	**4.73%**	**21.92%**	**$85,631**	**16.84%**	**4.56%**	**21.40%**	**$83,600**
General Tier 4 Members								
Normal Cost	7.22%	1.63%	8.85%	$19,046	7.18%	1.62%	8.80%	$18,938
UAAL (Before POB Credit)	13.96%	4.69%	18.65%	40,136	13.53%	4.53%	18.06%	38,867
Pension Obligation Bond Credit	-3.64%	-1.56%	-5.20%	-11,191	-3.64%	-1.57%	-5.21%	-11,212
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-1,872	-0.82%	0.00%	-0.82%	-1,765
Total Contributions	**16.67%**	**4.76%**	**21.43%**	**$46,119**	**16.25%**	**4.58%**	**20.83%**	**$44,828**

[1] For employers with active member payroll. The UAAL contribution for ACOE, expressed as a level dollar amount, is $89 K when made on April 1, 2021.

[2] Amounts are based on the December 31, 2019 projected compensation shown on page 47.

Recommended Employer Contribution Rates (continued)

County Only	December 31, 2019 Actuarial Valuation Basic	December 31, 2019 Actuarial Valuation COLA	December 31, 2019 Actuarial Valuation Total	December 31, 2019 Actuarial Valuation Estimated Annual Dollar Amount[1] ($ in '000s)	December 31, 2018 Actuarial Valuation Basic	December 31, 2018 Actuarial Valuation COLA	December 31, 2018 Actuarial Valuation Total	December 31, 2018 Actuarial Valuation Estimated Annual Dollar Amount[1] ($ in '000s)
Safety Tier 1 Members								
Normal Cost	29.04%	11.96%	41.00%	$312	28.37%	11.61%	39.98%	$304
Member Cost Sharing Contributions (Adjusted for Refunds)	-3.00%	0.00%	-3.00%	-23	-3.00%	0.00%	-3.00%	-23
UAAL (Before POB Credit)	38.85%	12.28%	51.13%	389	37.80%	11.78%	49.58%	377
Pension Obligation Bond Credit	-3.21%	-1.98%	-5.19%	-39	-3.17%	-1.97%	-5.14%	-39
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-7	-0.82%	0.00%	-0.82%	-6
Total Contributions	**60.81%**	**22.26%**	**83.07%**	**$632**	**59.18%**	**21.42%**	**80.60%**	**$613**
Safety Tier 2 Members								
Normal Cost	17.86%	3.67%	21.53%	$24,744	17.96%	3.69%	21.65%	$24,882
Member Cost Sharing Contributions (Adjusted for Refunds)	-2.94%	0.00%	-2.94%	-3,379	-2.93%	0.00%	-2.93%	-3,367
UAAL (Before POB Credit)	38.85%	12.28%	51.13%	58,763	37.80%	11.78%	49.58%	56,982
Pension Obligation Bond Credit	-3.21%	-1.98%	-5.19%	-5,965	-3.17%	-1.97%	-5.14%	-5,907
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-1,000	-0.82%	0.00%	-0.82%	-942
Total Contributions	**49.69%**	**13.97%**	**63.66%**	**$73,163**	**48.84%**	**13.50%**	**62.34%**	**$71,648**
Safety Tier 2C Members								
Normal Cost	16.31%	3.56%	19.87%	$619	16.51%	3.50%	20.01%	$623
Member Cost Sharing Contributions (Adjusted for Refunds)	0.00%	0.00%	0.00%	0	0.00%	0.00%	0.00%	0
UAAL (Before POB Credit)	38.85%	12.28%	51.13%	1,593	37.80%	11.78%	49.58%	1,544
Pension Obligation Bond Credit	-3.21%	-1.98%	-5.19%	-162	-3.17%	-1.97%	-5.14%	-160
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-27	-0.82%	0.00%	-0.82%	-26
Total Contributions	**51.08%**	**13.86%**	**64.94%**	**$2,023**	**50.32%**	**13.31%**	**63.63%**	**$1,981**

[1] Amounts are based on the December 31, 2019 projected compensation shown on page 47.

Recommended Employer Contribution Rates (continued)

County Only	December 31, 2019 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	December 31, 2018 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
Safety Tier 2D Members								
Normal Cost	17.45%	3.70%	21.15%	$3,313	17.22%	3.69%	20.91%	$3,276
Member Cost Sharing Contributions (Adjusted for Refunds)	-2.91%	0.00%	-2.91%	-456	-2.93%	0.00%	-2.93%	-459
UAAL (Before POB Credit)	38.85%	12.28%	51.13%	8,010	37.80%	11.78%	49.58%	7,767
Pension Obligation Bond Credit	-3.21%	-1.98%	-5.19%	-813	-3.17%	-1.97%	-5.14%	-805
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-136	-0.82%	0.00%	-0.82%	-128
Total Contributions	**49.31%**	**14.00%**	**63.31%**	**$9,918**	**48.10%**	**13.50%**	**61.60%**	**$9,651**
Safety Tier 4 Members								
Normal Cost	12.16%	3.26%	15.42%	$6,559	12.29%	3.29%	15.58%	$6,627
Member Cost Sharing Contributions (Adjusted for Refunds)	0.00%	0.00%	0.00%	0	0.00%	0.00%	0.00%	0
UAAL (Before POB Credit)	38.85%	12.28%	51.13%	21,748	37.80%	11.78%	49.58%	21,088
Pension Obligation Bond Credit	-3.21%	-1.98%	-5.19%	-2,208	-3.17%	-1.97%	-5.14%	-2,186
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-370	-0.82%	0.00%	-0.82%	-349
Total Contributions	**46.93%**	**13.56%**	**60.49%**	**$25,729**	**46.10%**	**13.10%**	**59.20%**	**$25,180**
All County Categories Combined								
Normal Cost	9.55%	2.07%	11.62%	$91,863	9.57%	2.07%	11.64%	$92,034
Member Cost Sharing Contributions (Adjusted for Refunds)	-0.49%	0.00%	-0.49%	-3,858	-0.49%	0.00%	-0.49%	-3,849
UAAL (Before POB Credit)	19.53%	6.39%	25.92%	204,911	18.96%	6.16%	25.12%	198,547
Pension Obligation Bond Credit	-3.54%	-1.66%	-5.20%	-41,086	-3.53%	-1.66%	-5.19%	-41,057
Implicit Retiree Health Benefit Subsidy	-0.87%	0.00%	-0.87%	-6,877	-0.82%	0.00%	-0.82%	-6,481
Total Contributions	**24.18%**	**6.80%**	**30.98%**	**$244,953**	**23.69%**	**6.57%**	**30.26%**	**$239,194**

[1] Amounts are based on the December 31, 2019 projected compensation shown on page 47.

Recommended Employer Contribution Rates (continued)

AHS, Court & First 5 Only	December 31, 2019 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	December 31, 2018 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
General Tier 1 Members								
Normal Cost	7.57%	2.75%	10.32%	$162	7.55%	2.73%	10.28%	$161
UAAL (Before POB Credit)	13.96%	4.69%	18.65%	292	13.53%	4.53%	18.06%	283
Pension Obligation Bond Credit	-3.64%	-1.56%	-5.20%	-81	-3.64%	-1.57%	-5.21%	-82
Total Contributions	**17.89%**	**5.88%**	**23.77%**	**$373**	**17.44%**	**5.69%**	**23.13%**	**$362**
General Tier 2 Members								
Normal Cost	7.74%	1.60%	9.34%	$18,156	7.77%	1.60%	9.37%	$18,214
UAAL (Before POB Credit)	13.96%	4.69%	18.65%	36,253	13.53%	4.53%	18.06%	35,106
Pension Obligation Bond Credit	-3.64%	-1.56%	-5.20%	-10,108	-3.64%	-1.57%	-5.21%	-10,128
Total Contributions	**18.06%**	**4.73%**	**22.79%**	**$44,301**	**17.66%**	**4.56%**	**22.22%**	**$43,192**
General Tier 4 Members								
Normal Cost	7.22%	1.63%	8.85%	$11,851	7.18%	1.62%	8.80%	$11,784
UAAL (Before POB Credit)	13.96%	4.69%	18.65%	24,973	13.53%	4.53%	18.06%	24,183
Pension Obligation Bond Credit	-3.64%	-1.56%	-5.20%	-6,963	-3.64%	-1.57%	-5.21%	-6,976
Total Contributions	**17.54%**	**4.76%**	**22.30%**	**$29,861**	**17.07%**	**4.58%**	**21.65%**	**$28,991**

[1] Amounts are based on the December 31, 2019 projected compensation shown on page 47.

Recommended Employer Contribution Rates (continued)

Housing Authority	December 31, 2019 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	December 31, 2018 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
General Tier 1 Members								
Normal Cost	7.57%	2.75%	10.32%	$297	7.55%	2.73%	10.28%	$296
UAAL	13.96%	4.69%	18.65%	537	13.53%	4.53%	18.06%	520
Total Contributions	**21.53%**	**7.44%**	**28.97%**	**$834**	**21.08%**	**7.26%**	**28.34%**	**$816**
General Tier 2 Members								
Normal Cost	7.74%	1.60%	9.34%	$21	7.77%	1.60%	9.37%	$21
UAAL	13.96%	4.69%	18.65%	42	13.53%	4.53%	18.06%	40
Total Contributions	**21.70%**	**6.29%**	**27.99%**	**$63**	**21.30%**	**6.13%**	**27.43%**	**$61**
General Tier 4 Members								
Normal Cost	7.22%	1.63%	8.85%	$127	7.18%	1.62%	8.80%	$126
UAAL	13.96%	4.69%	18.65%	267	13.53%	4.53%	18.06%	258
Total Contributions	**21.18%**	**6.32%**	**27.50%**	**$394**	**20.71%**	**6.15%**	**26.86%**	**$384**

[1] Amounts are based on the December 31, 2019 projected compensation shown on page 47.

Recommended Employer Contribution Rates (continued)

LARPD	December 31, 2019 Actuarial Valuation Basic	COLA	Total[1]	Estimated Annual Dollar Amount[2] ($ in '000s)	December 31, 2018 Actuarial Valuation Basic	COLA	Total[1]	Estimated Annual Dollar Amount[2] ($ in '000s)
General Tier 1 Members								
Normal Cost	7.57%	2.75%	10.32%	$64	7.55%	2.73%	10.28%	$64
UAAL	18.63%	9.12%	27.75%	173	15.70%	7.64%	23.34%	145
Total Contributions	**26.20%**	**11.87%**	**38.07%**	**$237**	**23.25%**	**10.37%**	**33.62%**	**$209**
General Tier 3 Members								
Normal Cost	11.82%	4.25%	16.07%	$291	10.92%	4.15%	15.07%	$273
UAAL	18.63%	9.12%	27.75%	503	15.70%	7.64%	23.34%	423
Total Contributions	**30.45%**	**13.37%**	**43.82%**	**$794**	**26.62%**	**11.79%**	**38.41%**	**$696**
General Tier 4 Members								
Normal Cost	7.22%	1.63%	8.85%	$168	7.18%	1.62%	8.80%	$167
UAAL	18.63%	9.12%	27.75%	526	15.70%	7.64%	23.34%	443
Total Contributions	**25.85%**	**10.75%**	**36.60%**	**$694**	**22.88%**	**9.26%**	**32.14%**	**$610**

1 For LARPD, the combined rate is 39.83% as of December 31, 2019 and 34.98% as of December 31, 2018.

2 Amounts are based on the December 31, 2019 projected compensation shown on page 47.

Recommended Employer Contribution Rates (continued)

All Categories Combined	December 31, 2019 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	December 31, 2018 Actuarial Valuation Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
All Categories Combined								
Normal Cost (Net)	8.61%	1.94%	10.55%	$119,142	8.62%	1.94%	10.56%	$119,291
UAAL (Net)	13.73%	4.28%	18.01%	203,362	13.23%	4.06%	17.29%	195,224
Total Contributions	**22.34%**	**6.22%**	**28.56%**	**$322,504**	**21.85%**	**6.00%**	**27.85%**	**$314,515**

Payroll Breakdown ($ in '000s)

	County Only	AHS, Court, & First 5	Housing Authority	LARPD	Total
General Tier 1	$7,586	$1,566	$2,879	$623	$12,654
General Tier 2	390,655	194,387	224		585,266
General Tier 3				1,811	1,811
General Tier 4	215,208	133,904	1,430	1,897	352,439
Safety Tier 1	761				761
Safety Tier 2	114,929				114,929
Safety Tier 2C	3,115				3,115
Safety Tier 2D	15,666				15,666
Safety Tier 4	42,534				42,534
Total	**$790,454**	**$329,857**	**$4,533**	**$4,331**	**$1,129,175**

[1] Amounts are based on the December 31, 2019 projected compensation shown above.

Recommended Employer Contribution Rates (continued)

A breakdown of the approximate[1] portion of the employer contribution rate by the various types of benefit is as follows:

	General	Safety
Service and non-service connected disability benefits	8%	24%
Service retirement and other benefits	92%	76%
Total	**100%**	**100%**

[1] In developing these percentages, we made the simplifying assumption that the liability for active and inactive members (including members who have already retired) can be approximated by the proportion of the normal cost required to fund disability and non-disability benefits.

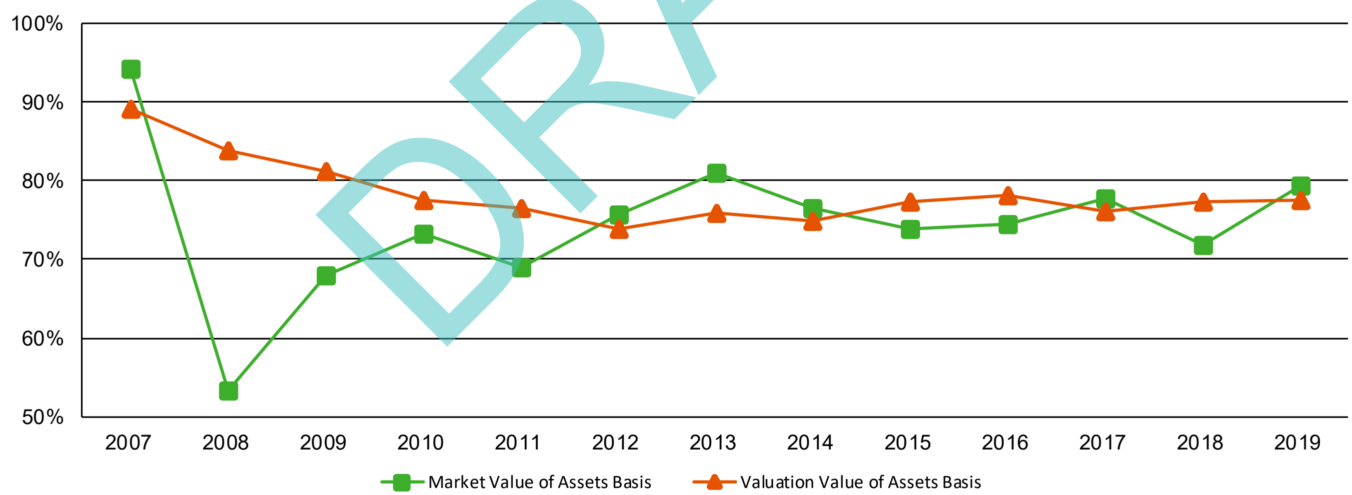
G. Funded Status

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

The chart below depicts a history of the funded ratio for the 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 Valuation or Market Value of Assets is used.

Funded Ratio for Years Ended December 31, 2007 – 2019[1]



[1] Prior to the December 31, 2013 valuation, the Funded Ratio on a Market Value basis was calculated using the end-of-year Valuation Value of Assets plus any deferred market gains. Beginning with the December 31, 2013 valuation, the Market Value of Assets for this purpose includes either one-half of any deferred market gains (after adjustment to include the balance in the Contingency Reserve) or a proportion of any deferred investment losses after netting out the Contingency Reserve that is commensurate with the size of the valuation reserves.

Schedule of Funding Progress for Years Ended December 31, 2010 – 2019

Actuarial Valuation Date as of December 31	Valuation Value of Assets[1] (a)	Actuarial Accrued Liability (AAL)[2] (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (%) (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (%) [(b) - (a)] / (c)
2010	$4,776,128,000	$6,162,740,000	$1,386,612,000	77.5%	$898,342,000	154.4%
2011	4,868,689,000	6,359,483,000	1,490,794,000	76.6%	892,489,000	167.0%
2012	4,883,872,000	6,612,929,000	1,729,057,000	73.9%	906,500,000	190.7%
2013	5,210,944,000	6,861,687,000	1,650,743,000	75.9%	916,803,000	180.1%
2014	5,681,097,000	7,592,072,000	1,910,975,000	74.8%	948,848,000	201.4%
2015	6,083,536,000	7,875,020,000	1,791,484,000	77.3%	969,534,000	184.8%
2016	6,436,138,000	8,237,715,000	1,801,577,000	78.1%	1,003,651,000	179.5%
2017	6,830,379,000	8,987,061,000	2,156,682,000	76.0%	1,055,661,000	204.3%
2018	7,239,327,000	9,376,397,000	2,137,070,000	77.2%	1,093,735,000	195.4%
2019	7,599,977,000	9,795,019,000	2,195,042,000	77.6%	1,129,175,000	194.4%

[1] Excludes assets for SRBR and other non-valuation reserves, and includes the following (whole dollar) reimbursement amounts of implicit retiree health benefit subsidy paid by the County (amounts beginning with the December 31, 2010 valuation date are estimates provided by ACERA):

Actuarial Valuation Date	Reimbursement Amount	For Year
12/31/2009	$5,287,767	2009
12/31/2010	4,500,000	2010
12/31/2011	4,411,206	2011
12/31/2012	7,370,466	2012
12/31/2013	6,993,032	2013
12/31/2014	5,215,355	2014

Actuarial Valuation Date	Reimbursement Amount	For Year
12/31/2015	$5,324,502	2015
12/31/2016	8,865,275	2016
12/31/2017	5,830,283	2017
12/31/2018	6,939,808	2018
12/31/2019	6,510,876	2019

[2] Excludes liabilities for SRBR and other non-valuation reserves.

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 for Year Ended December 31, 2019

	Basic ($ in '000s)	COLA ($ in '000s)	Total ($ in '000s)
Actuarial present value of future benefits			
• Present value of benefits for retired members and beneficiaries	$3,736,215	$2,270,011	$6,006,226
• Present value of benefits for inactive vested members	221,112	39,641	260,753
• Present value of benefits for active members	4,255,512	997,239	5,252,751
Total actuarial present value of future benefits	**$8,212,839**	**$3,306,891**	**$11,519,730**
Current and future assets			
• Total valuation value of assets	$5,164,550	$2,435,427	$7,599,977
• Present value of future contributions by members	705,079	175,682	880,761
• Present value of future employer contributions for:			
• Entry age normal cost	697,986	145,964	843,950
• Unfunded actuarial accrued liability	1,645,224	549,818	2,195,042
Total of current and future assets	**$8,212,839**	**$3,306,891**	**$11,519,730**

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 since it is based on the current level of assets.

The current AVR is about 6.9. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 6.9% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.5% of payroll decrease/(increase) in the required contribution for each 1% asset gain or 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 LVR is about 8.7, but is 7.4 for General (non-LARPD) compared to 14.1 for General (LARPD) and 15.4 for Safety. This means that assumption changes will have a greater impact on employer contribution rates for General (LARPD) and Safety than for General (non-LARPD).

The increase in the AVR and LVR for LARPD this year was caused by an about 12% reduction in the payroll for LARPD (relative to the assumption) as reported in the December 321, 2019 valuation.

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

Volatility Ratios for Years Ended 2010 – 2019

	Asset Volatility Ratio[1,2]				Liability Volatility Ratio[2]			
Year Ended December 31	General (non-LARPD)	General (LARPD)	Safety	Total	General (non-LARPD)	General (LARPD)	Safety	Total
2010	4.6	3.9	7.0	5.0	6.0	5.6	11.2	6.9
2011	4.5	4.2	7.0	4.9	6.2	6.8	11.9	7.1
2012	5.0	4.9	8.2	5.5	6.3	7.0	12.7	7.3
2013	5.5	5.7	9.1	6.1	6.4	7.4	13.1	7.5
2014	5.5	5.9	9.3	6.1	6.9	7.7	13.9	8.0
2015	5.5	5.7	8.8	6.0	7.0	7.3	13.7	8.1
2016	5.6	6.1	8.9	6.1	7.1	7.7	13.8	8.2
2017	6.0	7.6	9.8	6.6	7.3	9.1	14.6	8.5
2018	5.5	9.0	9.5	6.2	7.3	12.5	15.1	8.6
2019	6.1	11.1	10.8	6.9	7.4	14.1	15.4	8.7

[1] Prior to the December 31, 2013 valuation, the Asset Volatility Ratio was calculated using the end-of-year Valuation Value of Assets plus any deferred market gains. Beginning with the December 31, 2013 valuation, the adjusted Valuation Value of Assets for this purpose includes either one-half of any deferred market gains (after restoring the Contingency Reserve to 1% of total assets, if applicable) or a proportion of any deferred investment losses after netting out the Contingency Reserve that is commensurate with the size of the valuation reserves.

[2] Prior to the December 31, 2018 valuation, volatility ratios for the General (non-LARPD) group were calculated including assets, liabilities, and payroll attributable to Tier 1 members from the Livermore Area Recreation and Park District (LARPD) and the Alameda County Office of Education (payroll was $0 as of December 31, 2017). Beginning with the December 31, 2018 valuation, the assets, liabilities, and payroll attributable to LARPD Tier 1 members are included in calculating the volatility ratios for the General (LARPD) group, and the assets and liabilities attributable to Office of Education Tier 1 members are excluded from this table.

J. Risk Assessment

Since 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. We recommend a more detailed assessment of the risks to provide the Board with a better understanding of the risks inherent 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. As noted in the valuation highlights section of this report, a copy of the risk assessment report including the analysis recommended by Segal in consultation with ACERA staff will be available later in 2020.

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 52, a 1% asset gain or loss (relative to the assumed investment return) translates to about 6.9% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.5% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The year-by-year market value rate of return over the last 10 years has ranged from a low of -4.62% to a high of 19.53%.

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

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

- Other Risks

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

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

Evaluation of Historical Trends

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

- The funded percentage on the Valuation Value of Assets has fluctuated within a relatively narrow band from 73.9% to 78.1%. This is primarily due to contributions made to amortize the UAAL (i.e., amortizing each gain/loss layer of UAAL over 20 years) being roughly offset by lower than assumed average investment returns over recent years on a smoothed basis. For a more detailed history see *Section 2, Subsection G, Funded Status* starting on page 49.
- The geometric average investment return on the Actuarial Value of Assets over the last 10 years was 6.53%. This includes a high of 12.05% return and a low of 1.67%. The average over the last 5 years was 7.41%. For more details see the Investment Return table in *Section 2, Subsection C* on page 26.

- Beyond investment losses, the primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. For example, the assumption changes in 2014 added $459 million in unfunded liability. The assumption changes in 2017 changed the discount rate from 7.60% to 7.25% (as well as various other changes) adding $396 million in unfunded liability. For more details on unfunded liability changes see *Section 3, Exhibit H, Table of Amortization Bases* starting on page 82. A graphical representation of historical changes in UAAL by source will be included in the stand-alone risk assessment report.
- The plan's funding policy effectively deals with these unfunded liabilities over time. This can be seen most clearly in the *Section 3, Exhibit I, Projection of UAAL Balances and Payments* provided on pages 88 and 89.

Maturity Measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.69 to 0.89. 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 17.

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 $101 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, the plan currently has a relatively low level of negative cash flow. For more details on historical cash flows see the Comparison of Contributions with Benefits in *Section 2, Subsection B* on page 21.

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* starting on page 52.

Section 3: Supplemental Information

Exhibit A: Table of Plan Coverage

Total Plan

Category	Year Ended December 31 2019	Year Ended December 31 2018	Change From Prior Year
Active members in valuation:			
• Number	11,336	11,349	-0.1%
• Average age	47.1	47.0	0.1
• Average years of service	11.3	11.4	-0.1
• Total projected compensation	$1,129,176,948	$1,093,735,678	3.2%
• Average projected compensation	$99,610	$96,373	3.4%
• Account balances	$1,258,309,062	$1,223,982,697	2.8%
• Total active vested members	7,699	7,665	0.4%
Inactive vested members:			
• Number[1]	2,821	2,568	9.9%
• Average Age	47.3	47.9	-0.6
Retired members:			
• Number in pay status	7,888	7,628	3.4%
• Average age	72.1	72.0	0.1
• Average monthly benefit[2]	$4,425	$4,301	2.9%
Disabled members:			
• Number in pay status	951	924	2.9%
• Average age	64.7	64.7	0.0
• Average monthly benefit[2]	$3,672	$3,565	3.0%
Beneficiaries:			
• Number in pay status	1,239	1,231	0.6%
• Average age	75.5	75.2	0.3
• Average monthly benefit[2]	$2,448	$2,329	5.1%

Notes: For all the General and Safety Tiers combined, the average age at retirement for the service retirees and disabled retirees was 60.1 and 49.8, respectively.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

General Tier 1

Category	Year Ended December 31 2019	Year Ended December 31 2018	Change From Prior Year
Active members in valuation:			
• Number	133	158	-15.8%
• Average age	60.6	60.0	0.6
• Average years of service	30.3	29.9	0.4
• Total projected compensation	$12,653,976	$14,710,117	-14.0%
• Average projected compensation	$95,143	$93,102	2.2%
• Account balances	$55,949,318	$63,233,064	-11.5%
• Total active vested members	133	158	-15.8%
Inactive vested members:			
• Number[1]	43	52	-17.3%
• Average Age	62.7	62.3	0.4
Retired members:			
• Number in pay status	3,084	3,189	-3.3%
• Average age	76.8	76.3	0.5
• Average monthly benefit[2]	$5,143	$4,902	4.9%
Disabled members:			
• Number in pay status	143	151	-5.3%
• Average age	74.3	73.8	0.5
• Average monthly benefit[2]	$3,348	$3,209	4.3%
Beneficiaries:			
• Number in pay status	680	706	-3.7%
• Average age	80.3	79.9	0.4
• Average monthly benefit[2]	$2,465	$2,332	5.7%

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the General Tier 1 service and disabled retirees was 59.3 and 51.7, respectively.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

General Tier 2

Category	Year Ended December 31: 2019	Year Ended December 31: 2018	Change From Prior Year
Active members in valuation:			
• Number	5,659	6,075	-6.8%
• Average age	52.1	51.6	0.5
• Average years of service	16.6	15.9	0.7
• Total projected compensation	$585,265,989	$600,715,279	-2.6%
• Average projected compensation	$103,422	$98,883	4.6%
• Account balances	$774,077,768	$772,973,971	0.1%
• Total active vested members	5,528	5,926	-6.7%
Inactive vested members:			
• Number[1]	1,768	1,792	-1.3%
• Average Age	50.3	50.0	0.3
Retired members:			
• Number in pay status	3,562	3,250	9.6%
• Average age	69.6	69.4	0.2
• Average monthly benefit[2]	$2,855	$2,693	6.0%
Disabled members:			
• Number in pay status	472	458	3.1%
• Average age	64.8	64.5	0.3
• Average monthly benefit[2]	$2,681	$2,616	2.5%
Beneficiaries:			
• Number in pay status	283	255	11.0%
• Average age	68.0	66.8	1.2
• Average monthly benefit[2]	$1,447	$1,360	6.4%

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the General Tier 2 service and disabled retirees was 62.5 and 50.6, respectively.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

General Tier 3

Category	Year Ended December 31 2019	Year Ended December 31 2018	Change From Prior Year
Active members in valuation:			
• Number	20	24	-16.7%
• Average age	53.9	54.0	-0.1
• Average years of service	14.0	15.8	-1.8
• Total projected compensation	$1,811,498	$2,050,537	-11.7%
• Average projected compensation	$90,575	$85,439	6.0%
• Account balances	$3,421,771	$4,558,015	-24.9%
• Total active vested members	18	22	-18.2%
Inactive vested members:			
• Number[1]	13	12	8.3%
• Average Age	49.5	49.2	0.3
Retired members:			
• Number in pay status	30	26	15.4%
• Average age	63.4	63.0	0.4
• Average monthly benefit[2]	$4,429	$4,169	6.2%
Disabled members:			
• Number in pay status	1	1	0.0%
• Average age	66.1	65.1	1.0
• Average monthly benefit[2]	$2,191	$2,127	3.0%
Beneficiaries:			
• Number in pay status	3	3	0.0%
• Average age	63.0	62.0	1.0
• Average monthly benefit[2]	$3,493	$3,391	3.0%

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the General Tier 3 service and disabled retirees was 58.7 and 62.6, respectively.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

General Tier 4

Category	Year Ended December 31: 2019	Year Ended December 31: 2018	Change From Prior Year
Active members in valuation:			
• Number	4,148	3,703	12.0%
• Average age	41.0	40.2	0.8
• Average years of service	3.1	2.7	0.4
• Total projected compensation	$352,439,734[1]	$303,387,662	16.2%
• Average projected compensation	$84,966	$81,930	3.7%
• Account balances	$88,004,346	$62,652,374	40.5%
• Total active vested members	895	450	98.9%
Inactive vested members:			
• Number[2]	820	552	48.6%
• Average Age	40.5	40.0	0.5
Retired members:			
• Number in pay status	21	8	162.5%
• Average age	67.1	69.6	-2.5
• Average monthly benefit[3]	$1,178	$1,447	-18.6%
Disabled members:			
• Number in pay status	2	1	100.0%
• Average age	61.3	66.9	-5.6
• Average monthly benefit[3]	$2,017	$1,727	16.8%
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

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the General Tier 4 service and disabled retirees was 66.0 and 58.2, respectively.

[1] Projected compensation for 2020 has been limited. It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2020 is equal to $126,291. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of $126,291, or $151,549). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2020. (reference: Section 7522.10(d)).

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

[3] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier 1

Category	Year Ended December 31: 2019	Year Ended December 31: 2018	Change From Prior Year
Active members in valuation:			
• Number	3	4	-25.0%
• Average age	64.5	61.9	2.6
• Average years of service	29.2	29.2	0.0
• Total projected compensation	$761,481	$972,954	-21.7%
• Average projected compensation	$253,827	$243,239	4.4%
• Account balances	$3,309,986	$3,992,044	-17.1%
• Total active vested members	3	4	-25.0%
Inactive vested members:			
• Number[1]	6	8	-25.0%
• Average Age	62.7	59.4	3.3
Retired members:			
• Number in pay status	605	612	-1.1%
• Average age	73.0	72.2	0.8
• Average monthly benefit[2]	$8,546	$8,303	2.9%
Disabled members:			
• Number in pay status	94	99	-5.1%
• Average age	70.4	69.7	0.7
• Average monthly benefit[2]	$5,874	$5,750	2.2%
Beneficiaries:			
• Number in pay status	196	195	0.5%
• Average age	75.4	74.8	0.6
• Average monthly benefit[2]	$3,743	$3,481	7.5%

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the Safety Tier 1 service and disabled retirees was 54.9 and 48.4, respectively.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier 2

Category	Year Ended December 31 2019	Year Ended December 31 2018	Change From Prior Year
Active members in valuation:			
• Number	844	917	-8.0%
• Average age	47.1	46.5	0.6
• Average years of service	17.1	16.3	0.8
• Total projected compensation	$114,928,537	$119,570,783	-3.9%
• Average projected compensation	$136,171	$130,393	4.4%
• Account balances	$293,552,702	$285,854,627	2.7%
• Total active vested members	844	916	-7.9%
Inactive vested members:			
• Number[1]	122	125	-2.4%
• Average Age	47.2	47.1	0.1
Retired members:			
• Number in pay status	579	537	7.8%
• Average age	63.0	62.8	0.2
• Average monthly benefit[2]	$6,107	$5,982	2.1%
Disabled members:			
• Number in pay status	233	212	9.9%
• Average age	56.7	56.5	0.2
• Average monthly benefit[2]	$4,996	$4,855	2.9%
Beneficiaries:			
• Number in pay status	77	72	6.9%
• Average age	61.7	60.1	1.6
• Average monthly benefit[2]	$2,634	$2,573	2.4%

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the Safety Tier 2 service and disabled retirees was 55.6 and 47.3, respectively.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier 2C

Category	Year Ended December 31: 2019	2018	Change From Prior Year
Active members in valuation:			
• Number	25	28	-10.7%
• Average age	44.0	43.2	0.8
• Average years of service	9.1	8.0	1.1
• Total projected compensation	$3,115,284	$3,348,788	-7.0%
• Average projected compensation	$124,611	$119,600	4.2%
• Account balances	$2,926,564	$2,724,956	7.4%
• Total active vested members	24	24	0.0%
Inactive vested members:			
• Number[1]	10	7	42.9%
• Average Age	45.0	44.6	0.4
Retired members:			
• Number in pay status	1	1	0.0%
• Average age	52.5	51.5	1.0
• Average monthly benefit[2]	$858	$841	2.0%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the Safety Tier 2C service retirees was 50.0.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier 2D

Category	Year Ended December 31 2019	Year Ended December 31 2018	Change From Prior Year
Active members in valuation:			
• Number	125	121	3.3%
• Average age	41.1	39.9	1.2
• Average years of service	8.9	8.0	0.9
• Total projected compensation	$15,666,177	$14,392,198	8.9%
• Average projected compensation	$125,329	$118,944	5.4%
• Account balances	$16,239,989	$13,249,563	22.6%
• Total active vested members	110	102	7.8%
Inactive vested members:			
• Number[1]	12	10	20.0%
• Average Age	41.3	40.7	0.6
Retired members:			
• Number in pay status	1	2	-50.0%
• Average age	53.7	56.0	-2.3
• Average monthly benefit[2]	$616	$1,182	-47.9%
Disabled members:			
• Number in pay status	6	2	200.0%
• Average age	49.6	45.4	4.2
• Average monthly benefit[2]	$4,254	$4,586	-7.2%
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[2]	N/A	N/A	N/A

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the Safety Tier 2D service and disabled retirees was 52.0 and 47.9, respectively.

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from SRBR.

Exhibit A: Table of Plan Coverage (continued)

Safety Tier 4

Category	Year Ended December 31: 2019	2018	Change From Prior Year
Active members in valuation:			
• Number	379	319	18.8%
• Average age	36.1	35.9	0.2
• Average years of service	3.8	3.5	0.3
• Total projected compensation	$42,534,273[1]	$34,587,361	23.0%
• Average projected compensation	$112,228	$108,424	3.5%
• Account balances	$20,826,619	$14,744,082	41.3%
• Total active vested members	144	63	128.6%
Inactive vested members:			
• Number[2]	27	10	170.0%
• Average Age	34.1	36.4	-2.3
Retired members:			
• Number in pay status	5	3	66.7%
• Average age	59.9	57.4	2.5
• Average monthly benefit[3]	$1,437	$1,478	-2.8%
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

Notes: Based on the data provided for the December 31, 2019 actuarial valuation, the average age at retirement for the Safety Tier 4 service retirees was 58.9.

[1] Projected compensation for 2020 has been limited. It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2020 is equal to $126,291. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of $126,291, or $151,549). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2020. (reference: Section 7522.10(d)).

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

[3] Excludes supplemental benefits paid from SRBR.

Exhibit B: Members in Active Service as of December 31, 2019 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	106	106	- -	- -	- -	- -	- -	- -	- -	- -
	$65,779	$65,779	- -	- -	- -	- -	- -	- -	- -	- -
25 – 29	604	547	57	- -	- -	- -	- -	- -	- -	- -
	78,791	77,722	$89,056	- -	- -	- -	- -	- -	- -	- -
30 – 34	1,235	819	364	52	- -	- -	- -	- -	- -	- -
	89,308	85,629	96,627	$96,016	- -	- -	- -	- -	- -	- -
35 – 39	1,499	637	441	383	37	1	- -	- -	- -	- -
	97,149	87,876	100,349	107,558	$108,414	$189,374	- -	- -	- -	- -
40 – 44	1,512	463	350	396	252	51	- -	- -	- -	- -
	101,949	92,042	100,044	111,529	105,282	114,117	- -	- -	- -	- -
45 – 49	1,669	357	280	351	417	230	33	1	- -	- -
	106,733	92,490	103,417	110,711	111,068	119,249	$105,482	$79,016	- -	- -
50 – 54	1,562	297	220	260	347	235	157	45	1	- -
	105,725	99,004	102,184	105,872	107,156	116,062	107,322	96,043	$102,598	- -
55 – 59	1,503	224	198	223	309	192	172	160	25	- -
	101,561	92,209	105,156	104,519	96,848	104,439	107,225	106,611	95,357	- -
60 – 64	1,115	144	173	157	221	147	118	108	41	6
	103,643	92,488	108,326	100,326	100,948	105,626	105,675	111,828	116,071	$101,537
65 – 69	419	44	73	80	70	53	33	46	14	6
	101,070	97,303	103,839	92,379	91,585	97,359	108,808	113,354	126,807	157,540
70 & over	112	15	15	18	24	10	16	5	2	7
	95,617	85,274	114,975	83,364	95,467	101,439	91,820	83,888	98,478	116,248
Total	**11,336**	**3,653**	**2,171**	**1,920**	**1,677**	**919**	**529**	**365**	**83**	**19**
	$99,610	**$87,645**	**$101,253**	**$106,609**	**$104,340**	**$111,496**	**$106,432**	**$107,315**	**$111,056**	**$124,642**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 1

Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
		Years of Service								
Under 25	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
25 – 29	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
30 – 34	1	- -	1	- -	- -	- -	- -	- -	- -	- -
	$61,296	- -	$61,296	- -	- -	- -	- -	- -	- -	- -
35 – 39	2	- -	- -	2	- -	- -	- -	- -	- -	- -
	71,012	- -	- -	$71,012	- -	- -	- -	- -	- -	- -
40 – 44	6	- -	2	3	1	- -	- -	- -	- -	- -
	82,837	- -	74,667	70,864	$135,095	- -	- -	- -	- -	- -
45 – 49	5	- -	1	2	2	- -	- -	- -	- -	- -
	73,313	- -	55,082	85,807	69,933	- -	- -	- -	- -	- -
50 – 54	10	- -	- -	3	6	1	- -	- -	- -	- -
	83,596	- -	- -	67,167	93,607	$72,821	- -	- -	- -	- -
55 – 59	24	- -	- -	- -	4	2	1	4	13	- -
	84,391	- -	- -	- -	74,156	76,308	$60,788	$88,586	$89,308	- -
60 – 64	51	- -	3	3	1	1	3	7	27	6
	97,635	- -	101,436	83,067	73,173	143,952	61,511	94,138	102,076	$101,537
65 – 69	27	- -	- -	2	2	2	2	3	10	6
	108,615	- -	- -	129,108	83,927	64,597	96,164	80,386	99,861	157,540
70 & over	7	- -	- -	- -	- -	- -	- -	- -	- -	7
	116,248	- -	- -	- -	- -	- -	- -	- -	- -	116,248
Total	**133**	**- -**	**7**	**15**	**16**	**6**	**6**	**14**	**50**	**19**
	$95,143	**- -**	**$81,432**	**$82,343**	**$85,891**	**$83,097**	**$72,941**	**$89,605**	**$98,313**	**$124,642**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

General 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	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
25 – 29	5	2	3	- -	- -	- -	- -	- -	- -	- -
	$60,212	$56,971	$62,372	- -	- -	- -	- -	- -	- -	- -
30 – 34	158	12	115	31	- -	- -	- -	- -	- -	- -
	88,008	101,171	91,039	$71,670	- -	- -	- -	- -	- -	- -
35 – 39	487	21	194	248	24	- -	- -	- -	- -	- -
	101,953	114,695	108,316	97,506	$85,322	- -	- -	- -	- -	- -
40 – 44	738	26	192	295	191	34	- -	- -	- -	- -
	102,684	138,341	104,274	105,785	93,840	$89,212	- -	- -	- -	- -
45 – 49	926	23	145	278	315	137	27	1	- -	- -
	106,078	140,974	109,994	106,507	104,696	101,248	$92,538	$79,016	- -	- -
50 – 54	1,024	16	134	226	281	179	145	42	1	- -
	105,983	171,483	109,562	104,251	102,679	110,027	103,390	92,836	$102,598	- -
55 – 59	1,106	16	113	197	281	170	168	149	12	- -
	102,101	124,375	105,988	103,136	94,584	100,772	106,539	106,093	101,910	- -
60 – 64	826	13	98	143	211	139	113	98	11	- -
	105,979	117,179	120,310	98,112	100,332	105,286	106,364	111,812	128,516	- -
65 – 69	304	2	42	71	66	46	31	43	3	- -
	100,077	111,693	107,252	89,095	87,922	97,964	109,623	115,654	229,648	- -
70 & over	85	1	10	18	24	9	16	5	2	- -
	93,965	87,393	126,268	83,364	95,467	84,411	91,820	83,888	98,478	- -
Total	**5,659**	**132**	**1,046**	**1,507**	**1,393**	**714**	**500**	**338**	**29**	**- -**
	$103,422	**$129,877**	**$106,936**	**$101,495**	**$98,812**	**$103,125**	**$104,551**	**$106,912**	**$125,003**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 3

		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	2	2	- -	- -	- -	- -	- -	- -	- -	- -
	$109,341	$109,341	- -	- -	- -	- -	- -	- -	- -	- -
40 – 44	1	- -	- -	- -	- -	1	- -	- -	- -	- -
	74,323	- -	- -	- -	- -	$74,323	- -	- -	- -	- -
45 – 49	2	- -	1	- -	- -	1	- -	- -	- -	- -
	78,428	- -	$74,823	- -	- -	82,033	- -	- -	- -	- -
50 – 54	4	- -	2	1	- -	1	- -	- -	- -	- -
	80,363	- -	86,758	$74,323	- -	73,613	- -	- -	- -	- -
55 – 59	6	- -	1	3	2	- -	- -	- -	- -	- -
	92,683	- -	103,200	100,117	$76,275	- -	- -	- -	- -	- -
60 – 64	4	- -	2	- -	1	1	- -	- -	- -	- -
	99,085	- -	107,729	- -	73,717	107,165	- -	- -	- -	- -
65 – 69	1	- -	- -	- -	- -	- -	- -	- -	1	- -
	87,746	- -	- -	- -	- -	- -	- -	- -	$87,746	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	**20**	**2**	**6**	**4**	**3**	**4**	**- -**	**- -**	**1**	**- -**
	$90,575	**$109,341**	**$94,500**	**$93,668**	**$75,423**	**$84,283**	**- -**	**- -**	**$87,746**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 4

		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	93	93	- -	- -	- -	- -	- -	- -	- -	- -
	$61,889	$61,889	- -	- -	- -	- -	- -	- -	- -	- -
25 – 29	508	476	32	- -	- -	- -	- -	- -	- -	- -
	74,567	74,743	$71,936	- -	- -	- -	- -	- -	- -	- -
30 – 34	900	743	157	- -	- -	- -	- -	- -	- -	- -
	84,676	84,227	86,803	- -	- -	- -	- -	- -	- -	- -
35 – 39	770	573	194	3	- -	- -	- -	- -	- -	- -
	85,581	85,400	86,379	$68,384	- -	- -	- -	- -	- -	- -
40 – 44	545	417	122	5	1	- -	- -	- -	- -	- -
	87,530	87,593	87,993	72,073	$82,033	- -	- -	- -	- -	- -
45 – 49	440	324	113	2	1	- -	- -	- -	- -	- -
	89,040	88,093	91,151	126,291	82,985	- -	- -	- -	- -	- -
50 – 54	337	259	74	2	2	- -	- -	- -	- -	- -
	89,623	90,762	85,618	76,529	103,420	- -	- -	- -	- -	- -
55 – 59	266	198	61	6	- -	- -	1	- -	- -	- -
	88,485	87,082	91,645	96,335	- -	- -	$126,291	- -	- -	- -
60 – 64	193	129	61	2	1	- -	- -	- -	- -	- -
	88,004	89,542	83,303	113,017	126,291	- -	- -	- -	- -	- -
65 – 69	77	42	31	4	- -	- -	- -	- -	- -	- -
	96,605	96,617	99,215	76,255	- -	- -	- -	- -	- -	- -
70 & over	19	14	5	- -	- -	- -	- -	- -	- -	- -
	87,034	85,122	92,388	- -	- -	- -	- -	- -	- -	- -
Total	**4,148**	**3,268**	**850**	**24**	**5**	**- -**	**1**	**- -**	**- -**	**- -**
	$84,966	**$84,292**	**$87,374**	**$86,676**	**$99,630**	**- -**	**$126,291**	**- -**	**- -**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

Safety 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	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
60 – 64	2	- -	- -	- -	- -	- -	- -	1	1	- -
	$238,240	- -	- -	- -	- -	- -	- -	$122,919	$353,562	- -
65 – 69	1	- -	- -	- -	1	- -	- -	- -	- -	- -
	285,000	- -	- -	- -	$285,000	- -	- -	- -	- -	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	**3**	**- -**	**- -**	**- -**	**1**	**- -**	**- -**	**1**	**1**	**- -**
	$253,827	**- -**	**- -**	**- -**	**$285,000**	**- -**	**- -**	**$122,919**	**$353,562**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

Safety 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	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
25 – 29	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
30 – 34	19	- -	- -	19	- -	- -	- -	- -	- -	- -
	$132,836	- -	- -	$132,836	- -	- -	- -	- -	- -	- -
35 – 39	133	- -	4	116	12	1	- -	- -	- -	- -
	133,275	- -	$128,645	130,865	$153,434	$189,374	- -	- -	- -	- -
40 – 44	166	- -	2	91	57	16	- -	- -	- -	- -
	139,662	- -	107,939	133,223	142,671	169,528	- -	- -	- -	- -
45 – 49	259	- -	4	65	93	92	5	- -	- -	- -
	138,010	- -	127,732	128,743	134,468	146,459	$177,099	- -	- -	- -
50 – 54	157	- -	5	26	58	54	11	3	- -	- -
	134,278	- -	116,998	128,833	130,374	137,652	157,212	$140,948	- -	- -
55 – 59	70	- -	3	16	22	20	2	7	- -	- -
	133,009	- -	123,107	126,355	131,756	138,426	178,513	127,918	- -	- -
60 – 64	30	- -	3	9	6	6	2	2	2	- -
	130,757	- -	147,052	138,445	125,809	106,866	132,964	168,970	$117,816	- -
65 – 69	9	- -	- -	3	1	5	- -	- -	- -	- -
	131,220	- -	- -	167,102	155,209	104,893	- -	- -	- -	- -
70 & over	1	- -	- -	- -	- -	1	- -	- -	- -	- -
	254,687	- -	- -	- -	- -	254,687	- -	- -	- -	- -
Total	**844**	**- -**	**21**	**345**	**249**	**195**	**20**	**12**	**2**	**- -**
	$136,171	**- -**	**$125,564**	**$131,346**	**$135,941**	**$143,580**	**$161,889**	**$138,017**	**$117,816**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

Safety Tier 2C

		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	6	- -	5	1	- -	- -	- -	- -	- -	- -
	$126,164	- -	$128,505	$114,459	- -	- -	- -	- -	- -	- -
35 – 39	4	- -	3	1	- -	- -	- -	- -	- -	- -
	102,758	- -	109,243	83,305	- -	- -	- -	- -	- -	- -
40 – 44	6	- -	6	- -	- -	- -	- -	- -	- -	- -
	128,936	- -	128,936	- -	- -	- -	- -	- -	- -	- -
45 – 49	4	- -	2	1	- -	- -	1	- -	- -	- -
	109,889	- -	117,576	107,519	- -	- -	$96,887	- -	- -	- -
50 – 54	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
55 – 59	2	- -	2	- -	- -	- -	- -	- -	- -	- -
	159,810	- -	159,810	- -	- -	- -	- -	- -	- -	- -
60 – 64	3	1	2	- -	- -	- -	- -	- -	- -	- -
	138,157	$92,458	161,006	- -	- -	- -	- -	- -	- -	- -
65 – 69	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	**25**	**1**	**20**	**3**	**- -**	**- -**	**1**	**- -**	**- -**	**- -**
	$124,611	**$92,458**	**$131,033**	**$101,761**	**- -**	**- -**	**$96,887**	**- -**	**- -**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

Safety Tier 2D

		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	1	- -	1	- -	- -	- -	- -	- -	- -	- -
	$129,247	- -	$129,247	- -	- -	- -	- -	- -	- -	- -
30 – 34	33	- -	32	1	- -	- -	- -	- -	- -	- -
	126,705	- -	126,517	$132,729	- -	- -	- -	- -	- -	- -
35 – 39	31	3	14	13	1	- -	- -	- -	- -	- -
	118,732	$133,035	125,492	107,868	$122,409	- -	- -	- -	- -	- -
40 – 44	23	6	13	2	2	- -	- -	- -	- -	- -
	132,833	150,675	125,407	131,316	129,096	- -	- -	- -	- -	- -
45 – 49	20	2	9	3	6	- -	- -	- -	- -	- -
	123,365	149,249	134,533	116,801	101,266	- -	- -	- -	- -	- -
50 – 54	8	3	2	2	- -	- -	1	- -	- -	- -
	119,198	120,667	137,763	93,702	- -	- -	$128,651	- -	- -	- -
55 – 59	7	1	5	1	- -	- -	- -	- -	- -	- -
	131,894	153,096	136,031	90,007	- -	- -	- -	- -	- -	- -
60 – 64	2	- -	1	- -	1	- -	- -	- -	- -	- -
	137,830	- -	164,039	- -	111,621	- -	- -	- -	- -	- -
65 – 69	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	**125**	**15**	**77**	**22**	**10**	**- -**	**1**	**- -**	**- -**	**- -**
	$125,329	**$141,117**	**$128,513**	**$110,248**	**$109,982**	**- -**	**$128,651**	**- -**	**- -**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit B: Members in Active Service as of December 31, 2019 by Age, Years of Service, and Average Projected Compensation (continued)

Safety Tier 4

		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	13	13	- -	- -	- -	- -	- -	- -	- -	- -
	$93,606	$93,606	- -	- -	- -	- -	- -	- -	- -	- -
25 – 29	90	69	21	- -	- -	- -	- -	- -	- -	- -
	103,108	98,867	$117,042	- -	- -	- -	- -	- -	- -	- -
30 – 34	118	64	54	- -	- -	- -	- -	- -	- -	- -
	107,272	98,998	117,078	- -	- -	- -	- -	- -	- -	- -
35 – 39	70	38	32	- -	- -	- -	- -	- -	- -	- -
	112,852	105,683	121,365	- -	- -	- -	- -	- -	- -	- -
40 – 44	27	14	13	- -	- -	- -	- -	- -	- -	- -
	114,027	113,450	114,649	- -	- -	- -	- -	- -	- -	- -
45 – 49	13	8	5	- -	- -	- -	- -	- -	- -	- -
	119,725	116,978	124,122	- -	- -	- -	- -	- -	- -	- -
50 – 54	22	19	3	- -	- -	- -	- -	- -	- -	- -
	146,387	146,893	143,182	- -	- -	- -	- -	- -	- -	- -
55 – 59	22	9	13	- -	- -	- -	- -	- -	- -	- -
	138,692	141,052	137,058	- -	- -	- -	- -	- -	- -	- -
60 – 64	4	1	3	- -	- -	- -	- -	- -	- -	- -
	143,256	151,549	140,491	- -	- -	- -	- -	- -	- -	- -
65 – 69	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	**379**	**235**	**144**	**- -**	**- -**	**- -**	**- -**	**- -**	**- -**	**- -**
	$112,228	**$106,922**	**$120,886**	**- -**	**- -**	**- -**	**- -**	**- -**	**- -**	**- -**

Notes: Age and years of service were projected from November 30, 2019 to December 31, 2019.

Exhibit C: Reconciliation of Member Data

	Active Members	Inactive Vested Members[1]	Retired Members	Disabled Members	Beneficiaries	Total
Number as of December 31, 2018	**11,349**	**2,568**	**7,628**	**924**	**1,231**	**23,700**
• New members	911	0	0	0	69	980
• Terminations – with vested rights	(394)	394	0	0	0	0
• Contribution refunds	(134)	(103)	0	0	0	(237)
• Retirements	(380)	(102)	482	0	0	0
• New disabilities	(25)	(6)	(21)	52	0	0
• Return to work	26	(25)	(1)	0	0	0
• Died with or without beneficiary	(16)	(4)	(202)	(25)	(58)	(305)
• Data adjustments[2]	(1)	99	2	0	(3)	97
Number as of December 31, 2019	**11,336**	**2,821**	**7,888**	**951**	**1,239**	**24,235**

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

[2] Out of the net 99 data adjustments for inactive vested members: 4 non-members from last year went to payment status this year; 66 members were hired and terminated employment after November 30, 2018 (i.e. the census data collection date for last year's valuation); 31 members were classified as contribution refunds in the December 31, 2018 valuation data and terminated vested in the December 31, 2019 data; 1 member was classified as retired in the December 31, 2018 valuation data and terminated vested in the December 31, 2019 data; and 1 member and 4 non-member records were added to the terminated vested file.

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

	Year Ended December 31, 2019		Year Ended December 31, 2018	
Net assets at market value at the beginning of the year		**$7,592,586,569**		**$8,112,099,556**
Contribution income:				
• Employer contributions	$298,526,950		$269,684,809	
• Member contributions	103,117,022		94,735,673	
Net contribution income		*$401,643,972*		*$364,420,482*
Investment income:				
• Interest, dividends and other income	$101,531,349		$120,629,800	
• Asset appreciation	1,307,646,904		(417,757,336)	
• Less investment and administrative fees	(66,383,453)		(73,984,083)	
Net investment income		*$1,342,794,800*		*$(371,111,618)*
Total income available for benefits		**$1,744,438,772**		**($6,691,137)**
Less benefit payments:				
• Service retirement	$(489,452,611)		$(459,141,978)	
• Death payments	(2,825,577)		(2,957,440)	
• Supplemental cost of living	(1,181,244)		(1,134,613)	
• Member refunds	(10,724,708)		(8,709,150)	
• Health insurance subsidies	(43,562,150)		(40,878,670)	
Net benefit payments		*$(547,746,289)*		*$(512,821,851)*
Change in net assets at market value		**$1,196,692,483**		**$(519,512,988)**
Net assets at market value at the end of the year		**$8,789,279,051**		**$7,592,586,569**

Note: Results may be slightly off due to rounding.

Exhibit E: Summary Statement of Plan Assets

	December 31, 2019		December 31, 2018	
Cash		*$4,151,369*		*$1,573,133*
Securities lending collateral		*121,705,062*		*183,002,987*
Accounts receivable:				
• Contributions	$18,310,516		$17,422,507	
• Investment receivables	17,044,483		15,986,252	
• Investments sold	3,361,020		1,202,614	
• Futures contracts	307,397		0	
• Foreign exchange contracts	5,129,347		100,999	
• Others	290,431		107,881	
Total accounts receivable		*$44,443,194*		*$34,820,254*
Prepaid expenses		*762,811*		*1,292,997*
Investments:				
• Short-term investments	$231,758,980		$159,672,681	
• Equities	4,852,057,801		4,147,368,158	
• Fixed income investments	1,241,764,327		1,203,445,404	
• Real estate	585,368,670		561,242,142	
• Capital assets	2,532,109		1,485,300	
• Private equity and alternative investments	1,854,346,819		1,512,465,825	
Total investments at market value		*$8,767,828,706*		*$7,585,679,510*
Total assets		$8,938,891,142		$7,806,368,882
Accounts payable:				
• Securities lending & investments purchased	$(128,455,437)		$(189,585,727)	
• Investment-related payables	(11,866,889)		(12,363,273)	
• Futures contracts & equity swaps	(2,631,699)		(1,392,567)	
• Foreign exchange contracts	(2,383)		(3,651,400)	
• Accrued administration expense	(2,357,945)		(2,275,696)	
• Members benefits & refunds, and retirement payroll deductions payable	(4,297,739)		(4,513,650)	
Total accounts payable		$(149,612,091)		$(213,782,313)
Net assets at market value		**$8,789,279,051**		**$7,592,586,569**
Net assets at actuarial value		**$8,528,590,602**		**$8,161,706,068**
Net assets at valuation value		**$7,599,976,117**		**$7,239,327,157**

Note: Results may be slightly off due to rounding.

Exhibit F: Summary of Reported Reserve Information as of December 31, 2019

	Reserves
Used in Development of Valuation Value of Assets:	
• Members deposit-basic	$1,292,363,820
• Members cost-of-living	288,958,431
• Employer advance (before transfer from SRBR to employer advance)	1,159,079,409
• Pension reserve-current	1,699,718,634
• Pension reserve-prior	5,444,221
• Annuity reserve	1,001,168,069
• Cost-of-living reserve	2,146,441,252
• Survivor death benefit	291,405
• SRBR transfer to employer advance[1]	6,510,876
• Reserve for interest fluctuations (contingency reserve), if negative	0
Subtotal	$7,599,976,117[2]
Not Used in Development of Valuation Value of Assets:	
• 401(h) account	$10,415,538
• Supplemental retirees benefit reserve (before transfer from SRBR to employer advance)	924,709,823
• Reserve for interest fluctuations (contingency reserve), if positive	0
• Market stabilization reserve	260,688,449
• SRBR transfer to employer advance[1]	(6,510,876)
Subtotal	$1,189,302,934
Total	**$8,789,279,051**

Note: Results may be slightly off due to rounding.

[1] Estimate provided by ACERA.
[2] A breakdown of this amount between the different cost groups is provided in Section 4, Exhibit VI.

Exhibit G: Development of the Fund through December 31, 2019

Year Ended December 31	Employer Contributions	Member Contributions	Net Investment Return[1]	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2010	$147,543,301	$77,604,809	$635,617,238	$313,150,062	$5,224,494,880	$5,487,858,259	105.0%
2011	162,879,221	77,990,907	(53,810,166)	337,156,660	5,074,398,182	5,556,242,772	109.5%
2012	179,648,812	78,608,004	698,682,556	363,133,358	5,668,204,196	5,543,303,209	97.8%
2013	191,180,146	76,230,024	1,095,188,216	390,507,104	6,640,295,478	5,953,454,661	89.7%
2014	213,254,775	79,714,187	266,028,241	411,279,675	6,788,013,006	6,545,159,225	96.4%
2015	224,607,104	82,948,934	(19,960,005)	434,984,266	6,640,624,773	6,987,026,015	105.2%
2016	241,728,451	85,736,229	454,641,033	457,150,304	6,965,580,182	7,309,485,170	104.9%
2017	247,063,550	89,325,824	1,293,322,206	483,192,206	8,112,099,556	7,803,026,229	96.2%
2018	269,684,809	94,735,673	(371,111,618)	512,821,851	7,592,586,569	8,161,706,068	107.5%
2019	298,526,950	103,117,022	1,342,794,800	547,746,289	8,789,279,051	8,528,590,602	97.0%

[1] On a market basis, net of investment fees and administrative expenses.

Exhibit H: Table of Amortization Bases

General (Excluding LARPD & Office of Education)

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Combined Bases	December 31, 2011	$885,036	21	$839,178	13	$82,276
Experience Loss	December 31, 2012	165,501	20	155,955	13	15,290
Experience Gain	December 31, 2013	(75,003)	20	(71,989)	14	(6,662)
Experience Gain	December 31, 2014	(156,281)	20	(152,018)	15	(13,346)
Change in Assumptions	December 31, 2014	350,827	20	341,261	15	29,960
Experience Gain	December 31, 2015	(98,619)	20	(97,008)	16	(8,114)
Experience Loss	December 31, 2016	3,655	20	3,622	17	290
Experience Gain	December 31, 2017	(27,249)	20	(27,115)	18	(2,082)
Change in Assumptions	December 31, 2017	260,437	20	259,151	18	19,895
Experience Gain[2]	December 31, 2018	(6,121)	20	(6,114)	19	(452)
Experience Loss	December 31, 2019	74,367	20	74,367	20	5,303
Subtotal				**$1,319,290**		**$122,358**

1 Level percentage of payroll.
2 Includes the impact of transferring the allocated UAAL for LARPD Tier 1 members to the LARPD cost group and the allocated UAAL for Office of Education Tier 1 members to the Office of Education cost group.

Exhibit H: Table of Amortization Bases (continued)

General (LARPD)[1]

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[2] ($ in '000s)
Combined Bases	December 31, 2011	$7,060	21	$6,694	13	$656
Experience Loss	December 31, 2012	370	20	348	13	34
Experience Gain	December 31, 2013	(534)	20	(512)	14	(47)
Experience Gain	December 31, 2014	(1,562)	20	(1,520)	15	(133)
Change in Assumptions	December 31, 2014	1,303	20	1,268	15	111
Experience Gain[3]	December 31, 2015	(1,506)	20	(1,483)	16	(124)
Experience Loss	December 31, 2016	139	20	138	17	11
Experience Gain[4]	December 31, 2017	(622)	20	(620)	18	(48)
Change in Assumptions	December 31, 2017	1,418	20	1,411	18	108
Experience Loss[5]	December 31, 2018	1,058	20	1,057	19	78
UAAL for Tier 1 members[6]	December 31, 2018	6,576	20	6,569	19	486
Experience Loss[7]	December 31, 2019	980	20	980	20	70
Subtotal				**$14,330**		**$1,202**

[1] When LARPD General Tier 3 was established in 2008, they were classified as a stand-alone group since they were the only employer with the higher 2.5% at 55 benefit (i.e., Section 31676.18), and the cost to upgrade the past service under that formula was only to be paid by LARPD. (reference: Segal's letter dated October 7, 2008). The initial UAAL rate for that group was based on an allocation of assets needed to maintain the total employer rate from the December 31, 2007 valuation before any benefit improvements for General Tier 3. The UAAL rate for LARPD General Tier 3 was then increased to reflect the benefit improvement. When LARPD General Tier 4 was later established in 2013, that tier was combined with LARPD General Tier 3 for purpose of determining their UAAL rate only (as normal cost for LARPD General Tier 4 has continued to be developed on a pooled basis with other General employers offering General Tier 4 benefits), in order to continue with the open-group level percentage of payroll approach for paying off the UAAL amount for General Tier 3 (that is now closed to new entrants because of CalPEPRA). Furthermore, the Board adopted the declining employer payroll policy in 2018 and determined that the policy applies to LARPD Tier 1. As a result, the UAAL (and associated assets) of LARPD Tier 1 was combined with the UAAL for LARPD Tiers 3 and 4.

[2] Level percentage of payroll.

[3] There is a liability gain from the death of one of LARPD's Tier 3 retirees and the withdrawal of one of LARPD's Tier 3 actives.

[4] There is a liability gain from the death of one of LARPD's Tier 3 retirees.

[5] There is a liability loss mainly from retiree mortality experience for LARPD's Tier 1 and Tier 3 retirees as a result of no actual deaths.

[6] The allocated UAAL for LARPD Tier 1 of $6,167,000 determined as of December 31, 2017 is rolled forward to December 31, 2018 to be amortized starting with the December 31, 2018 valuation.

[7] The loss is primarily due to (a) lower than expected return on investments (after smoothing), (b) actual contributions lower than expected, and (c) higher than expected salary increases for active members.

Exhibit H: Table of Amortization Bases (continued)

General Combined (Excluding Office of Education)

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Combined Bases	December 31, 2011	$892,096	21	$845,872	13	$82,932
Experience Loss	December 31, 2012	165,871	20	156,303	13	15,324
Experience Gain	December 31, 2013	(75,537)	20	(72,501)	14	(6,709)
Experience Gain	December 31, 2014	(157,843)	20	(153,538)	15	(13,479)
Change in Assumptions	December 31, 2014	352,130	20	342,529	15	30,071
Experience Gain	December 31, 2015	(100,125)	20	(98,491)	16	(8,238)
Experience Loss	December 31, 2016	3,794	20	3,760	17	301
Experience Gain	December 31, 2017	(27,871)	20	(27,735)	18	(2,130)
Change in Assumptions	December 31, 2017	261,855	20	260,562	18	20,003
Experience Loss	December 31, 2018	1,513	20	1,512	19	112
Experience Loss	December 31, 2019	75,347	20	75,347	20	5,373
Subtotal				**$1,333,620**		**$123,560**

[1] Level percentage of payroll.

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[1] ($ in '000s)
Combined Bases	December 31, 2011	$598,698	21	$567,679	13	$55,657
Experience Loss	December 31, 2012	63,130	20	59,490	13	5,833
Experience Gain	December 31, 2013	(9,350)	20	(8,976)	14	(831)
Experience Gain	December 31, 2014	(43,238)	20	(42,059)	15	(3,692)
Change in Assumptions	December 31, 2014	107,552	20	104,619	15	9,185
Experience Gain	December 31, 2015	(12,850)	20	(12,641)	16	(1,057)
Experience Loss	December 31, 2016	19,183	20	19,012	17	1,521
Experience Loss	December 31, 2017	6,354	20	6,323	18	485
Change in Assumptions	December 31, 2017	134,184	20	133,521	18	10,251
Experience Loss	December 31, 2018	9,377	20	9,366	19	692
Experience Loss	December 31, 2019	24,143	20	24,143	20	1,722
Subtotal				**$860,477**		**$79,766**

[1] Level percentage of payroll.

Exhibit H: Table of Amortization Bases (continued)

Total (Excluding Office of Education)

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
Combined Bases	December 31, 2011	$1,490,794	21	$1,413,551	13	$138,589
Experience Loss	December 31, 2012	229,001	20	215,793	13	21,157
Experience Gain	December 31, 2013	(84,887)	20	(81,477)	14	(7,540)
Experience Gain	December 31, 2014	(201,081)	20	(195,597)	15	(17,171)
Change in Assumptions	December 31, 2014	459,682	20	447,148	15	39,256
Experience Gain	December 31, 2015	(112,975)	20	(111,132)	16	(9,295)
Experience Loss	December 31, 2016	22,977	20	22,772	17	1,822
Experience Gain	December 31, 2017	(21,517)	20	(21,412)	18	(1,645)
Change in Assumptions	December 31, 2017	396,039	20	394,083	18	30,254
Experience Loss	December 31, 2018	10,890	20	10,878	19	804
Experience Loss	December 31, 2019	99,490	20	99,490	20	7,095
Total				**$2,194,097**		**$203,326**

[1] Level percentage of payroll.

Exhibit H: Table of Amortization Bases (continued)

General (Office of Education)

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment[1] ($ in '000s)
UAAL for Tier 1 Members	December 31, 2017	$1,357	20	$699	18	$72
Experience Loss	December 31, 2018	61	20	59	19	6
Experience Loss	December 31, 2019	110	20	110	20	11
Subtotal				**$868**		**$89**
Credit for Expected UAAL Contribution				77[2]		
Total				**$945**		

Note: The equivalent amortization period for the entire Plan is about 14 years.

[1] Level dollar, and reflects timing of payment (i.e., next scheduled on April 1, 2021).
[2] $78,000 (as determined in the December 31, 2018 valuation to be payable April 1, 2020), discounted at 7.25% to December 31, 2019.

Exhibit I: Projection of UAAL Balances and Payments

Outstanding Balance of $2,195 Million in Net UAAL as of December 31, 2019

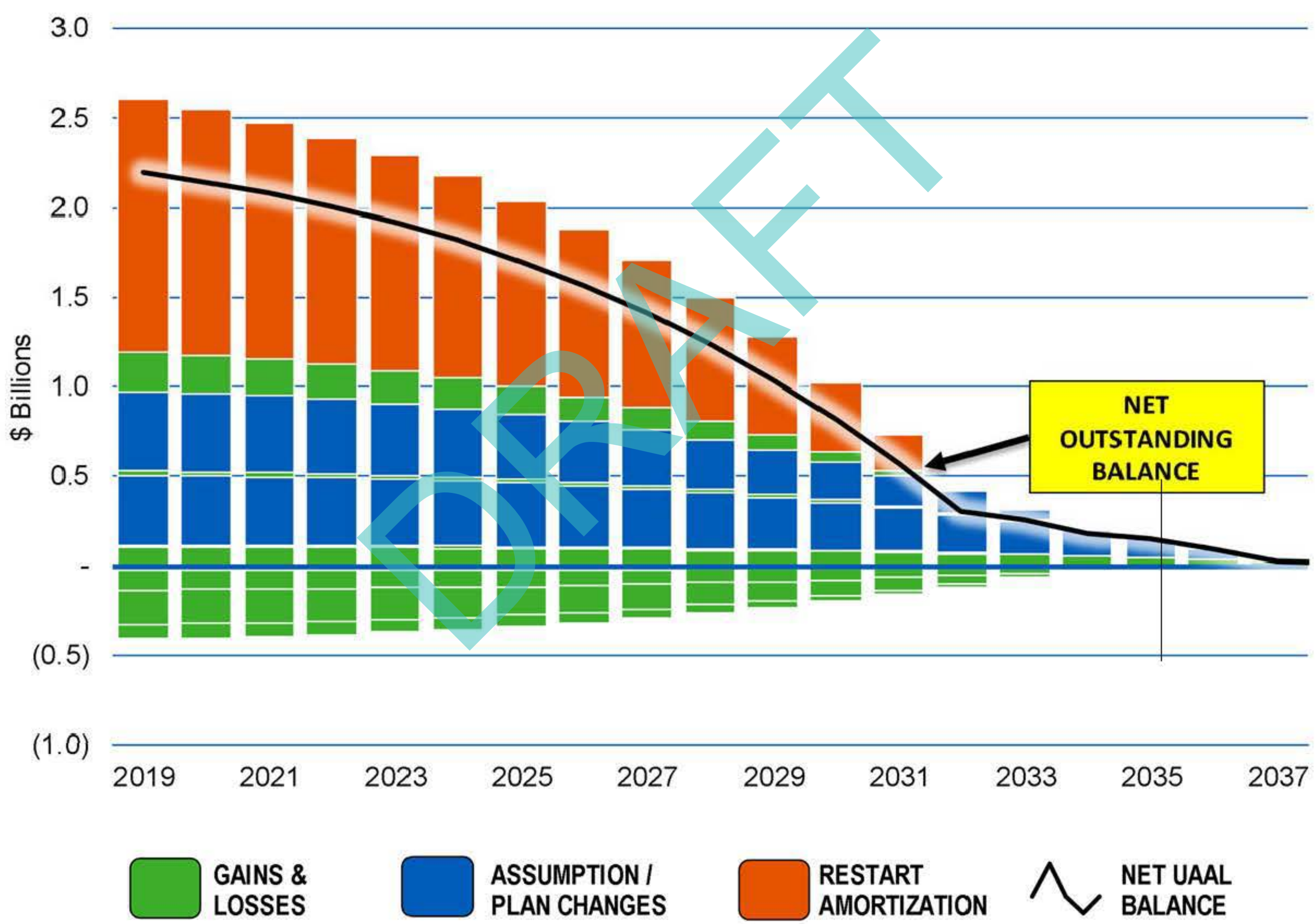


Exhibit I: Projection of UAAL Balances and Payments

Annual Payments Required to Amortize $2,195 Million in Net UAAL as of December 31, 2019

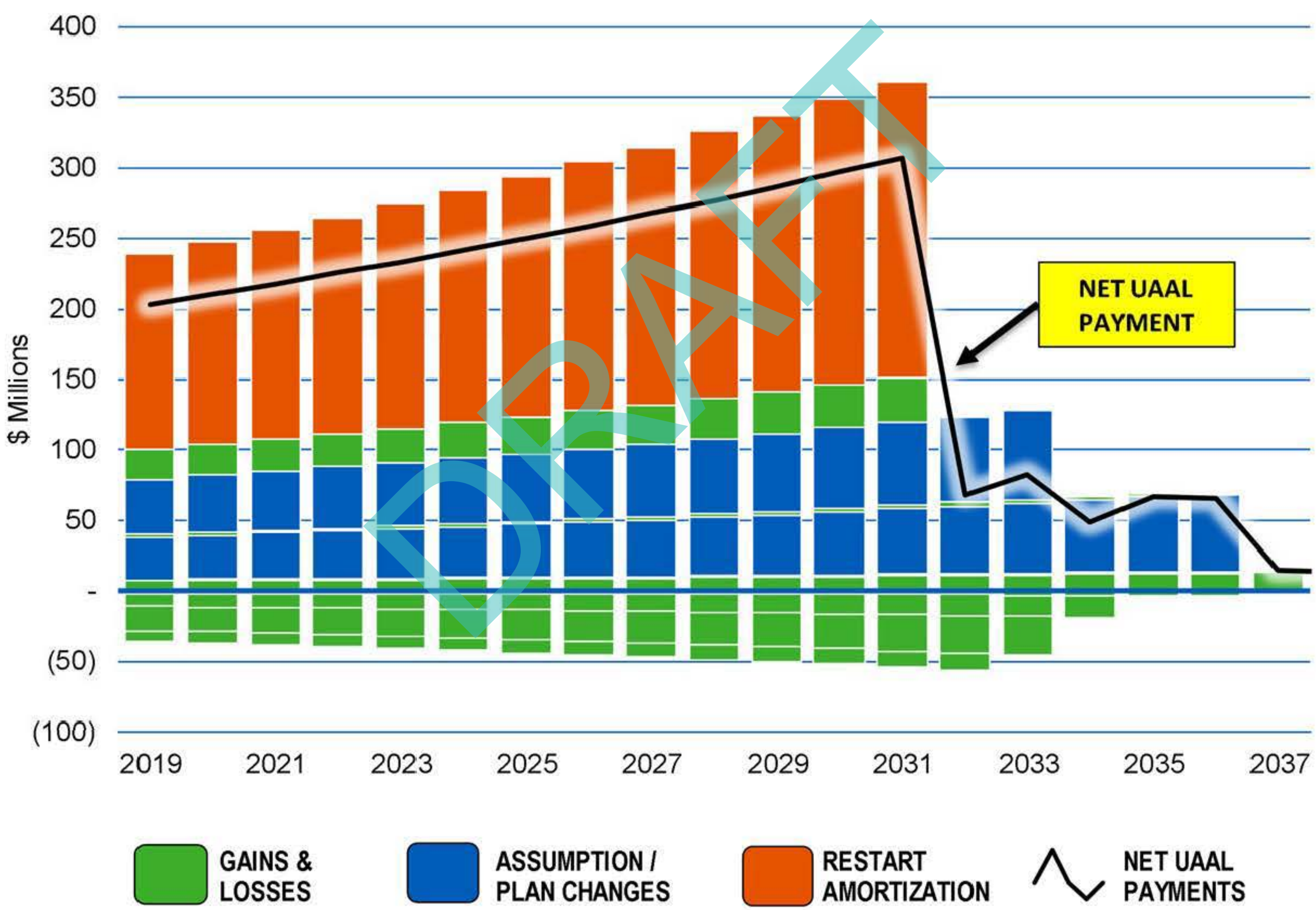


Exhibit J: Definition of Pension Terms

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. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield in actuarial liabilities that are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.
Actuarially Equivalent:	Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV):	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.
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 law.
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 Unfunded Actuarial Accrued Liability.
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; Withdrawal rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates - the rates of salary increase due to inflation and productivity growth.

Closed Amortization Period:	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Open Amortization Period.
Decrements:	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined Benefit Plan:	A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.
Defined Contribution Plan:	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer Normal Cost:	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience Study:	A periodic review and analysis of the actual experience of the 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 in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.
Open Amortization Period:	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period with level percentage of payroll is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never decrease, but will become smaller each year, in relation to covered payroll, if the actuarial assumptions are realized.
Unfunded Actuarial Accrued Liability:	The excess of the Actuarial Accrued Liability over the Actuarial 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.

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 I: 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 December 1, 2013 through November 30, 2016 Actuarial Experience Study report dated September 6, 2017. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all tiers. These assumptions were adopted by the Board.
<u>Economic Assumptions</u>	
Net Investment Return:	7.25%; net of administrative and investment expenses. Based on the Actuarial Experience Study referenced above, expected administrative and investment expenses represent about 0.90% of the Market Value of Assets.
Employee Contribution Crediting Rate:	7.25%, compounded semi-annually.
Consumer Price Index:	Increase of 3.00% per year. Retiree COLA increases due to CPI are subject to a 3% maximum change per year for General Tier 1, General Tier 3, and Safety Tier 1, and 2% maximum change per year for General Tier 2, General Tier 4, Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4.
Payroll Growth:	Inflation of 3.00% per year plus real "across the board" salary increases of 0.50% per year, used to amortize the Unfunded Actuarial Accrued Liability as a level percentage of payroll.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 3.00% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 3.00% per year from the valuation date.

Salary Increases:

The annual rate of compensation increase includes:

- Inflation at 3.00%, 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
0-1	4.80	7.80
1-2	4.80	7.80
2-3	3.90	7.00
3-4	2.40	4.40
4-5	1.90	3.50
5-6	1.60	2.30
6-7	1.50	1.60
7-8	1.10	1.00
8-9	0.80	1.00
9-10	0.80	0.90
10-11	0.50	0.80
11 & Over	0.40	0.80

Terminal Pay Assumptions:

Additional pay elements are expected to be received during a member's final average earnings period. The percentages, added to the final average salary, used in this valuation are:

	Service Retirement	Disability Retirement
General Tier 1	8.0%	6.5%
General Tier 2	3.0%	1.4%
General Tier 3	8.0%	6.5%
General Tier 4	N/A	N/A
Safety Tier 1	8.5%	6.4%
Safety Tier 2	3.5%	2.1%
Safety Tier 2C	3.5%	2.1%
Safety Tier 2D	3.5%	2.1%
Safety Tier 4	N/A	N/A

Demographic Assumptions:

Post-Retirement Mortality Rates:

Healthy

- **General Members and All Beneficiaries:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected generationally with the two-dimensional MP-2016 projection scale.
- **Safety Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected generationally with the two-dimensional MP-2016 projection scale.

Disabled

- **General Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, set forward seven years for males and set forward four years for females, projected generationally with the two-dimensional MP-2016 projection scale.
- **Safety Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, set forward two years for males and with no set forward for females, projected generationally with the two-dimensional MP-2016 projection scale.

The RPH-2014 mortality tables and adjustments as shown above reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Pre-Retirement Mortality Rates:

- **General and Safety Members:** Headcount-Weighted RP-2014 (RPH-2014) Employee Mortality Tables multiplied by 80%, projected generationally with the two-dimensional MP-2016 projection scale.

	Rate (%)			
	General[1]		Safety[1]	
Age	Male	Female	Male	Female
20	0.05	0.02	0.05	0.02
25	0.05	0.02	0.05	0.02
30	0.05	0.02	0.05	0.02
35	0.05	0.03	0.05	0.03
40	0.06	0.04	0.06	0.04
45	0.10	0.07	0.10	0.07
50	0.17	0.11	0.17	0.11
55	0.27	0.17	0.27	0.17
60	0.45	0.24	0.45	0.24
65	0.78	0.36	0.78	0.36

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

[1] Generational projections beyond the base year (2014) are not reflected in the above mortality rates.

Mortality Rates for Member Contributions:	• **General Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 30% male and 70% female. • **Safety Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 75% male and 25% female.
Optional Forms of Benefit:	*Service Retirement and All Beneficiaries* • **General Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 30% male and 70% female. • **General Beneficiaries:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 70% male and 30% female. • **Safety Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 75% male and 25% female. • **Safety Beneficiaries:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, with no setback for males and females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 25% male and 75% female. *Disability Retirement* • **General Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, set forward seven years for males and set forward four years for females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 30% male and 70% female. • **Safety Members:** Headcount-Weighted RP-2014 (RPH-2014) Healthy Annuitant Mortality Tables, set forward two years for males and with no set forward for females, projected 20 years with the two-dimensional mortality improvement Scale MP-2016, weighted 75% male and 25% female.

Disability Incidence:

	Rate (%)	
Age	**General**	**Safety**
20	0.00	0.00
25	0.01	0.03
30	0.03	0.26
35	0.05	0.58
40	0.08	0.73
45	0.19	0.78
50	0.31	1.52
55	0.38	2.00
60	0.43	2.60

60% of General disabilities are assumed to be service connected disabilities. The other 40% are assumed to be non-service connected disabilities.

100% of Safety disabilities are assumed to be service connected disabilities.

Termination:

Less Than Five Years of Service

Years of Service	Rate (%) General	Rate (%) Safety
0-1	11.00	4.00
1-2	9.00	3.50
2-3	8.00	3.50
3-4	6.00	2.50
4-5	6.00	2.00

60% of all terminated members with less than 5 years of service are assumed to choose a refund of contributions. The other 40% are assumed to choose a deferred vested benefit.

Five or More Years of Service

Age	Rate (%) General	Rate (%) Safety
20	6.00	2.00
25	6.00	2.00
30	5.40	2.00
35	4.40	1.70
40	3.40	1.20
45	3.00	1.00
50	3.00	1.00
55	3.00	1.00
60	3.00	0.40

35% of all terminated members with 5 or more years of service are assumed to choose a refund of contributions. The other 65% are assumed to choose a deferred vested benefit.

No termination is assumed after a member is eligible for retirement (as long as a retirement rate is present).

Retirement Rates:

	Rate (%)[1]							
	General				Safety			
Age	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1[2]	Tier 2, 2D[2]	Tier 2C[2]	Tier 4
49	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00
50	4.00	2.00	6.00	0.00	35.00	15.00	4.00	4.00
51	4.00	2.00	3.00	0.00	30.00	15.00	2.00	2.00
52	4.00	2.00	5.00	4.00	25.00	15.00	2.00	2.00
53	4.00	2.00	6.00	1.50	35.00	15.00	3.00	3.00
54	4.00	2.00	6.00	1.50	45.00	15.00	6.00	6.00
55	6.00	2.00	12.00	2.00	45.00	15.00	10.00	10.00
56	8.00	3.00	13.00	2.50	45.00	15.00	12.00	12.00
57	10.00	4.00	13.00	3.50	45.00	15.00	20.00	20.00
58	12.00	4.00	14.00	3.50	45.00	20.00	10.00	10.00
59	14.00	5.00	16.00	4.50	45.00	20.00	15.00	15.00
60	20.00	7.00	21.00	6.00	45.00	30.00	60.00	60.00
61	20.00	9.00	20.00	8.00	45.00	30.00	60.00	60.00
62	35.00	15.00	30.00	18.00	45.00	30.00	60.00	60.00
63	30.00	16.00	25.00	15.00	45.00	30.00	60.00	60.00
64	30.00	18.00	25.00	17.00	45.00	50.00	60.00	60.00
65	35.00	25.00	30.00	22.00	100.00	100.00	100.00	100.00
66	35.00	25.00	25.00	25.00	100.00	100.00	100.00	100.00
67	30.00	25.00	25.00	25.00	100.00	100.00	100.00	100.00
68	30.00	30.00	25.00	30.00	100.00	100.00	100.00	100.00
69	35.00	35.00	50.00	35.00	100.00	100.00	100.00	100.00
70	65.00	50.00	65.00	50.00	100.00	100.00	100.00	100.00
71	65.00	50.00	65.00	50.00	100.00	100.00	100.00	100.00
72	65.00	50.00	65.00	50.00	100.00	100.00	100.00	100.00
73	65.00	50.00	65.00	50.00	100.00	100.00	100.00	100.00
74	65.00	50.00	65.00	50.00	100.00	100.00	100.00	100.00
75	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

[1] The retirement rates only apply to members that are eligible to retire at the age shown.

[2] Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

Retirement Age and Benefit for Deferred Vested Members:

General Retirement Age: 61

Safety Retirement Age: 56

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.

	30% of future General and 60% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 3.90% and 4.30% compensation increases are assumed per annum for General and Safety, respectively.
Future Benefit Accruals:	1.0 year of service per year of employment, plus 0.003 years of additional service for General members and 0.006 years of additional service for Safety members, to anticipate conversion of unused sick leave for each 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.
Inclusion of Deferred Vested Members:	All deferred vested members are included in the valuation.
Data Adjustment:	Data as of November 30 has been adjusted to December 31 by adding one month of age and, for active members, one month of service.
Form of Payment:	All active and inactive vested members are assumed to elect the unmodified option at retirement.
Percent Married:	70% of male members; 50% of female members.
Age and Gender of Spouse:	For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.
Actuarial Funding Policy	
Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus years of 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.
Actuarial Value of Assets:	Market value of assets (MVA) less unrecognized returns in each of the last ten six-month interest crediting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on the market value, and are recognized semi-annually over a five-year period. The actuarial value of assets (AVA) is limited by a 40% corridor; the AVA cannot be less than 60% of MVA, nor greater than 140% of MVA.
Valuation Value of Assets:	The Actuarial Value of Assets reduced by the value of the non-valuation reserves.
Amortization Policy:	Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011 (and 13 years remaining as of December 31, 2019). On or after January 1, 2012, any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate

	decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods. ACOE's UAAL amortization under the declining employer payroll policy is level dollar.
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 3.50% (i.e., 3.00% inflation plus 0.50% across-the-board salary increase). The amortization policy is described on the previous page. Alameda County previously issued pension obligation bonds (POB) and the net bond proceeds were contributed to ACERA. When the POBs were issued, AHS, Court and First 5 were part of the County and, consequently, they share in the proceeds. The net bond proceeds contributed to ACERA allow the Association to provide a "Pension Obligation Bond Credit" to these employers, thereby reducing their employer contribution rate. As of December 31, 2019, the outstanding balances of the POBs were $500.6 million for the General employers (County, AHS, Court, and First 5) and $93.8 million for the Safety employers (County). For several years, the Board of Retirement has approved transfers from the SRBR to the Employer Advance Reserve to reimburse the County for their payment of the implicit retiree health benefit subsidy. The amortization credits resulting from these transfers have served to reduce the County's employer contribution rates. The recommended employer contributions are provided in *Section 2, Subsection F*. These rates reflect the POB credits for the County, AHS, Court, and First 5, and the retiree health benefit subsidy credits for the County, noted above.

Member Contributions:

Non-Tier 4 Members

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for non-Tier 4 General and Safety members, respectively. The basic 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 1/100 of Final Average Salary for General Tier 1, General Tier 3, and all Safety non-Tier 4 members and 1/120 of Final Average Salary for General Tier 2 members. That age is 60 for General Tier 1 and Tier 2, 55 for General Tier 3, and 50 for all Safety non-Tier 4 members. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to the basic contributions, members pay one-half of the total normal cost necessary to fund cost-of-living benefits. As instructed by ACERA, we have also included a 3% cost-sharing contribution that we understand will be paid by Safety Tier 1 and Tier 2 members. For Safety Tier 2C members, there are no cost-sharing contributions. For Safety Tier 2D members, the cost-sharing contribution rate is 5% of salary for the first 5 years of vesting service and 3% of salary for each subsequent year of vesting service. (The 3% cost-sharing contribution for Safety Tiers 1, 2, and 2D (after 5 years of service) will continue even after the member attains 30 years of service.)

Accumulation includes semi-annual crediting of interest at the assumed investment earnings rate. Following the procedure established by the Board, basic member rates have been adjusted to anticipate conversion of terminal pay at retirement.

Tier 4 Members

Pursuant to Section 7522.30(a) of the Government Code, Tier 4 members are required to contribute at least 50% of the Normal Cost rate.

When previously calculating member rates, there were certain additional requirements that had to be met such as requiring the employee rates be rounded to the nearest one quarter of one percent and requiring the new employees to pay the contribution rate of "similarly situated employees", if it is greater. (reference: Section 7522.30(c)). Furthermore, Section 7522.30(d) indicated that "once established, the employee contribution rate described in subdivision (c) shall not be adjusted on account of a change to the normal cost rate unless the normal cost rate increases or decreases by more than 1 percent of payroll above or below the normal cost rate in effect at the time the employee contribution rate is first established or, if later, the normal cost rate in effect at the time of the last adjustment to the employee contribution rate under this section."

However, as we referenced in our letter dated February 26, 2014, Assembly Bill 1380 (AB 1380) was approved by the Governor on September 6, 2013. In particular, Section 31620.5(a) was added to the Government Code to provide the Board with the discretion to not apply the rounding previously required under Section 7522.30(c). We understand that our recommendation in that letter to no longer apply the rounding rule effective with the December 31, 2013 valuation was adopted by the Board, and the results in this valuation reflect that action taken by the Board.

Section 31620.5(b) of AB 1380 also stipulates that the "one percent rule" under Section 7522.30(d) "shall not apply to the contribution rates of members of retirement systems established pursuant to this chapter."

Therefore, in preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the Tier 4 members.

	The member contribution rates for all members are provided in *Section 4, Exhibit III*.
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 $225,000 for 2019 and $230,000 for 2020. 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-Tier 4 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. Non-Tier 4 contribution rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.
Justification for Change in Actuarial Assumptions:	There have been no changes in actuarial assumptions since the last valuation.

Exhibit II: 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:	January 1 through December 31
Membership Eligibility:	Membership with ACERA usually begins with the second pay period following appointment to a full time County or member District position. For Housing Authority and LARPD, membership with ACERA begins on the first day of hire. ACERA members who change from full time to part time will continue to participate at ACERA.
General and Safety Tier 1	All General and Safety members hired on or before June 30, 1983. For Housing Authority General members, the hire date is on or before September 30, 2011 (instead of June 30, 1983). For LARPD General members, the hire date is on or before September 30, 2008 (instead of June 30, 1983).
General and Safety Tier 2	All General and Safety members hired after June 30, 1983, and not in any of the other Tiers listed below. For Housing Authority General members, the hire date is after September 30, 2011 (instead of June 30, 1983).
General Tier 3	Only General LARPD members hired before October 1, 2008 who elected the 2.5% at 55 formula and all General LARPD members hired after that date.
General and Safety Tier 4	All General and Safety members with membership dates on or after January 1, 2013.
Safety Tier 2C	All Safety members in the Sheriff's Department (excluding Probation Officers) hired on or after October 17, 2010 who elected the 2% at 50 formula.
Safety Tier 2D	All Safety members in the Sheriff's Department (excluding Probation Officers) hired on or after October 17, 2010 who elected the 3% at 55 formula.
Final Compensation for Benefit Determination:	
General Tier 1, General Tier 3 and Safety Tier 1	Highest consecutive 12 months of compensation earnable (§31462.1) (FAS1).
General Tier 2, General Tier 4, Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4	For non-Tier 4 members, highest consecutive 36 months of compensation earnable (§31462), and for Tier 4 members, highest consecutive 36 months of pensionable compensation (§7522.10(c), §7522.32 and §7522.34) (FAS3).
Compensation Limit:	
Non-Tier 4	For members with membership dates on or after July 1, 1996, compensation earnable is limited by Internal Revenue Code Section 401(a)(17). The limit for 2020 is $285,000. The limit is indexed for inflation on an annual basis.

Tier 4	Pensionable compensation is limited to $126,291 for 2020 for an employer that is enrolled in Social Security. For an employer that is not enrolled in Social Security, the maximum amount for 2020 is 120% of $126,291, or $151,549. (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2020. (reference: Section 7522.10(d)).
Service:	Years of service (Yrs) are generally based on a member's employment during a period of time for which deductions are made from their compensation.
Service Retirement Eligibility:	
General	
Non-Tier 4	Age 50 with 5 years of service and a total of 10 years of qualifying membership, or age 70 regardless of service, or after 30 years of service regardless of age (§31672).
Tier 4	Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).
Safety	
Non-Tier 4	Age 50 with 5 years of service and a total of 10 years of qualifying membership, or age 70 regardless of service, or after 20 years of service regardless of age (§31663.25).
Tier 4	Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).

Benefit Formula:		
General Tier 1 (§31676.12)	**Retirement Age**	**Benefit Formula**
	50	1.34% x (FAS1 – $1,400) x Yrs
	55	1.77% x (FAS1 – $1,400) x Yrs
	60	2.34% x (FAS1 – $1,400) x Yrs
	62 and over	2.62% 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 Tier 3 (§31676.18)	**Retirement Age**	**Benefit Formula**
	50	2.00% x FAS1 x Yrs
	55 and over	2.50% x FAS1 x Yrs
General Tier 4 (§7522.20(a))	**Retirement Age**	**Benefit Formula**
	52	1.00% x FAS3 x Yrs
	55	1.30% x FAS3 x Yrs
	60	1.80% x FAS3 x Yrs
	62	2.00% x FAS3 x Yrs
	65	2.30% x FAS3 x Yrs
	67 and over	2.50% x FAS3 x Yrs
Safety Tier 1 (Non-Integrated) (§31664.1)	**Retirement Age**	**Benefit Formula**
	50 and over	3.00% x FAS1 x Yrs
Safety Tier 2 (Non-Integrated) (§31664.1)	**Retirement Age**	**Benefit Formula**
	50 and over	3.00% x FAS3 x Yrs
Safety Tier 2C (Non-Integrated) (§31664)	**Retirement Age**	**Benefit Formula**

	50	2.00% x FAS3 x Yrs
	55 and over	2.62% x FAS3 x Yrs
Safety Tier 2D (Non-Integrated) (§31664.2)	**Retirement Age**	**Benefit Formula**
	50	2.29% x FAS3 x Yrs
	55 and over	3.00% x FAS3 x Yrs
Safety Tier 4 (Non-Integrated) (§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:	
Non-Tier 4	100% of Highest Average Compensation (§31676.1, §31676.12, §31676.18, §31664, §31664.1, and §31664.2).
Tier 4	None.
Non-Service Connected Disability:	
General Tier 1, Tier 2, Tier 3, and Tier 4	
Eligibility	Five years of service (§31720).
Benefit Formula	1.8% of Final Compensation per year of service for General Tier 1 and Tier 3 and 1.5% of Final Compensation per year of service for General Tier 2 and Tier 4. If the benefit does not exceed one-third of Final Compensation, the service is projected to 62 for General Tier 1 and Tier 3, and to age 65 for General Tier 2 and Tier 4, but the total benefit cannot be more than one-third of Final Compensation (§31727.1 and §31727).
Safety Tier 1, Tier 2, Tier 2C, Tier 2D and Tier 4	
Eligibility	Five years of service (§31720).
Benefit Formula	1.8% of Final Compensation 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).

Service Connected Disability:	
All Members	
Eligibility	No age or service requirements (§31720).
Benefit Formula	50% of the Final Compensation or 100% of Service Retirement benefit, if greater (§31727.4).
Pre-Retirement Death:	
All Members	
Eligibility	None.
Basic lump sum benefit	Refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six month's compensation (§31781).
Service Connected Death	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787).
	OR
Vested Members	
Eligibility	Five years of service.
Basic benefit	60% of the greater of Service or Non-Service Connected Disability Retirement benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of the basic lump sum benefit above.
Service Connected Death	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787).
Death After Retirement:	
All Members	
Service Retirement or Non-Service Connected Disability Retirement	Unless another option was selected at retirement, 60% of member's unmodified allowance continues to eligible spouse (§31760.1) and lump sum death burial benefit payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the date of retirement (§31760.1). Based on action taken by the Board in February 2014, we are continuing to exclude the death burial benefit from the pension valuation.
Service Connected Disability	Unless another option was selected at retirement, 100% of member's allowance continued to eligible spouse (§31786).

Withdrawal Benefits:	
Less than Five Years of Service	Refund of accumulated employee contributions with interest, or benefit at age 70 (§31628). Effective January 1, 2003, 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, entitled to earned benefits commencing at any time after eligible to retire (§31700).
Post-retirement Cost-of-Living Benefits:	
General Tier 1, General Tier 3 and Safety Tier 1	Annual adjustment based on Consumer Price Index to a maximum of 3% per year; excess "banked" (§31870.1).
General Tier 2, General Tier 4 Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4	Annual adjustment based on Consumer Price Index to a maximum of 2% per year; excess "banked" (§31870).
Supplemental Benefit:	Non-vested supplemental COLA and medical benefits are also paid from the Supplemental Retirees Benefit Reserve to eligible retirees and survivors. These benefits have been excluded from this valuation.
Member Contributions:	Please refer to *Section 4, Exhibit III* for specific rates.
General Tier 1	
Basic	Entry-age based rates that provide for an average annuity at age 60 equal to 1/100 of FAS1 (§31621.2).
Cost-of-Living	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
General Tier 2	
Basic	Entry-age based rates that provide for an average annuity at age 60 equal to 1/120 of FAS3 (§31621).
Cost-of-Living	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
General Tier 3	
Basic	Entry-age based rates that provide for an average annuity at age 55 equal to 1/100 of FAS1 (§31621.8).
Cost-of-Living	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
General Tier 4	50% of the total Normal Cost rate.
Safety Non-Tier 4	
Basic	Entry-age based rates that provide for an average annuity at age 50 equal to 1/100 of FAS1 (FAS3 for Tier 2, Tier 2C, and Tier 2D) (§31639.25). As instructed by ACERA, we have also included a 3% cost-sharing

	contribution that we understand will be paid by Safety Tier 1 and Tier 2 members. For Safety Tier 2C members, there are no cost-sharing contributions. For Safety Tier 2D members, the cost-sharing contribution rate is 5% of salary for the first 5 years of vesting service and 3% of salary for each subsequent year of vesting service. (The 3% cost-sharing contribution for Safety Tiers 1, 2, and 2D (after 5 years of service) will continue even after the member attains 30 years of service.)
Cost-of-Living	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
Safety Tier 4	50% of the total Normal Cost rate.
Other Information:	Except for the 3% cost-sharing contribution described above, non-Tier 4 Safety members are exempt from paying member contributions after 30 or more years of service. This exemption also applies for General members hired on or before March 7, 1973.
Changes in 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 III: Member Contribution Rates

Comparison of Total Member Rate[1] from December 31, 2019 (New) and December 31, 2018 (Current) Valuations:

General Tier 1

Entry Age	Current	New	Change
25	9.36%	9.31%	**-0.05%**
35	11.31%	11.26%	**-0.05%**
45	13.65%	13.59%	**-0.06%**

General Tier 2

Entry Age	Current	New	Change
25	6.45%	6.44%	**-0.01%**
35	7.78%	7.78%	**0.00%**
45	9.38%	9.38%	**0.00%**

General Tier 3

Entry Age	Current	New	Change
25	10.97%	11.20%	**0.23%**
35	13.24%	13.51%	**0.27%**
45	16.04%	16.37%	**0.33%**

General Tier 4

Entry Age[2]	Current	New	Change
Any	8.80%	8.85%	**0.05%**

Safety Tier 1

Entry Age	Current	New	Change
25	17.99%	17.68%	**-0.31%**
30	19.29%	18.95%	**-0.34%**
35	20.75%	20.39%	**-0.36%**

Safety Tier 2

Entry Age	Current	New	Change
25	15.14%	15.14%	**0.00%**
30	16.20%	16.20%	**0.00%**
35	17.37%	17.37%	**0.00%**

Safety Tier 2C

Entry Age	Current	New	Change
25	11.60%	11.57%	**-0.03%**
30	12.61%	12.58%	**-0.03%**
35	13.73%	13.69%	**-0.04%**

Safety Tier 2D (with less than 5 years of vesting service)

Entry Age	Current	New	Change
25	16.97%	16.99%	**0.02%**
30	18.02%	18.04%	**0.02%**
35	19.17%	19.20%	**0.03%**

Safety Tier 2D (with 5 or more years of vesting service)

Entry Age	Current	New	Change
25	14.97%	14.99%	**0.02%**
30	16.02%	16.04%	**0.02%**
35	17.17%	17.20%	**0.03%**

Safety Tier 4

Entry Age[2]	Current	New	Change
Any	15.58%	15.42%	**-0.16%**

[1] For the non-CalPEPRA tiers, contributions for the first $161 of biweekly payroll are based on 2/3 of the above rates for integrated members.
[2] Tier 4 member rates are independent of entry age.

Exhibit III: Member Contribution Rates (continued)

Breakdown of member rate between basic and COLA calculated in the December 31, 2019 and December 31, 2018 valuations:

December 31, 2019 Actuarial Valuation

	BASIC		COLA		COST SHARING CONTRIBUTIONS[2]		TOTAL	
	Rate	Estimated Annual Amount[3]	Rate	Estimated Annual Amount[3]	Rate	Estimated Annual Amount[3]	Rate	Estimated Annual Amount[3]
General Tier 1	6.84%	$866	2.59%	$327			9.43%	$1,193
General Tier 2	6.19%	36,228	1.51%	8,837			7.70%	45,065
General Tier 3	10.10%	183	4.31%	78			14.41%	261
General Tier 4	7.22%	25,446	1.63%	5,745			8.85%	31,191
Safety Tier 1	4.47%	34	2.49%	19	3.00%	$23	9.96%	76
Safety Tier 2	9.08%	10,436	3.73%	4,286	3.00%	3,448	15.81%	18,170
Safety Tier 2C	10.02%	312	3.46%	108	0.00%	0	13.48%	420
Safety Tier 2D	9.35%	1,465	3.69%	578	3.05%	478	16.09%	2,521
Safety Tier 4	12.16%	5,172	3.26%	1,387	0.00%	0	15.42%	6,559
All Tiers Combined	**7.10%**	**$80,142**	**1.89%**	**$21,365**	**0.35%**	**$3,949**	**9.34%**	**$105,456**

December 31, 2018 Actuarial Valuation[1]

	BASIC		COLA		COST SHARING CONTRIBUTIONS[2]		TOTAL	
	Rate	Estimated Annual Amount[3]	Rate	Estimated Annual Amount[3]	Rate	Estimated Annual Amount[3]	Rate	Estimated Annual Amount[3]
General Tier 1	6.84%	$866	2.63%	$332			9.47%	$1,198
General Tier 2	6.19%	36,228	1.51%	8,837			7.70%	45,065
General Tier 3	10.10%	183	4.03%	73			14.13%	256
General Tier 4	7.18%	25,305	1.62%	5,710			8.80%	31,015
Safety Tier 1	4.47%	34	2.65%	20	3.00%	$23	10.12%	77
Safety Tier 2	9.08%	10,436	3.74%	4,298	3.00%	3,448	15.82%	18,182
Safety Tier 2C	10.02%	312	3.50%	109	0.00%	0	13.52%	421
Safety Tier 2D	9.35%	1,465	3.67%	575	3.05%	478	16.07%	2,518
Safety Tier 4	12.29%	5,227	3.29%	1,400	0.00%	0	15.58%	6,627
All Tiers Combined	**7.09%**	**$80,056**	**1.89%**	**$21,354**	**0.35%**	**$3,949**	**9.33%**	**$105,359**

[1] These rates have been re-calculated by applying the individual entry age based member rates determined in December 31, 2018 valuation to the Association membership as of December 31, 2019.

[2] Cost sharing contributions for Safety Tier 2D members are determined based on proportion of members contributing 5.00% (with less than 5 years of vesting service) and 3.00% (with 5 or more years of vesting service).

[3] Amounts are in thousands and are based on December 31, 2019 annual payroll (also in thousands):

	County	AHS, Court & First 5	Housing Authority	LARPD	Total
General Tier 1	$7,586	$1,566	$2,879	$623	$12,654
General Tier 2	390,655	194,387	224		585,266
General Tier 3				1,811	1,811
General Tier 4	215,208	133,904	1,430	1,897	352,439
Safety Tier 1	761				761
Safety Tier 2	114,929				114,929
Safety Tier 2C	3,115				3,115
Safety Tier 2D	15,666				15,666
Safety Tier 4	42,534				42,534
Total	$790,454	$329,857	$4,533	$4,331	$1,129,175

Exhibit III: Member Contribution Rates (continued)

General Tier 1 Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation (as a % of biweekly payroll)

General Tier 1						
	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	3.79%	5.68%	1.43%	2.15%	5.22%	7.83%
17	3.86%	5.79%	1.46%	2.19%	5.32%	7.98%
18	3.94%	5.91%	1.49%	2.23%	5.43%	8.14%
19	4.02%	6.03%	1.52%	2.28%	5.54%	8.31%
20	4.10%	6.14%	1.55%	2.32%	5.65%	8.46%
21	4.18%	6.26%	1.58%	2.37%	5.76%	8.63%
22	4.26%	6.39%	1.61%	2.41%	5.87%	8.80%
23	4.34%	6.51%	1.64%	2.46%	5.98%	8.97%
24	4.42%	6.64%	1.67%	2.51%	6.09%	9.15%
25	4.51%	6.76%	1.70%	2.55%	6.21%	9.31%
26	4.60%	6.89%	1.73%	2.60%	6.33%	9.49%
27	4.68%	7.03%	1.77%	2.65%	6.45%	9.68%
28	4.77%	7.16%	1.81%	2.71%	6.58%	9.87%
29	4.87%	7.30%	1.84%	2.76%	6.71%	10.06%
30	4.96%	7.44%	1.87%	2.81%	6.83%	10.25%
31	5.05%	7.58%	1.91%	2.86%	6.96%	10.44%
32	5.15%	7.72%	1.95%	2.92%	7.10%	10.64%
33	5.25%	7.87%	1.98%	2.97%	7.23%	10.84%
34	5.35%	8.02%	2.02%	3.03%	7.37%	11.05%
35	5.45%	8.17%	2.06%	3.09%	7.51%	11.26%
36	5.55%	8.32%	2.09%	3.14%	7.64%	11.46%
37	5.65%	8.48%	2.13%	3.20%	7.78%	11.68%
38	5.76%	8.64%	2.17%	3.26%	7.93%	11.90%
39	5.87%	8.80%	2.22%	3.33%	8.09%	12.13%

[1] Use these rates for non-integrated members .

Exhibit III: Member Contribution Rates (continued)

	General Tier 1					
	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
40	5.98%	8.97%	2.26%	3.39%	8.24%	12.36%
41	6.09%	9.14%	2.30%	3.45%	8.39%	12.59%
42	6.21%	9.31%	2.35%	3.52%	8.56%	12.83%
43	6.33%	9.49%	2.39%	3.59%	8.72%	13.08%
44	6.45%	9.68%	2.43%	3.65%	8.88%	13.33%
45	6.58%	9.86%	2.49%	3.73%	9.07%	13.59%
46	6.70%	10.06%	2.53%	3.80%	9.23%	13.86%
47	6.84%	10.26%	2.58%	3.87%	9.42%	14.13%
48	6.98%	10.47%	2.63%	3.95%	9.61%	14.42%
49	7.12%	10.67%	2.69%	4.03%	9.81%	14.70%
50	7.24%	10.86%	2.73%	4.10%	9.97%	14.96%
51	7.37%	11.06%	2.79%	4.18%	10.16%	15.24%
52	7.49%	11.24%	2.83%	4.25%	10.32%	15.49%
53	7.59%	11.39%	2.87%	4.30%	10.46%	15.69%
54	7.69%	11.54%	2.91%	4.36%	10.60%	15.90%
55	7.78%	11.67%	2.94%	4.41%	10.72%	16.08%
56	7.84%	11.76%	2.96%	4.44%	10.80%	16.20%
57	7.80%	11.70%	2.95%	4.42%	10.75%	16.12%
58	7.66%	11.49%	2.89%	4.34%	10.55%	15.83%
59 & Over	7.34%	11.01%	2.77%	4.16%	10.11%	15.17%

Interest:	7.25% per annum
COLA:	3.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	37.77%
Terminal Pay:	8.0%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

General Tier 2 Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation (as a % of biweekly payroll)

General Tier 2

	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	2.90%	4.35%	0.71%	1.06%	3.61%	5.41%
17	2.96%	4.43%	0.72%	1.08%	3.68%	5.51%
18	3.01%	4.52%	0.73%	1.10%	3.74%	5.62%
19	3.07%	4.61%	0.75%	1.13%	3.82%	5.74%
20	3.13%	4.70%	0.77%	1.15%	3.90%	5.85%
21	3.20%	4.79%	0.78%	1.17%	3.98%	5.96%
22	3.26%	4.89%	0.79%	1.19%	4.05%	6.08%
23	3.32%	4.98%	0.81%	1.22%	4.13%	6.20%
24	3.39%	5.08%	0.83%	1.24%	4.22%	6.32%
25	3.45%	5.18%	0.84%	1.26%	4.29%	6.44%
26	3.52%	5.28%	0.86%	1.29%	4.38%	6.57%
27	3.58%	5.38%	0.87%	1.31%	4.45%	6.69%
28	3.65%	5.48%	0.89%	1.34%	4.54%	6.82%
29	3.72%	5.58%	0.91%	1.36%	4.63%	6.94%
30	3.79%	5.69%	0.93%	1.39%	4.72%	7.08%
31	3.87%	5.80%	0.95%	1.42%	4.82%	7.22%
32	3.94%	5.91%	0.96%	1.44%	4.90%	7.35%
33	4.01%	6.02%	0.98%	1.47%	4.99%	7.49%
34	4.09%	6.13%	1.00%	1.50%	5.09%	7.63%
35	4.17%	6.25%	1.02%	1.53%	5.19%	7.78%
36	4.25%	6.37%	1.04%	1.56%	5.29%	7.93%
37	4.33%	6.49%	1.05%	1.58%	5.38%	8.07%
38	4.41%	6.61%	1.07%	1.61%	5.48%	8.22%
39	4.49%	6.73%	1.10%	1.65%	5.59%	8.38%

[1] Use these rates for non-integrated members .

Exhibit III: Member Contribution Rates (continued)

General Tier 2

	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
40	4.57%	6.86%	1.12%	1.68%	5.69%	8.54%
41	4.66%	6.99%	1.14%	1.71%	5.80%	8.70%
42	4.75%	7.12%	1.16%	1.74%	5.91%	8.86%
43	4.84%	7.26%	1.18%	1.77%	6.02%	9.03%
44	4.93%	7.40%	1.21%	1.81%	6.14%	9.21%
45	5.03%	7.54%	1.23%	1.84%	6.26%	9.38%
46	5.13%	7.69%	1.25%	1.88%	6.38%	9.57%
47	5.23%	7.84%	1.28%	1.92%	6.51%	9.76%
48	5.33%	7.99%	1.30%	1.95%	6.63%	9.94%
49	5.42%	8.13%	1.33%	1.99%	6.75%	10.12%
50	5.51%	8.27%	1.35%	2.02%	6.86%	10.29%
51	5.59%	8.39%	1.37%	2.05%	6.96%	10.44%
52	5.67%	8.50%	1.39%	2.08%	7.06%	10.58%
53	5.73%	8.60%	1.40%	2.10%	7.13%	10.70%
54	5.79%	8.68%	1.41%	2.12%	7.20%	10.80%
55	5.81%	8.71%	1.42%	2.13%	7.23%	10.84%
56	5.78%	8.67%	1.41%	2.12%	7.19%	10.79%
57	5.72%	8.58%	1.39%	2.09%	7.11%	10.67%
58	5.91%	8.87%	1.45%	2.17%	7.36%	11.04%
59 & Over	6.12%	9.18%	1.49%	2.24%	7.61%	11.42%

Interest:	7.25% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	24.43%
Terminal Pay:	3.0%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

General Tier 3 Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation
(as a % of biweekly payroll)

General Tier 3						
	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	4.40%	6.60%	1.89%	2.83%	6.29%	9.43%
17	4.49%	6.73%	1.93%	2.89%	6.42%	9.62%
18	4.58%	6.86%	1.96%	2.94%	6.54%	9.80%
19	4.67%	7.00%	2.00%	3.00%	6.67%	10.00%
20	4.76%	7.13%	2.04%	3.06%	6.80%	10.19%
21	4.85%	7.27%	2.08%	3.12%	6.93%	10.39%
22	4.94%	7.41%	2.12%	3.18%	7.06%	10.59%
23	5.03%	7.55%	2.16%	3.24%	7.19%	10.79%
24	5.13%	7.70%	2.20%	3.30%	7.33%	11.00%
25	5.23%	7.84%	2.24%	3.36%	7.47%	11.20%
26	5.33%	7.99%	2.29%	3.43%	7.62%	11.42%
27	5.43%	8.14%	2.33%	3.49%	7.76%	11.63%
28	5.53%	8.30%	2.37%	3.56%	7.90%	11.86%
29	5.64%	8.46%	2.41%	3.62%	8.05%	12.08%
30	5.74%	8.62%	2.46%	3.69%	8.20%	12.31%
31	5.85%	8.78%	2.51%	3.76%	8.36%	12.54%
32	5.96%	8.94%	2.55%	3.83%	8.51%	12.77%
33	6.07%	9.11%	2.61%	3.91%	8.68%	13.02%
34	6.19%	9.28%	2.65%	3.98%	8.84%	13.26%
35	6.31%	9.46%	2.70%	4.05%	9.01%	13.51%
36	6.43%	9.64%	2.75%	4.13%	9.18%	13.77%
37	6.55%	9.82%	2.81%	4.21%	9.36%	14.03%
38	6.67%	10.01%	2.86%	4.29%	9.53%	14.30%
39	6.80%	10.20%	2.91%	4.37%	9.71%	14.57%

[1] Use these rates for non-integrated members .

Exhibit III: Member Contribution Rates (continued)

	General Tier 3					
	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
40	6.93%	10.40%	2.97%	4.46%	9.90%	14.86%
41	7.07%	10.61%	3.03%	4.55%	10.10%	15.16%
42	7.21%	10.82%	3.09%	4.64%	10.30%	15.46%
43	7.36%	11.04%	3.15%	4.73%	10.51%	15.77%
44	7.50%	11.26%	3.21%	4.82%	10.71%	16.08%
45	7.64%	11.46%	3.27%	4.91%	10.91%	16.37%
46	7.78%	11.66%	3.33%	5.00%	11.11%	16.66%
47	7.90%	11.85%	3.39%	5.08%	11.29%	16.93%
48	8.01%	12.01%	3.43%	5.15%	11.44%	17.16%
49	8.11%	12.17%	3.47%	5.21%	11.58%	17.38%
50	8.20%	12.30%	3.51%	5.27%	11.71%	17.57%
51	8.27%	12.40%	3.54%	5.31%	11.81%	17.71%
52	8.22%	12.33%	3.53%	5.29%	11.75%	17.62%
53	8.08%	12.12%	3.46%	5.19%	11.54%	17.31%
54 & Over	7.74%	11.61%	3.32%	4.98%	11.06%	16.59%

Interest:	7.25% per annum
COLA:	3.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	42.86%
Terminal Pay:	8.0%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

General Tier 4 Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation (as a % of biweekly eligible payroll)[1]

	General Tier 4		
	Basic	COLA	Total
Entry Age	Eligible Pay	Eligible Pay	Eligible Pay
All Ages	7.22%	1.63%	8.85%

Interest:	7.25% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	22.58%
Terminal Pay:	0.0%

[1] It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2020 is equal to $126,291. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of $126,291, or $151,549). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2020. (reference: Section 7522.10(d))

Exhibit III: Member Contribution Rates (continued)

Safety Tier 1 Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation
(as a % of biweekly payroll)

Safety Tier 1

	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	5.40%	8.11%	3.00%	3.00%	3.03%	4.54%	11.43%	15.65%
17	5.49%	8.24%	3.00%	3.00%	3.08%	4.62%	11.57%	15.86%
18	5.59%	8.38%	3.00%	3.00%	3.13%	4.70%	11.72%	16.08%
19	5.68%	8.52%	3.00%	3.00%	3.19%	4.78%	11.87%	16.30%
20	5.77%	8.66%	3.00%	3.00%	3.24%	4.86%	12.01%	16.52%
21	5.87%	8.81%	3.00%	3.00%	3.29%	4.94%	12.16%	16.75%
22	5.97%	8.95%	3.00%	3.00%	3.35%	5.02%	12.32%	16.97%
23	6.07%	9.10%	3.00%	3.00%	3.40%	5.10%	12.47%	17.20%
24	6.17%	9.25%	3.00%	3.00%	3.46%	5.19%	12.63%	17.44%
25	6.27%	9.41%	3.00%	3.00%	3.51%	5.27%	12.78%	17.68%
26	6.38%	9.57%	3.00%	3.00%	3.57%	5.36%	12.95%	17.93%
27	6.48%	9.73%	3.00%	3.00%	3.63%	5.45%	13.11%	18.18%
28	6.59%	9.89%	3.00%	3.00%	3.69%	5.54%	13.28%	18.43%
29	6.70%	10.05%	3.00%	3.00%	3.76%	5.64%	13.46%	18.69%
30	6.82%	10.22%	3.00%	3.00%	3.82%	5.73%	13.64%	18.95%
31	6.93%	10.40%	3.00%	3.00%	3.89%	5.83%	13.82%	19.23%
32	7.05%	10.58%	3.00%	3.00%	3.95%	5.93%	14.00%	19.51%
33	7.17%	10.76%	3.00%	3.00%	4.02%	6.03%	14.19%	19.79%
34	7.30%	10.95%	3.00%	3.00%	4.09%	6.14%	14.39%	20.09%
35	7.43%	11.14%	3.00%	3.00%	4.17%	6.25%	14.60%	20.39%
36	7.56%	11.34%	3.00%	3.00%	4.24%	6.36%	14.80%	20.70%
37	7.70%	11.55%	3.00%	3.00%	4.32%	6.48%	15.02%	21.03%
38	7.85%	11.77%	3.00%	3.00%	4.40%	6.60%	15.25%	21.37%
39	8.01%	12.01%	3.00%	3.00%	4.49%	6.73%	15.50%	21.74%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 1

	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**
40	8.16%	12.25%	3.00%	3.00%	4.58%	6.87%	15.74%	22.12%
41	8.33%	12.49%	3.00%	3.00%	4.67%	7.00%	16.00%	22.49%
42	8.51%	12.76%	3.00%	3.00%	4.77%	7.16%	16.28%	22.92%
43	8.67%	13.00%	3.00%	3.00%	4.86%	7.29%	16.53%	23.29%
44	8.79%	13.19%	3.00%	3.00%	4.93%	7.39%	16.72%	23.58%
45	8.85%	13.27%	3.00%	3.00%	4.96%	7.44%	16.81%	23.71%
46	8.86%	13.28%	3.00%	3.00%	4.97%	7.45%	16.83%	23.73%
47	8.68%	13.02%	3.00%	3.00%	4.87%	7.30%	16.55%	23.32%
48	8.41%	12.62%	3.00%	3.00%	4.71%	7.07%	16.12%	22.69%
49 & Over	7.94%	11.91%	3.00%	3.00%	4.45%	6.68%	15.39%	21.59%

Interest: 7.25% per annum
COLA: 3.00%
Mortality: See *Section 4, Exhibit I*
Salary Increase: Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor: 56.06%
Terminal Pay: 8.5%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2 Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation
(as a % of biweekly payroll)

Safety Tier 2								
	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	4.94%	7.42%	3.00%	3.00%	2.03%	3.05%	9.97%	13.47%
17	5.03%	7.54%	3.00%	3.00%	2.07%	3.10%	10.10%	13.64%
18	5.11%	7.67%	3.00%	3.00%	2.10%	3.15%	10.21%	13.82%
19	5.20%	7.79%	3.00%	3.00%	2.14%	3.21%	10.34%	14.00%
20	5.28%	7.92%	3.00%	3.00%	2.17%	3.26%	10.45%	14.18%
21	5.37%	8.05%	3.00%	3.00%	2.21%	3.31%	10.58%	14.36%
22	5.46%	8.19%	3.00%	3.00%	2.25%	3.37%	10.71%	14.56%
23	5.55%	8.32%	3.00%	3.00%	2.28%	3.42%	10.83%	14.74%
24	5.64%	8.46%	3.00%	3.00%	2.32%	3.48%	10.96%	14.94%
25	5.74%	8.60%	3.00%	3.00%	2.36%	3.54%	11.10%	15.14%
26	5.83%	8.75%	3.00%	3.00%	2.40%	3.60%	11.23%	15.35%
27	5.93%	8.89%	3.00%	3.00%	2.44%	3.66%	11.37%	15.55%
28	6.03%	9.04%	3.00%	3.00%	2.48%	3.72%	11.51%	15.76%
29	6.13%	9.19%	3.00%	3.00%	2.52%	3.78%	11.65%	15.97%
30	6.23%	9.35%	3.00%	3.00%	2.57%	3.85%	11.80%	16.20%
31	6.34%	9.51%	3.00%	3.00%	2.61%	3.91%	11.95%	16.42%
32	6.45%	9.67%	3.00%	3.00%	2.65%	3.98%	12.10%	16.65%
33	6.56%	9.83%	3.00%	3.00%	2.70%	4.05%	12.26%	16.88%
34	6.67%	10.01%	3.00%	3.00%	2.75%	4.12%	12.42%	17.13%
35	6.79%	10.18%	3.00%	3.00%	2.79%	4.19%	12.58%	17.37%
36	6.91%	10.37%	3.00%	3.00%	2.84%	4.26%	12.75%	17.63%
37	7.04%	10.56%	3.00%	3.00%	2.89%	4.34%	12.93%	17.90%
38	7.17%	10.75%	3.00%	3.00%	2.95%	4.42%	13.12%	18.17%
39	7.30%	10.95%	3.00%	3.00%	3.01%	4.51%	13.31%	18.46%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2

	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
40	7.44%	11.16%	3.00%	3.00%	3.06%	4.59%	13.50%	18.75%
41	7.58%	11.36%	3.00%	3.00%	3.11%	4.67%	13.69%	19.03%
42	7.69%	11.54%	3.00%	3.00%	3.17%	4.75%	13.86%	19.29%
43	7.77%	11.66%	3.00%	3.00%	3.20%	4.80%	13.97%	19.46%
44	7.80%	11.70%	3.00%	3.00%	3.21%	4.82%	14.01%	19.52%
45	7.75%	11.63%	3.00%	3.00%	3.19%	4.78%	13.94%	19.41%
46	7.62%	11.43%	3.00%	3.00%	3.13%	4.70%	13.75%	19.13%
47	7.43%	11.14%	3.00%	3.00%	3.05%	4.58%	13.48%	18.72%
48	7.68%	11.52%	3.00%	3.00%	3.16%	4.74%	13.84%	19.26%
49 & Over	7.94%	11.91%	3.00%	3.00%	3.27%	4.90%	14.21%	19.81%

Interest:	7.25% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	41.14%
Terminal Pay:	3.5%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2C Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation (as a % of biweekly payroll)

Safety Tier 2C						
	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	4.94%	7.42%	1.71%	2.56%	6.65%	9.98%
17	5.03%	7.54%	1.73%	2.60%	6.76%	10.14%
18	5.11%	7.67%	1.76%	2.64%	6.87%	10.31%
19	5.20%	7.79%	1.79%	2.69%	6.99%	10.48%
20	5.28%	7.92%	1.82%	2.73%	7.10%	10.65%
21	5.37%	8.05%	1.85%	2.78%	7.22%	10.83%
22	5.46%	8.19%	1.89%	2.83%	7.35%	11.02%
23	5.55%	8.32%	1.91%	2.87%	7.46%	11.19%
24	5.64%	8.46%	1.95%	2.92%	7.59%	11.38%
25	5.74%	8.60%	1.98%	2.97%	7.72%	11.57%
26	5.83%	8.75%	2.01%	3.02%	7.84%	11.77%
27	5.93%	8.89%	2.05%	3.07%	7.98%	11.96%
28	6.03%	9.04%	2.08%	3.12%	8.11%	12.16%
29	6.13%	9.19%	2.11%	3.17%	8.24%	12.36%
30	6.23%	9.35%	2.15%	3.23%	8.38%	12.58%
31	6.34%	9.51%	2.19%	3.28%	8.53%	12.79%
32	6.45%	9.67%	2.23%	3.34%	8.68%	13.01%
33	6.56%	9.83%	2.26%	3.39%	8.82%	13.22%
34	6.67%	10.01%	2.30%	3.45%	8.97%	13.46%
35	6.79%	10.18%	2.34%	3.51%	9.13%	13.69%
36	6.91%	10.37%	2.39%	3.58%	9.30%	13.95%
37	7.04%	10.56%	2.43%	3.64%	9.47%	14.20%
38	7.17%	10.75%	2.47%	3.71%	9.64%	14.46%
39	7.30%	10.95%	2.52%	3.78%	9.82%	14.73%

[1] Use these rates for non-integrated members .

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2C						
	Basic		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
40	7.44%	11.16%	2.57%	3.85%	10.01%	15.01%
41	7.58%	11.36%	2.61%	3.92%	10.19%	15.28%
42	7.69%	11.54%	2.65%	3.98%	10.34%	15.52%
43	7.77%	11.66%	2.68%	4.02%	10.45%	15.68%
44	7.80%	11.70%	2.69%	4.04%	10.49%	15.74%
45	7.75%	11.63%	2.67%	4.01%	10.42%	15.64%
46	7.62%	11.43%	2.63%	3.94%	10.25%	15.37%
47	7.43%	11.14%	2.56%	3.84%	9.99%	14.98%
48	7.68%	11.52%	2.65%	3.97%	10.33%	15.49%
49 & Over	7.94%	11.91%	2.74%	4.11%	10.68%	16.02%

Interest:	7.25% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	34.50%
Terminal Pay:	3.5%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2D Members' Contribution Rates for Members with Less than 5 Years of Vesting Service Based on the December 31, 2019 Actuarial Valuation (as a % of biweekly payroll)

Safety Tier 2D Members with Less than 5 Years of Vesting Service

	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	4.94%	7.42%	5.00%	5.00%	1.95%	2.92%	11.89%	15.34%
17	5.03%	7.54%	5.00%	5.00%	1.98%	2.97%	12.01%	15.51%
18	5.11%	7.67%	5.00%	5.00%	2.01%	3.02%	12.12%	15.69%
19	5.20%	7.79%	5.00%	5.00%	2.05%	3.07%	12.25%	15.86%
20	5.28%	7.92%	5.00%	5.00%	2.08%	3.12%	12.36%	16.04%
21	5.37%	8.05%	5.00%	5.00%	2.12%	3.18%	12.49%	16.23%
22	5.46%	8.19%	5.00%	5.00%	2.15%	3.23%	12.61%	16.42%
23	5.55%	8.32%	5.00%	5.00%	2.19%	3.28%	12.74%	16.60%
24	5.64%	8.46%	5.00%	5.00%	2.23%	3.34%	12.87%	16.80%
25	5.74%	8.60%	5.00%	5.00%	2.26%	3.39%	13.00%	16.99%
26	5.83%	8.75%	5.00%	5.00%	2.30%	3.45%	13.13%	17.20%
27	5.93%	8.89%	5.00%	5.00%	2.34%	3.51%	13.27%	17.40%
28	6.03%	9.04%	5.00%	5.00%	2.38%	3.57%	13.41%	17.61%
29	6.13%	9.19%	5.00%	5.00%	2.42%	3.63%	13.55%	17.82%
30	6.23%	9.35%	5.00%	5.00%	2.46%	3.69%	13.69%	18.04%
31	6.34%	9.51%	5.00%	5.00%	2.50%	3.75%	13.84%	18.26%
32	6.45%	9.67%	5.00%	5.00%	2.54%	3.81%	13.99%	18.48%
33	6.56%	9.83%	5.00%	5.00%	2.59%	3.88%	14.15%	18.71%
34	6.67%	10.01%	5.00%	5.00%	2.63%	3.95%	14.30%	18.96%
35	6.79%	10.18%	5.00%	5.00%	2.68%	4.02%	14.47%	19.20%
36	6.91%	10.37%	5.00%	5.00%	2.73%	4.09%	14.64%	19.46%
37	7.04%	10.56%	5.00%	5.00%	2.77%	4.16%	14.81%	19.72%
38	7.17%	10.75%	5.00%	5.00%	2.83%	4.24%	15.00%	19.99%
39	7.30%	10.95%	5.00%	5.00%	2.88%	4.32%	15.18%	20.27%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2D Members with Less than 5 Years of Vesting Service

	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**
40	7.44%	11.16%	5.00%	5.00%	2.93%	4.40%	15.37%	20.56%
41	7.58%	11.36%	5.00%	5.00%	2.99%	4.48%	15.57%	20.84%
42	7.69%	11.54%	5.00%	5.00%	3.03%	4.55%	15.72%	21.09%
43	7.77%	11.66%	5.00%	5.00%	3.07%	4.60%	15.84%	21.26%
44	7.80%	11.70%	5.00%	5.00%	3.08%	4.62%	15.88%	21.32%
45	7.75%	11.63%	5.00%	5.00%	3.06%	4.59%	15.81%	21.22%
46	7.62%	11.43%	5.00%	5.00%	3.01%	4.51%	15.63%	20.94%
47	7.43%	11.14%	5.00%	5.00%	2.93%	4.40%	15.36%	20.54%
48	7.68%	11.52%	5.00%	5.00%	3.03%	4.54%	15.71%	21.06%
49 & Over	7.94%	11.91%	5.00%	5.00%	3.13%	4.70%	16.07%	21.61%

Interest:	7.25% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	39.44%
Terminal Pay:	3.5%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2D Members with 5 or More Years of Vesting Service
Based on the December 31, 2019 Actuarial Valuation (as a % of biweekly payroll)

Safety Tier 2D Members with 5 or More Years of Vesting Service

	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]	First $161	Over $161[1]
16 & Under	4.94%	7.42%	3.00%	3.00%	1.95%	2.92%	9.89%	13.34%
17	5.03%	7.54%	3.00%	3.00%	1.98%	2.97%	10.01%	13.51%
18	5.11%	7.67%	3.00%	3.00%	2.01%	3.02%	10.12%	13.69%
19	5.20%	7.79%	3.00%	3.00%	2.05%	3.07%	10.25%	13.86%
20	5.28%	7.92%	3.00%	3.00%	2.08%	3.12%	10.36%	14.04%
21	5.37%	8.05%	3.00%	3.00%	2.12%	3.18%	10.49%	14.23%
22	5.46%	8.19%	3.00%	3.00%	2.15%	3.23%	10.61%	14.42%
23	5.55%	8.32%	3.00%	3.00%	2.19%	3.28%	10.74%	14.60%
24	5.64%	8.46%	3.00%	3.00%	2.23%	3.34%	10.87%	14.80%
25	5.74%	8.60%	3.00%	3.00%	2.26%	3.39%	11.00%	14.99%
26	5.83%	8.75%	3.00%	3.00%	2.30%	3.45%	11.13%	15.20%
27	5.93%	8.89%	3.00%	3.00%	2.34%	3.51%	11.27%	15.40%
28	6.03%	9.04%	3.00%	3.00%	2.38%	3.57%	11.41%	15.61%
29	6.13%	9.19%	3.00%	3.00%	2.42%	3.63%	11.55%	15.82%
30	6.23%	9.35%	3.00%	3.00%	2.46%	3.69%	11.69%	16.04%
31	6.34%	9.51%	3.00%	3.00%	2.50%	3.75%	11.84%	16.26%
32	6.45%	9.67%	3.00%	3.00%	2.54%	3.81%	11.99%	16.48%
33	6.56%	9.83%	3.00%	3.00%	2.59%	3.88%	12.15%	16.71%
34	6.67%	10.01%	3.00%	3.00%	2.63%	3.95%	12.30%	16.96%
35	6.79%	10.18%	3.00%	3.00%	2.68%	4.02%	12.47%	17.20%
36	6.91%	10.37%	3.00%	3.00%	2.73%	4.09%	12.64%	17.46%
37	7.04%	10.56%	3.00%	3.00%	2.77%	4.16%	12.81%	17.72%
38	7.17%	10.75%	3.00%	3.00%	2.83%	4.24%	13.00%	17.99%
39	7.30%	10.95%	3.00%	3.00%	2.88%	4.32%	13.18%	18.27%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 2D Members with 5 or More Years of Vesting Service

	Basic		Cost Sharing Contributions		COLA		Total	
Entry Age	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**	**First $161**	**Over $161[1]**
40	7.44%	11.16%	3.00%	3.00%	2.93%	4.40%	13.37%	18.56%
41	7.58%	11.36%	3.00%	3.00%	2.99%	4.48%	13.57%	18.84%
42	7.69%	11.54%	3.00%	3.00%	3.03%	4.55%	13.72%	19.09%
43	7.77%	11.66%	3.00%	3.00%	3.07%	4.60%	13.84%	19.26%
44	7.80%	11.70%	3.00%	3.00%	3.08%	4.62%	13.88%	19.32%
45	7.75%	11.63%	3.00%	3.00%	3.06%	4.59%	13.81%	19.22%
46	7.62%	11.43%	3.00%	3.00%	3.01%	4.51%	13.63%	18.94%
47	7.43%	11.14%	3.00%	3.00%	2.93%	4.40%	13.36%	18.54%
48	7.68%	11.52%	3.00%	3.00%	3.03%	4.54%	13.71%	19.06%
49 & Over	7.94%	11.91%	3.00%	3.00%	3.13%	4.70%	14.07%	19.61%

Interest:	7.25% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	39.44%
Terminal Pay:	3.5%

[1] Use these rates for non-integrated members.

Exhibit III: Member Contribution Rates (continued)

Safety Tier 4 Members' Contribution Rates Based on the December 31, 2019 Actuarial Valuation (as a % of biweekly eligible payroll)[1]

	Safety Tier 4		
	Basic	COLA	Total
Entry Age	Eligible Pay	Eligible Pay	Eligible Pay
All Ages	12.16%	3.26%	15.42%

Interest:	7.25% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit I*
Salary Increase:	Inflation (3.00%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit I*)
COLA Loading Factor:	26.81%
Terminal Pay:	0.0%

[1] It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2020 is equal to $126,291. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of $126,291, or $151,549). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2020. (reference: Section 7522.10(d))

Exhibit IV: Projected Employer Contributions by Each Participating Employer

Estimated Employer Contribution Requirement for Each Participating Employer in ACERA ($000s)
Calculated Based on Projected Employer Compensation Used in the December 31, 2019 Actuarial Valuation

Dollar Contribution[1,3] – Based on December 31, 2019 Valuation

	General				Safety					
Employer Name (Code)	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**	**Tier 1**	**Tier 2**	**Tier 2C**	**Tier 2D**	**Tier 4**	**Total**
Alameda County (101)	$1,738	$85,631		$46,119	$632	$73,163	$2,023	$9,918	$25,729	$244,953
Health System (106)	163	35,585		24,582						60,330
Superior Court (632)	210	8,051		4,539						12,800
First 5 (714)		665		740						1,405
Housing Authority (103)	834	63		394						1,291
LARPD (104)	237		$794	694						1,725
Total	**$3,182**	**$129,995**	**$794**	**$77,068**	**$632**	**$73,163**	**$2,023**	**$9,918**	**$25,729**	**$322,504**

Dollar Contribution[2,3] – Based on December 31, 2018 Valuation

	General				Safety					
Employer Name (Code)	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**	**Tier 1**	**Tier 2**	**Tier 2C**	**Tier 2D**	**Tier 4**	**Total**
Alameda County (101)	$1,693	$83,600		$44,828	$613	$71,648	$1,981	$9,651	$25,180	$239,194
Health System (106)	158	34,693		23,866						58,717
Superior Court (632)	204	7,850		4,407						12,461
First 5 (714)		649		718						1,367
Housing Authority (103)	816	61		384						1,261
LARPD (104)	209		$696	610						1,515
Total	**$3,080**	**$126,853**	**$696**	**$74,813**	**$613**	**$71,648**	**$1,981**	**$9,651**	**$25,180**	**$314,515**

[1] Includes contributions only for those employers with active member payroll. The UAAL contribution for ACOE, expressed as a level dollar amount, is $89 K when made on April 1, 2021.

[2] Includes contributions only for those employers with active member payroll. The UAAL contribution for ACOE, expressed as a level dollar amount, is $78 K when made on April 1, 2020.

[3] Contribution calculated using projected compensation provided on the next page for the December 31, 2019 valuation:

Exhibit IV: Projected Employer Contributions by Each Participating Employer (continued)

	December 31, 2019 Projected Total Compensation ($000s)									
	General				Safety					
Employer Name (Code)	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 2C	Tier 2D	Tier 4	Total
Alameda County (101)	$7,586	$390,655		$215,208	$761	$114,929	$3,115	$15,666	$42,534	$790,454
Health System (106)	682	156,139		110,231						267,052
Superior Court (632)	884	35,328		20,356						56,568
First 5 (714)		2,920		3,317						6,237
Housing Authority (103)	2,879	224		1,430						4,533
LARPD (104)	623		1,811	1,897						4,331
Total	**$12,654**	**$585,266**	**$1,811**	**$352,439**	**$761**	**$114,929**	**$3,115**	**$15,666**	**$42,534**	**$1,129,175**

Exhibit V: Schedule of Outstanding Balances of Prior Implicit Retiree Health Benefit Subsidy Transfers

For Year(s)	Initial Years	Initial Amount[1]	Outstanding Balance	Years Remaining	Annual Payment[2]
Prior to 2013	[3]	[3]	$33,706	13	$3,301
2013	20	$6,993	6,583	14	608
2014	20	5,215	4,889	15	429
2015	20	5,325	5,144	16	430
2016	20	8,865	8,730	17	697
2017	20	5,830	5,727	18	440
2018	20	6,940	6,881	19	508
2019	20	6,511	6,511	20	464
Total			**$78,171**		**$6,877**

[1] For years 2013 and later, these amounts are estimates provided by ACERA.
[2] Level percentage of payroll.
[3] Various initial years and amounts prior to 2013.

Exhibit VI: Allocation of the Valuation Value of Assets as of December 31, 2019

The allocation of the Valuation Value of Assets is determined based on a roll-forward of the prior year allocation using employer contributions, member contributions, benefit payments, and calculated interest credits as provided by ACERA.

	General (Excluding LARPD and Office of Education)	General (Office of Education)	General (LARPD)	Safety	Total
A. Valuation Value of Assets at Beginning-of-Year					
Basic Only	$3,791,787,232	$1,770,669	$29,941,755	$1,088,871,342	$4,912,370,998
COLA Only	1,634,005,352	1,362,547	15,240,109	676,348,151	2,326,956,159
Total	$5,425,792,584	$3,133,216	$45,181,864	$1,765,219,493	$7,239,327,157
B. Adjustment for the difference between the Actual SRBR Transfer and the Estimated SRBR Transfer used in Prior Valuation					
Basic Only	$(31,418)	$0	$0	$(9,251)	$(40,669)
C. Employer Contributions					
Basic Only	$151,617,916	$750,000	$933,947	$81,391,348	$234,693,211
COLA Only	40,930,929	0	372,627	22,530,183	63,833,739
Total	$192,548,845	$750,000	$1,306,574	$103,921,531	$298,526,950
D. Employee Contributions					
Basic Only	$61,119,825	$0	$396,671	$21,226,902	$82,743,398
COLA Only	13,919,030	0	129,743	6,324,851	20,373,624
Total	$75,038,855	$0	$526,414	$27,551,753	$103,117,022
E. Benefit Payments					
Basic Only	$275,660,989	$274,991	$2,441,488	$102,352,798	$380,730,266
COLA Only	86,583,844	110,259	586,782	34,774,911	122,055,796
Total	$362,244,833	$385,250	$3,028,270	$137,127,709	$502,786,062
F. Average Valuation Value of Assets: (A) + (B) +1/2 x [(C) + (D) - (E)]					
Basic Only	$3,760,294,190	$2,008,174	$29,386,320	$1,088,994,817	$4,880,683,500
COLA Only	1,618,138,410	1,307,418	15,197,903	673,388,213	2,308,031,943
Total	$5,378,432,599	$3,315,591	$44,584,223	$1,762,383,030	$7,188,715,443
G. Return on Valuation Value of Assets: Total Column (G) / Total Column (F) x Cost Group Column (F)					
Basic Only	$238,069,898	$127,140	$1,860,492	$68,945,905	$309,003,436
COLA Only	102,581,690	82,884	963,469	42,689,365	146,317,407
Total	$340,651,588	$210,024	$2,823,961	$111,635,269	$455,320,843
H. Preliminary Valuation Value of Assets Provided by ACERA: (A) + (B) + (C) + (D) – (E) + (G)					
Basic Only	$3,966,902,464	$2,372,818	$30,691,377	$1,158,073,448	$5,158,040,107
COLA Only	1,704,853,157	1,335,172	16,119,166	713,117,639	2,435,425,134
Total	$5,671,755,621	$3,707,990	$46,810,543	$1,871,191,087	$7,593,465,241
I. Estimated SRBR Transfer and other Asset Transfer					
Basic Only	$5,052,907	$0	$0	$1,457,969	$6,510,876
COLA Only	0	0	0	0	0
Total	$5,052,907	$0	$0	$1,457,969	$6,510,876
J. Valuation Value of Assets at End of Year: (H) + (I)					
Basic Only	**$3,971,955,371**	**$2,372,818**	**$30,691,377**	**$1,159,531,417**	**$5,164,550,983**
COLA Only	**1,704,853,157**	**1,335,172**	**16,119,166**	**713,117,639**	**2,435,425,134**
Total	**$5,676,808,528**	**$3,707,990**	**$46,810,543**	**$1,872,649,056**	**$7,599,976,117**

Note: Results may be slightly off due to rounding.

ACERA

MEMORANDUM TO THE BOARD OF RETIREMENT

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: **Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74 Actuarial Valuations and Addendums as of December 31, 2019**

Executive Summary

Staff has completed its review and evaluation of the GASB Statement No. 67 and Statement No. 74 Actuarial Valuations and Addendums[1] as of December 31, 2019. Staff and ACERA's actuary, Segal Consulting, conducted presentations of this information at the following meetings:

- April 16, 2020, Board of Retirement meeting; and
- April 29, 2020 Participating Employers' Meeting.

Having no need for further review, staff recommends the Board of Retirement consider a motion to adopt the GASB Statement No. 67 and Statement No, 74 Actuarial Valuations and Addendums as of December 31, 2019.

Recommendation

Staff recommends that the Board of Retirement adopt the GASB Statement No. 67 and Statement No. 74 Actuarial Valuations and Addendums as of December 31, 2019.

Attachments: Addendums to the Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74 Actuarial Valuations as of December 31, 2019

[1] The addendums contain additional schedules recommended by the American Institute of Certified Public Accountants (AICPA) for use in allocating the Net Pension Liability (NPL) and the Net OPEB Liability (NOL) by employer, before issuing the full companion reports for the employers' financial reporting under GASB Statement No. 68 and Statement No.75.

Alameda County Employees' Retirement Association (ACERA)

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

As of December 31, 2019

DRAFT

Segal

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T 415.263.8200

April 7, 2020

Board of Retirement
Alameda County Employees' Retirement Association
475 14th Street, Suite 1000
Oakland, CA 94612

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statement 67 (GASB 67) Actuarial Valuation as of December 31, 2019. It contains various information that will need to be disclosed in order to comply with GASB 67.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist ACERA in preparing items related to the pension plan in their financial report. The census and financial information on which our calculations were based were provided by ACERA. 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; and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Eva Yum, FSA, MAAA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion 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 ACERA.

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

Sincerely,

Segal

Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary	Eva Yum, FSA, MAAA, EA Senior Actuary

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statement 67 (GASB 67) as of December 31, 2019. This valuation is based on:

- The benefit provisions of ACERA, as administered by the Board;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of November 30, 2018, provided by ACERA;
- The assets of the Plan as of December 31, 2019, provided by ACERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the December 31, 2019 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the December 31, 2019 valuation.

General observations on GASB 67 actuarial valuation

1. It is important to note that Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. Employers and plans 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 ACERA uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is generally determined on the same basis as ACERA's Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.
3. The 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 fair value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis.

Highlights of the valuation

1. As we disclosed in our December 31, 2019 funding valuation report, the 7.25% investment return assumption that the Board approved on December 21, 2017 for determining the liabilities for funding purposes and used for establishing the employer and employee contribution rates has continued to be developed without considering the impact of any future 50/50 excess earnings allocation. This is based on our understanding that Article 5.5 of the Statute, which authorizes the allocation of 50% of excess earnings to the SRBR, does not allow for the use of a different investment return for funding than is used for interest crediting. This would appear in effect to preclude the prefunding of the SRBR through the use of an assumption lower than the market earnings assumption of 7.25%.

   As required by the Actuarial Standard of Practice (ASOP) No. 4 ("Measuring Pension Obligations and Determining Pension Plan Costs or Contributions"), we performed a stochastic model to estimate the impact of the 50% allocation of future excess earnings to the SRBR. The results of our model indicated that the 50/50 allocation of future excess earnings would have about the same impact as an "outflow" (i.e., assets not available to fund the benefits included in the determination of the TPL) that would average approximately 0.60% of assets over time. This approximated outflow was incorporated into our GASB crossover test[1] (Appendix A), along with the additional future employer contributions that would result from those future allocations of excess earnings to the SRBR under ACERA's funding policy.

2. The NPL measured as of December 31, 2019 was determined by rolling forward the TPL for the funded benefits as of December 31, 2018. Similar to last year, we have included in the TPL as of December 31, 2019 the non-OPEB unlimited Actuarial Accrued Liability (AAL) of $198.5 million, which was calculated by rolling forward the total unlimited non-OPEB AAL as of December 31, 2018.

3. We have also continued the practice of adjusting the Plan's Fiduciary Net Position as of December 31, 2019 to include the $40.4 million set aside by the Retirement Board in the SRBR reserve to pay non-vested Supplemental COLA and retired member death benefits[2] as of December 31, 2019. It should be noted that as of December 31, 2019, the deferred investment gain for the entire Plan was $260.7 million. Consequently, after first replenishing the Contingency Reserve from $0 to $89.4 million (1% of total assets), we have added to the Plan's Fiduciary Net Position the proportionate share of one-half of the net deferred investment gain that is commensurate with the size of the non-OPEB SRBR reserve, or $3.8 million. The net effect of the adjustments to the Plan's Fiduciary Net Position as of December 31, 2019 for non-OPEB SRBR benefits was an addition of $44.2 million.

[1] The purpose of the GASB crossover test is to determine if the full expected return (or 7.25% in this case) can be used as the discount rate to determine the TPL and the NPL. That is, if there is no crossover point where the projected benefit payments would exceed the Plan's Fiduciary Net Position, then the full expected return assumption can be used. As detailed later in this report, ACERA does pass the crossover test, which means that the full 7.25% investment rate of return assumption can be used as the discount rate to determine the TPL and the resulting NPL.

[2] We have excluded the liability and the assets associated with the OPEB component of the SRBR reserve account because it is our understanding that those amounts are reportable under GASB 74/75.

Note that the proportionate share of one-half of the net deferred market gain as of December 31, 2019 for the Pension Plan was equal to $85.5 million, and in calculating the Plan's Fiduciary Net Position we have adjusted the Pension Plan's valuation value of assets in the funding valuation to reflect that amount.

4. The $154.3 million difference between the $198.5 million added to the TPL and the net $44.2 million added to the Plan's Fiduciary Net Position as of December 31, 2019 represents the NPL attributable to non-OPEB SRBR benefits.
5. The NPL decreased from $2,764 million as of December 31, 2018 to $2,141 million as of December 31, 2019 primarily as a result of the favorable investment return during calendar year 2019 of about $679 million. Changes in these values during the last two fiscal years ending December 31, 2018 and December 31, 2019 can be found in *Section 2*, *Schedule of Changes in Net Pension Liability* on page 19.
6. The discount rate used to measure the TPL and NPL as of December 31, 2019 and December 31, 2018 was 7.25%, following the same assumptions used by ACERA in the pension funding valuations as of December 31, 2019 and December 31, 2018, respectively. The detailed calculations used in this derivation can be found in *Section 3, Appendix A*. Various other information that is required to be disclosed can be found throughout *Section 2*.

Summary of key valuation results

Measurement Date		December 31, 2019	December 31, 2018
Disclosure elements for fiscal year ending December 31:	• Service cost[1]	$215,625,191	$209,890,150
	• Total Pension Liability	9,959,791,606	9,535,148,109
	• Plan's Fiduciary Net Position[2]	7,819,098,646	6,771,146,134
	• Net Pension Liability	2,140,692,960	2,764,001,975
Schedule of contributions for fiscal year ending December 31:	• Actuarially determined contributions	$298,526,950	$269,684,809
	• Actual contributions[3]	298,526,950	269,684,809
	• Contribution deficiency / (excess)	0	0
Demographic data for plan year ending December 31:[4]	• Number of retired members and beneficiaries	10,078	9,783
	• Number of inactive vested members[5]	2,821	2,568
	• Number of active members	11,336	11,349
Key assumptions as of December 31:	• Investment rate of return	7.25%	7.25%
	• Inflation rate	3.00%	3.00%
	• Projected salary increases[6]	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%

(1) The Service Cost is based on the previous year's valuation, meaning the December 31, 2019 and December 31, 2018 measurement date values are based on the valuations as of December 31, 2018 and December 31, 2017, respectively. Both service costs have been calculated using the assumptions shown in the December 31, 2018 measurement date column, as there had been no changes in the actuarial assumptions between the December 31, 2017 and December 31, 2018 valuations.

(2) For 2019, the Plan's Fiduciary Net Position amount shown ($7,819,098,646) includes the net fair value of assets ($8,789,279,051) less OPEB-related SRBR assets ($970,180,405). The OPEB-related SRBR assets include $877,769,175 in the SRBR-OPEB reserve (after reducing the reserve by the $6,510,876 SRBR implicit subsidy transfer), and $10,415,538 in the 401(h) reserve, plus a proportionate share of one half of the deferred market gains (after adjustment to replenish the balance in the Contingency Reserve) commensurate with the size of the OPEB to total SRBR and 401(h) reserve to valuation and 401(h) reserves ($81,995,692). For 2018, the Plan's Fiduciary Net Position amount shown ($6,771,146,134) includes the net fair value of assets ($7,592,586,569) less OPEB-related SRBR assets ($821,440,435). The OPEB-related SRBR assets include $873,183,258 in the SRBR-OPEB reserve (after reducing the reserve by the $6,939,808 SRBR implicit subsidy transfer), and $9,830,102 in the 401(h) reserve, less a proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of the OPEB and 401(h) reserves ($61,572,926). Note that amounts may not total properly due to rounding.

(3) Employer contributions are on a net basis after (i) considering the total cash contributions made by the employers, (ii) reducing by the employer contributions made to the 401(h) account, and (iii) increasing by the amount of transfer from the SRBR to the Employers Advance Reserve for employer contributions made to the 401(h) account in (ii).

(4) Data as of December 31, 2018 is used in the measurement of the TPL as of December 31, 2019.

(5) Includes members who left their contributions on deposit even though they have less than five years of service.

(6) Includes inflation at 3.00% plus real across-the-board salary increase of 0.50% plus merit and promotional increases.

Important information about actuarial valuations

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

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

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan of benefits.
Participant data	An actuarial valuation for a plan is based on data provided to the actuary by ACERA. 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 fair value of assets as of the valuation date, as provided by ACERA. The Association uses an "actuarial value of assets" that differs from fair value to gradually reflect six-month changes in the fair value of assets in determining contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets or, if there are no assets, a rate of return based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). 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.

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 ACERA 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 ACERA 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 ACERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to ACERA.

Section 2: GASB 67 Information

General information about the pension plan

Plan Description

Plan administration. The Alameda County Employees' Retirement Association (ACERA) was established by the Alameda County Board of Supervisors in 1947. ACERA is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.). ACERA is a cost-sharing, multiple employer, defined benefit, public employee retirement system whose main function is to provide service retirement, disability, death, and survivor benefits to the General and Safety members employed by the County of Alameda. ACERA also provides retirement benefits to the employee members of First 5 Alameda County, Housing Authority of the County of Alameda, Alameda Health System, Livermore Area Recreation and Park District (LARPD), and Superior Court of California—County of Alameda, and Alameda County Office of Education.

The management of ACERA is vested with the ACERA Board of Retirement. The Board consists of nine members and two alternates. The County Treasurer is a member of the Board of Retirement by law and is elected by the general public. Four members are appointed by the Board of Supervisors, one of whom may be a County Supervisor. Two active members are elected by the General members; one active member and one alternate are elected by the Safety members; one retired member and one alternate are elected by the retired members. 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 December 31, 2019, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	10,078
Inactive vested members entitled to but not yet receiving benefits[1]	2,821
Active members	11,336
Total	24,235

(1) Includes terminated members due a refund of member contributions.

Note: Data as of December 31, 2019 is not used in the measurement of the TPL as of December 31, 2019.

Section 2: GASB 67 Information

Benefits provided. ACERA provides service retirement, disability, death, and survivor benefits to eligible employees. The first date of ACERA membership varies by employer, as follows:

- Alameda County, Alameda Health System and Alameda Superior Court Employees: Membership for these employees is effective on the first day of the second pay period following the employee's hire date in an ACERA covered position. This is the date of entry into ACERA membership. As of the date of entry, payroll deductions for retirement contributions begin and service credit for each hour worked is earned. During the short period between the beginning of employment and the ACERA plan date of entry, the employee does not pay contributions or earn service credit. A member may purchase this service credit (referred to as "days prior to entry") any time before retirement without changing the membership, but date of entry does not change.
- Housing Authority and Livermore Area Recreation and Park District Employees: Membership for these employees is effective on the first day of employee's hire in an ACERA covered position. The first date of employment is the date of entry into ACERA membership. As of this date of entry, payroll deductions for retirement contributions begin and service credit for each hour work is earned.
- First 5 Employees: Membership for these employees is effective on the first day of the second pay period following the employee's hire date.
- Office of Education Employees: This is a closed plan with no more active employees (i.e., there is no new ACERA membership. However, the employer does retain retired members and beneficiaries in the Retirement Association as of the December 31, 2019 valuation date).

There are separate retirement benefits for General and Safety members. Safety membership is extended to those involved in active law enforcement, deferred firefighters, or positions that have been designated as Safety by the Board of Retirement (e.g. Juvenile Hall Group Counselor, Probation Officer, etc.). All other employees are classified as General members.

Any new member who becomes a member on or after January 1, 2013 is placed into Tier 4 and is subject to the provisions of California Public Employees' Pension Reform Act of 2013 (PEPRA), California Government Code 7522 et seq. and Assembly Bill (AB) 197.

General members enrolled in Tiers 1, 2, or 3 are eligible to retire once they attain the age of 70 regardless of service or at age 50 with five or more years of retirement service credit and a total of 10 years of qualifying membership. A non-Tier 4 General member with 30 years of service is eligible to retire regardless of age. General members enrolled in Tier 4 are eligible to retire once they have attained the age of 52 and have acquired five years of retirement service credit, or at age 70 regardless of service.

Safety members enrolled in Tiers 1, 2, 2C, or 2D are eligible to retire once they attain the age of 70 regardless of service or at age 50 with five or more years of retirement service credit and a total of 10 years of qualifying membership. A non-Tier 4 Safety member with 20 years of service is eligible to retire regardless of age. Safety members enrolled in Tier 4 are eligible to retire once they have attained the age of 50 and have acquired five years of retirement service credit, or at age 70 regardless of service.

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.

The tiers and their basic provisions are listed below:

Tier Name	Service Retirement Governing Code Section	Effective Date	Basic Provisions	Final Average Salary Period	Plan Sponsors
General Tier 1	§31676.12	Various	2.0% at 57; maximum 3% COLA	Highest 1-year	All
General Tier 2	§31676.1	June 30, 1983*	2.0% at 61; maximum 2% COLA	Highest 3-years	All except LARPD
General Tier 3	§31676.18	October 1, 2008	2.5% at 55; maximum 3% COLA	Highest 1-year	LARPD
General Tier 4	§7522.20(a)	January 1, 2013	2.5% at 67; maximum 2% COLA	Highest 3-years	All
Safety Tier 1	§31664.1	Various	3.0% at 50; maximum 3% COLA	Highest 1-year	County
Safety Tier 2	§31664.1	June 30, 1983	3.0% at 50; maximum 2% COLA	Highest 3-years	County
Safety Tier 2C	§31664	October 17, 2010	2.6% at 55; maximum 2% COLA	Highest 3-years	County
Safety Tier 2D	§31664.2	October 17, 2010	3.0% at 55; maximum 2% COLA	Highest 3-years	County
Safety Tier 4	§7522.25(d)	January 1, 2013	2.7% at 57; maximum 2% COLA	Highest 3-years	County

** For Housing Authority members, the effective date is September 30, 2011.*

For members enrolled in Tiers 1, 2, 2C, 2D, or 3, the maximum monthly retirement allowance is 100% of final compensation. There is no maximum for members enrolled in Tier 4.

The member may elect an unmodified retirement allowance, or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse or domestic partner. An eligible surviving spouse or domestic partner is one married to or registered with the member one year prior to the effective retirement date. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse, domestic partner, or named beneficiary having an insurable interest in the life of the member.

Section 2: GASB 67 Information

ACERA provides an annual cost-of-living benefit to all retirees. The cost-of-living adjustment, based upon the Consumer Price Index for the San Francisco-Oakland-Hayward Area (with 1982-84 as the base period), is capped at 3.0% for General Tiers 1 and 3 and Safety Tier 1, and at 2.0% for General Tiers 2 and 4 and Safety Tiers 2, 2C, 2D, and 4.

The County of Alameda and the other participating agencies 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 ACERA's actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of December 31, 2019 for 2019 (based on the December 31, 2017 valuation for the second half of 2018/2019 and on the December 31, 2018 valuation for the first half of 2019/2020) was 27.60% of compensation.

Members are required to make contributions to ACERA regardless of the retirement plan or tier in which they are included. The average member contribution rate as of December 31, 2019 for 2019 (based on the December 31, 2017 valuation for the second half of 2018/2019 and on the December 31, 2018 valuation for the first half of 2019/2020) was 9.53% of compensation.

Net pension liability

Measurement Date	December 31, 2019	December 31, 2018
Components of the Net Pension Liability		
Total Pension Liability	$9,959,791,606	$9,535,148,109
Plan's Fiduciary Net Position	(7,819,098,646)	(6,771,146,134)
Net Pension Liability	$2,140,692,960	$2,764,001,975
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	78.51%	71.01%

The Net Pension Liability for the plan was measured as of December 31, 2019 and 2018. Plan's Fiduciary Net Position (plan assets) was valued as of the measurement dates and the Total Pension Liability was determined based upon rolling forward the TPL from actuarial valuations as of December 31, 2018 and 2017, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of December 31, 2019 and 2018 are the same as those used in ACERA's funding valuations as of December 31, 2018 and 2017, respectively.

Actuarial assumptions. The TPL as of December 31, 2019 that was measured by an actuarial valuation as of December 31, 2018 used the following actuarial assumptions, which were based on the results of an experience study for the period December 1, 2013 through November 30, 2016, applied to all periods included in the measurement. They are the same assumptions used in the December 31, 2019 funding valuation for ACERA.

Inflation:	3.00%
Salary increases:	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation
Investment rate of return:	7.25%, net of pension plan investment expense, including inflation
Other assumptions:	See analysis of actuarial experience during the period December 1, 2013 through November 30, 2016

Section 2: GASB 67 Information

The TPL as of December 31, 2018, that was measured by an actuarial valuation as of December 31, 2017, used the following actuarial assumptions, which were based on the results of an experience study for the period December 1, 2013 through November 30, 2016, applied to all periods included in the measurement. They are the same assumptions used in the December 31, 2018 funding valuation for ACERA.

Inflation:	3.00%
Salary increases:	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation
Investment rate of return:	7.25%, net of pension plan investment expense, including inflation
Other assumptions:	See analysis of actuarial experience during the period December 1, 2013 through November 30, 2016

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments[3] was determined in 2017 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 (approved by the Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses are shown in the following table. This information was used in the derivation of the long-term expected investment rate of return assumption for the December 31, 2019 actuarial valuation. This information will be subject to change every three years based on the results of an actuarial experience study.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Domestic Large Cap Equity	22.40%	5.75%
Domestic Small Cap Equity	5.60%	6.37%
Developed International Equity	19.50%	6.89%
Emerging Markets Equity	6.50%	9.54%
U.S. Core Fixed Income	11.25%	1.03%
High Yield Bonds	1.50%	3.99%
International Bonds	2.25%	0.19%
TIPS	2.00%	0.98%
Real Estate	8.00%	4.47%
Commodities	3.00%	3.78%
Hedge Funds	9.00%	4.30%
Private Equity	9.00%	7.60%
Total	100.00%	

[3] Note that the investment return assumption for funding purposes was developed net of both investment and administrative expenses; however, the same investment return assumption was used for financial reporting purposes, and it was considered gross of administrative expenses for financial reporting purposes. (This resulted in an increase in the margin for adverse deviation when using that investment return assumption for financial reporting.)

Discount rate. The discount rate used to measure the Total Pension Liability (TPL) was 7.25% as of December 31, 2019 and December 31, 2018. Our understanding is that Article 5.5 of the Statute, which authorizes the allocation of 50% of excess earnings to the SRBR, does not allow for the use of a different investment return assumption for funding than is used for interest crediting. In order to reflect the provisions of Article 5.5, we have treated future allocations to the SRBR as an additional outflow against the Plan's Fiduciary Net Position in the GASB crossover test, as mentioned earlier in Section 1. Again, we are estimating that the additional outflow would average approximately 0.60% of assets over time, based on the results of our stochastic modeling of the 50% allocation of future excess earnings to the SRBR.

The projection of cash flows used to determine the discount rate assumes plan member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the actuarially determined contribution rates[4] plus additional future contributions that would follow from the future allocation of excess earnings to the SRBR. 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 pension 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 Total Pension Liability as of both December 31, 2019 and December 31, 2018.

[4] For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability of ACERA as of December 31, 2019, calculated using the discount rate of 7.25%, as well as what ACERA's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate.

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability as of December 31, 2019	$3,433,615,732	$2,140,692,960	$1,075,688,763

The following presents the Net Pension Liability of ACERA as of December 31, 2018, calculated using the discount rate of 7.25%, as well as what ACERA's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate.

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability as of December 31, 2018	$4,006,839,721	$2,764,001,975	$1,739,578,825

Schedule of changes in Net Pension Liability – Last two fiscal years

Measurement Date	December 31, 2019	December 31, 2018
Total Pension Liability		
• Service cost[1]	$215,625,191	$209,890,150
• Interest	688,654,389	659,591,792
• Change of benefit terms	0	0
• Differences between expected and actual experience	24,548,056	13,710,084
• Changes of assumptions	0	0
• Benefit payments, including refunds of member contributions	(504,184,139)	(471,943,181)
Net change in Total Pension Liability	**$424,643,497**	**$411,248,845**
Total Pension Liability – beginning	**9,535,148,109**	**9,123,899,264**
Total Pension Liability – ending	**$9,959,791,606**	**$9,535,148,109**
Plan's Fiduciary Net Position		
• Contributions – employer[2]	$298,526,950	$269,684,809
• Contributions – member	103,117,022	94,735,673
• Net investment income	1,165,766,104	(216,308,362)
• Benefit payments, including refunds of member contributions	(504,184,139)	(471,943,181)
• Administrative expense	(15,273,425)	(15,246,130)
• Other	0	0
Net change in Plan's Fiduciary Net Position	**$1,047,952,512**	**$(339,077,191)**
Plan's Fiduciary Net Position[3] – beginning	**6,771,146,134**	**7,110,223,325**
Plan's Fiduciary Net Position[3] – ending	**$7,819,098,646**	**$6,771,146,134**
Net Pension Liability – ending	**$2,140,692,960**	**$2,764,001,975**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	**78.51%**	**71.01%**
Covered payroll[4]	**$1,081,586,887**	**$1,046,033,851**
Plan Net Pension Liability as percentage of covered payroll	**197.92%**	**264.24%**

(1) The Service Cost is based on the previous year's valuation, meaning the December 31, 2019 and December 31, 2018 measurement date values are based on the valuations as of December 31, 2018 and December 31, 2017, respectively. Both service costs have been calculated using the assumptions shown in the December 31, 2018 measurement date column, as there had been no changes in the actuarial assumptions between the December 31, 2017 and December 31, 2018 valuations.

(2) Employer contributions are on a net basis after (i) considering the total cash contributions made by the employers, (ii) reducing by the employer contributions made to the 401(h) account, and (iii) increasing by the amount of transfer from the SRBR to the Employers Advance Reserve for employer contributions made to the 401(h) account in (ii).

(3) See footnote (2) on page 7 for a discussion on the development of the 2019 "Plan's Fiduciary Net Position – beginning" amount of $6,771,146,134 and the 2019 "Plan's Fiduciary Net Position – ending" amount of $7,819,098,646.

(4) Covered payroll represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based.

Schedule of contributions – Last ten fiscal years

Year Ended December 31	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll[1]	Contributions as a Percentage of Covered Payroll
2010	$147,543,301	$147,543,301	$0	$839,617,361	17.57%
2011	162,879,221	162,879,221	0	837,482,162	19.45%
2012	179,648,812	179,648,812	0	845,932,592	21.24%
2013	191,180,146	191,180,146	0	853,349,657	22.40%
2014	213,254,775	213,254,775	0	886,924,862	24.04%
2015	224,607,104	224,607,104	0	945,858,017[2]	23.75%
2016	241,728,451	241,728,451	0	947,567,631	25.51%
2017	247,063,550	247,063,550	0	995,178,209	24.83%
2018	269,684,809	269,684,809	0	1,046,033,851	25.78%
2019	298,526,950	298,526,950	0	1,081,586,887	27.60%

(1) For years ended December 31, 2017 and later, covered payroll represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For the years ended before December 31, 2017, covered payroll was referred to as covered-employee payroll and only Compensation Earnable and Pensionable Compensation that would go into the determination of retirement benefits was included.

(2) ACERA indicated that this amount is based on 27 pay periods for 2015.

See accompanying notes to this schedule on next page.

Notes to Schedule:

Methods and assumptions used to establish "actuarially determined contribution" rates:

Valuation date:	Actuarially determined contribution rates for the first six months of calendar year 2019 (or the second half of fiscal year 2018/2019) are calculated based on the December 31, 2017 valuation. Actuarially determined contribution rates for the last six months of calendar year 2019 (or the first half of fiscal year 2019/2020) are calculated based on the December 31, 2018 valuation.
Actuarial cost method:	Entry Age Actuarial Cost Method
Amortization method:	Level percent of payroll (3.50% payroll growth assumed in the December 31, 2018 valuation and 3.50% payroll growth assumed in the December 31, 2017 valuation)
Remaining amortization period:	**<u>December 31, 2017 valuation</u>** Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011 (and 15 years remaining as of December 31, 2017). On or after January 1, 2012, any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods. **<u>December 31, 2018 valuation</u>** Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011 (and 14 years remaining as of December 31, 2018). On or after January 1, 2012, any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods.
Asset valuation method:	The actuarial value of assets is determined by recognizing any difference between the actual and the expected market return over 10 six-month interest crediting periods. The actuarial value of assets is further adjusted, if necessary, to be within 40% of the market value of assets. The valuation value of assets is the actuarial value of assets reduced by the value of the non-valuation reserves.

Actuarial assumptions:		
Valuation Date:	**December 31, 2017 Valuation**	**December 31, 2018 Valuation**
Investment rate of return:	7.25%, net of pension plan investment expense, including inflation	7.25%, net of pension plan investment expense, including inflation
Inflation rate:	3.00%	3.00%
Real across-the-board salary increase:	0.50%	0.50%
Projected salary increases:	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%, vary by service, including inflation
Cost of living adjustments:	3.00% of retirement income for General Tiers 1 and 3, and Safety Tier 1; 2.00% for General Tiers 2 and 4, and Safety Tiers 2, 2C, 2D, and 4	3.00% of retirement income for General Tiers 1 and 3, and Safety Tier 1; 2.00% for General Tiers 2 and 4, and Safety Tiers 2, 2C, 2D, and 4
Other assumptions:	Same as those used in the December 31, 2017 funding actuarial valuation	Same as those used in the December 31, 2018 funding actuarial valuation

Appendix A: Projection of Pension Plan's Fiduciary Net Position ($ in millions) for use in the Calculation of Discount Rate as of December 31, 2019

Year Beginning January 1,	Projected Beginning Plan Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2019	6,771	402	504	15	1,076	7,730
2020	7,730 **	391	581	18	550	8,071
2021	8,071	395	609	19	574	8,413
2022	8,413	397	638	19	597	8,749
2023	8,749	402	668	20	621	9,083
2024	9,083	405	698	21	644	9,412
2025	9,412	411	729	22	666	9,739
2026	9,739	418	759	22	689	10,064
2027	10,064	426	790	23	712	10,389
2043	11,818	226	1,155	27	816	11,678
2044	11,678	231	1,164	27	806	11,524
2045	11,524	230	1,171	27	794	11,351
2046	11,351	229	1,177	26	782	11,158
2047	11,158	227	1,181	26	767	10,945
2089	237	35	102	1	14	184
2090	184	32	86	0 *	11	140
2091	140	28	72	0 *	8	104
2092	104	25	59	0 *	6	76
2093	76	22	48	0 *	4	54
2094	54	20	39	0 *	3	37
2095	37	17	31	0 *	2	25
2096	25	15	25	0 *	1	16
2097	16	13	19	0 *	1	10
2098	10	11	15	0 *	1	7
2099	7	9	12	0 *	0 *	4
2109	2	1	1	0 *	0 *	1
2110	1	1	1	0 *	0 *	1
2111	1	1	1	0 *	0 *	1
2112	1	0 *	1	0 *	0 *	0
2113	0 *	0 *	0 *	0 *	0 *	0
2133	0 *	0 *	0 *	0 *	0 *	0
2134	0 *	0 *	0 *	0 *	0 *	0
2134	Discounted Value: 0 *,**					

* Less than $1M, when rounded.

** Excludes $89.4 million required to bring the Contingency Reserve to 1% of total assets as of December 31, 2019. See Note 2.

Notes

1. Amounts may not total exactly due to rounding.
2. Amounts shown in the year beginning January 1, 2019 row are actual amounts, based on the financial statements provided by ACERA. The Plan Fiduciary Net Position as of December 31, 2019 differs from the amount used for other GASB 67 purposes in that it excludes $89,388,911 of the Gross Market Stabilization Reserve expected to be used to bring the Contingency Reserve up to 1% of total assets. These assets are not used in developing the projected total contributions in column (b).
3. Years 2028-2042, 2048-2088, 2100-2108, and 2114-2132 have been omitted from this table.
4. Column (a): Except for the "discounted value" shown for 2134, all of the projected beginning plan fiduciary net position amounts shown have not been adjusted for the time value of money.
5. Column (b): Projected total contributions include employee and employer normal cost contributions based on closed group projections (based on covered active members as of November 30, 2018); plus employer contributions to the unfunded actuarial accrued liability; plus employer contributions to fund each year's annual administrative expenses as well as future allocations of excess earnings to the SRBR under ACERA's funding policy, both reflecting a 20-year amortization schedule. 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 November 30, 2018. The projected benefit payments reflect the cost of living increase assumption of 3.00% per annum for Tiers 1 and 3, and 2.00% per annum for Tiers 2 and 4. The projected benefit payments include the Non-OPEB Supplemental Retiree Benefits Reserve (SRBR) benefits to the extent the current Non-OPEB SRBR supports those benefits. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 31.b.(1)(e) of GASB Statement No. 67, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the discount rate.

   In addition, the projected benefit payments in column (c) include an amount equal to 0.60% of the beginning-of-year market value to reflect the approximated outflow of future allocations to the SRBR. This outflow has an estimated present value of $0.84 billion. This present value of outflow is expected to be sufficient to pay for the remaining present value of the non-OPEB SRBR benefits of $0.19 billion as well as the remaining present value of the OPEB SRBR benefits of $0.34 billion.
7. Column (d): Projected administrative expenses are calculated as approximately 0.23% of the beginning plan fiduciary net position amount. The 0.23% portion was based on the actual fiscal year 2019 administrative expenses as a percentage of the beginning plan fiduciary net position amount as of January 1, 2019. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.25% per annum.
9. As illustrated in this Exhibit, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2019 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 67. The terms may have different meanings in other contexts.

Actuarial Present Value of Projected Benefit Payments:	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation:	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date:	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution:	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs):	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad Hoc Postemployment Benefit Changes:	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Automatic Cost-of-Living Adjustments (Automatic COLAs):	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic Postemployment Benefit Changes:	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Cost-of-Living Adjustments:	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan):	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered Payroll:	Payroll on which contributions to a 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 nonemployer 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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VIA E-MAIL

DRAFT – FOR DISCUSSION WITH CLIENT

April 8, 2020

Ms. Margo Allen
Fiscal Services Officer
Alameda County Employees' Retirement Association
475 14th Street, Suite 1000
Oakland, CA 94612-1900

Re: Alameda County Employees' Retirement Association (ACERA)
Addendum to the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2019

Dear Margo:

In our Governmental Accounting Standards (GASB) Statement 67 actuarial valuation draft report dated April 7, 2020, we provided the Net Pension Liabilities (NPL) and other elements that are required for completing the Plan's financial reporting requirements under GASB Statement 67. In this letter, we have provided as an addendum to that report two additional schedules that the American Institute of Certified Public Accountants (AICPA) State and Local Government Expert Panel recommends be prepared by the Retirement Association's actuary (Segal) for use in allocating the NPL and pension expense by employer, before we issue the full companion report for the employer's financial reporting for ACERA under GASB Statement 68.

The attached schedules have been developed based on the assumptions, methods, and results shown in our draft report dated April 7, 2020. Exhibits A1 and A2 detail the method used for allocating the NPL and they provide the NPL amounts allocated to the seven employers at ACERA as of December 31, 2018 and December 31, 2019, respectively.

In 2019, the Alameda County Office of Education (ACOE) made a lump sum contribution of $750,000 to partially pay off their UAAL. That lump sum is greater than the amount that ACOE would have to make on an installment basis over 20 years. The non-OPEB SRBR NPL is allocated to the employers in proportion to the total employer contributions made by those employers to the Pension Plan. In order to have a more level allocation of the NPL to ACOE, ACERA approved an approach outlined in our March 2, 2020 letter to determine ACOE's proportionate share of the non-OPEB SRBR NPL by using the total annual UAAL contribution ACOE would have made of $132,883 in 2019 if they did not make the additional contribution to partially pay off their UAAL.

Exhibit B summarizes the allocated NPL, deferred outflows and inflows of resources, and pension expense by the seven employers. Additional information required under GASB Statement 68 that each of the employers will need to disclose will be provided later in a separate report.

These calculations were performed under the supervision of Eva Yum, FSA, MAAA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you have any questions.

Sincerely,

Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Actuary

Eva Yum, FSA, MAAA, EA
Senior Actuary

JB/
Enclosures

Segal

Schedule of Employer Allocations as of December 31, 2018

Actual Employer Contributions by Employer and Membership Class
January 1, 2018 to December 31, 2018

	General Members, Excluding ACOE and LARPD		General ACOE Members Only		General LARPD Members Only		All General Members Combined	
Employer	**Contributions**	**Percentage[1]**	**Contributions**	**Percentage**	**Contributions**	**Percentage**	**Contributions**	**Percentage**
Alameda County	$112,075,994	64.134%	$0	N/A	$0	0.000%	$112,075,994	63.731%
Health System	50,652,924	28.985%	0	N/A	0	0.000%	50,652,924	28.804%
Superior Court	9,789,834	5.602%	0	N/A	0	0.000%	9,789,834	5.567%
First 5	1,022,889	0.585%	0	N/A	0	0.000%	1,022,889	0.582%
Housing Authority	1,213,308	0.694%	0	N/A	0	0.000%	1,213,308	0.690%
LARPD	0	0.000%	0	N/A	1,100,236	100.000%	1,100,236	0.626%
ACOE	0	0.000%	0	N/A	0	0.000%	0	0.000%
Total for all Employers	**$174,754,949**	**100.000%**	**$0**	**N/A**	**$1,100,236**	**100.000%**	**$175,855,185**	**100.000%**

Actual Employer Contributions by Employer and Membership Class
January 1, 2018 to December 31, 2018

	Safety Members		Total	
Employer	**Contributions**	**Percentage**	**Contributions**	**Percentage[1,2]**
Alameda County	$93,829,624	100.000%	$205,905,618	76.351%
Health System	0	0.000%	50,652,924	18.782%
Superior Court	0	0.000%	9,789,834	3.630%
First 5	0	0.000%	1,022,889	0.379%
Housing Authority	0	0.000%	1,213,308	0.450%
LARPD	0	0.000%	1,100,236	0.408%
ACOE	0	0.000%	0	0.000%
Total for all Employers	**$93,829,624**	**100.000%**	**$269,684,809**	**100.000%**

[1] The unrounded percentages are used in the allocation of the NPL amongst the employers.

[2] In prior years, we used the unrounded percentages above in estimating the allocation of member contributions for purposes of determining pension expense amongst the employers. We had continued that practice through December 31, 2017 even though ACERA has since provided us with the actual member contributions by employer, as the difference between the actual and the estimated member contributions would only have the primary impact of changing the timing on when pension expense would have to be recognized by individual employers.
Starting with the 12/31/2018 actuarial valuation, ACERA has provided us with actual Pension Plan benefit payments by General (excluding ACOE and LARPD), General ACOE, General LARPD and Safety membership classes (in addition to the actual member contributions by employers). Therefore, we now use the actual Pension Plan benefit payments by those four membership classes and actual member contributions by employer within each of the four membership class for purposes of determining pension expense amongst the employers. This is consistent with how we developed the valuation value of assets in the funding actuarial valuation.

Schedule of Employer Allocations as of December 31, 2018

Allocation of December 31, 2018 Net Pension Liability

	General NPL, Excluding ACOE and LARPD (Excl. non-OPEB SRBR NPL)		General ACOE NPL Only (Excl. non-OPEB SRBR NPL)		General LARPD NPL Only (Excl. non-OPEB SRBR NPL)		Total General NPL (Excl. non-OPEB SRBR NPL)	
Employer	**NPL**	**Percentage[1]**	**NPL**	**Percentage[1]**	**NPL**	**Percentage[1]**	**NPL**	**Percentage**
Alameda County	$1,056,842,788	64.134%	$0	0.000%	$0	0.000%	$1,056,842,788	63.481%
Health System	477,641,781	28.985%	0	0.000%	0	0.000%	477,641,781	28.690%
Superior Court	92,315,179	5.602%	0	0.000%	0	0.000%	92,315,179	5.545%
First 5	9,645,534	0.585%	0	0.000%	0	0.000%	9,645,534	0.579%
Housing Authority	11,441,128	0.694%	0	0.000%	0	0.000%	11,441,128	0.687%
LARPD	0	0.000%	0	0.000%	15,284,738	100.000%	15,284,738	0.918%
ACOE	0	0.000%	1,666,157	100.000%	0	0.000%	1,666,157	0.100%
Total for all Employers	**$1,647,886,410**	**100.000%**	**$1,666,157**	**100.000%**	**$15,284,738**	**100.000%**	**$1,664,837,305**	**100.000%**

Allocation of December 31, 2018 Net Pension Liability

	Safety NPL (Excl. non-OPEB SRBR NPL)		General & Safety Total (Excl. non-OPEB SRBR NPL)		General & Safety Non-OPEB SRBR NPL		Total	
Employer	**NPL**	**Percentage[1]**	**NPL**	**Percentage**	**NPL**	**Percentage[2]**	**NPL**	**Percentage**
Alameda County	$971,674,335	100.000%	$2,028,517,123	76.940%	$97,339,469	76.351%	$2,125,856,592	76.913%
Health System	0	0.000%	477,641,781	18.116%	23,945,577	18.782%	501,587,358	18.147%
Superior Court	0	0.000%	92,315,179	3.501%	4,628,029	3.630%	96,943,208	3.507%
First 5	0	0.000%	9,645,534	0.366%	483,559	0.379%	10,129,093	0.366%
Housing Authority	0	0.000%	11,441,128	0.434%	573,577	0.450%	12,014,705	0.435%
LARPD	0	0.000%	15,284,738	0.580%	520,124	0.408%	15,804,862	0.572%
ACOE	0	0.000%	1,666,157	0.063%	0	0.000%	1,666,157	0.060%
Total for all Employers	**$971,674,335**	**100.000%**	**$2,636,511,640**	**100.000%**	**$127,490,335**	**100.000%**	**$2,764,001,975**	**100.000%**

1 Allocated based on the actual employer contributions within each membership class.
2 Allocated based on the actual employer contributions in total. ACOE was not required to make any Pension Plan contributions during 2018 because their payroll was $0. However, they were required to make a contribution under the Declining Employer Payroll Policy starting in 2019. As they would be expected to make a large lump sum contribution to partially pay off their liability, we would consult with the auditor on whether any special adjustment needs to be made when we report their non-OPEB SRBR NPL next year.

Notes:

Based on the January 1, 2018 through December 31, 2018 employer contributions as provided by ACERA.

Pension (excluding non-OPEB SRBR)

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position (plan assets). The Total Pension Liability for each membership class is obtained from internal valuation results. The Plan's Fiduciary Net Position for each membership class is obtained by allocating the total Plan's Fiduciary Net Position for Pension (excluding non-OPEB SRBR) proportionally based on the valuation value of assets for each membership class relative to the total valuation value of assets for all membership classes.[1] The total Plan's Fiduciary Net Position for pension as of December 31, 2018 includes the net market value of assets less SRBR assets. The SRBR assets include the SRBR-OPEB reserve (after reducing the reserve by the SRBR implicit subsidy transfer), the 401(h) reserve, and the Non-OPEB SRBR reserve, less a proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of those SRBR reserves.

The General ACOE membership class has only one employer (ACOE), so all of the NPL for General ACOE is allocated to the ACOE. The General LARPD membership class has only one employer (LARPD), so all of the NPL for General LARPD is allocated to LARPD. The Safety membership class also has only one employer (County), so all of the NPL for Safety is allocated to the County.

For General excluding ACOE and LARPD, the NPL is allocated based on the actual employer contributions within the General membership class excluding any contributions made by ACOE and LARPD. The steps used for the allocation are as follows:

-First calculate the ratio of the employer's contributions to the total contributions for the membership class.
-This ratio is multiplied by the NPL for the membership class to determine the employer's proportionate share of the NPL for the membership class.

Non-OPEB SRBR

The non-OPEB SRBR assets include the Non-OPEB SRBR reserve, less a proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of those Non-OPEB SRBR reserves.

For non-OPEB SRBR, the NPL is allocated based on the actual employer contributions in total. The steps used for the allocation are as follows:

-First calculate the ratio of the employer's total contributions to the total contributions for all employers.
-This ratio is multiplied by the NPL for the non-OPEB SRBR to determine the employer's proportionate share of the NPL for the non-OPEB SRBR.

Total

The employer's total allocated NPL is the sum of its allocated pension NPL from each membership class and the non-OPEB SRBR. The proportionate share of the total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

[1] As of December 31, 2018, the total Plan's Fiduciary Net Position for Pension (excluding non-OPEB SRBR) is $504.8 million **lower** than the valuation value of assets as of the same date due to the inclusion of deferred market **losses** and no available Contingency Reserve.

Schedule of Employer Allocations as of December 31, 2019

Actual Employer Contributions by Employer and Membership Class
January 1, 2019 to December 31, 2019

Employer	General Members, Excluding ACOE and LARPD		General ACOE Members Only		General LARPD Members Only		All General Members Combined	
	Contributions	Percentage[1]	Contributions	Percentage	Contributions	Percentage	Contributions	Percentage
Alameda County	$124,398,408	64.606%	$0	0.000%	$0	0.000%	$124,398,408	63.924%
Health System	54,239,577	28.169%	0	0.000%	0	0.000%	54,239,577	27.872%
Superior Court	11,501,609	5.973%	0	0.000%	0	0.000%	11,501,609	5.910%
First 5	1,200,993	0.624%	0	0.000%	0	0.000%	1,200,993	0.617%
Housing Authority	1,208,258	0.628%	0	0.000%	0	0.000%	1,208,258	0.621%
LARPD	0	0.000%	0	0.000%	1,306,574	100.000%	1,306,574	0.671%
ACOE	0	0.000%	750,000	100.000%	0	0.000%	750,000	0.385%
Total for all Employers	**$192,548,845**	**100.000%**	**$750,000**	**100.000%**	**$1,306,574**	**100.000%**	**$194,605,419**	**100.000%**

Actual Employer Contributions by Employer and Membership Class
January 1, 2019 to December 31, 2019

Employer	Safety Members		Total		Adjusted Total[2]	
	Contributions	Percentage	Contributions	Percentage	Contributions	Percentage[1]
Alameda County	$103,921,531	100.000%	$228,319,939	76.482%	$228,319,939	76.639%
Health System	0	0.000%	54,239,577	18.169%	54,239,577	18.207%
Superior Court	0	0.000%	11,501,609	3.853%	11,501,609	3.861%
First 5	0	0.000%	1,200,993	0.402%	1,200,993	0.403%
Housing Authority	0	0.000%	1,208,258	0.405%	1,208,258	0.406%
LARPD	0	0.000%	1,306,574	0.438%	1,306,574	0.439%
ACOE	0	0.000%	750,000	0.251%	132,883[2]	0.045%
Total for all Employers	**$103,921,531**	**100.000%**	**$298,526,950**	**100.000%**	**$297,909,833**	**100.000%**

[1] The unrounded percentages are used in the allocation of the NPL amongst the employers.
[2] ACOE made a lump sum contribution of $750,000 in 2019 to partially pay off their UAAL. That lump sum is greater than the amount that ACOE would have to make on an installment basis over 20 years. In order to have a more level allocation of the NPL to ACOE, ACERA approved an approach outlined in our March 2, 2020 letter to determine ACOE's proportionate share of the non-OPEB SRBR NPL by using the total annual UAAL contribution ACOE would have made of $132,883 in 2019 if they did not make the additional contribution to partially pay off their UAAL.

Schedule of Employer Allocations as of December 31, 2019

Allocation of December 31, 2019 Net Pension Liability

Employer	General NPL, Excluding ACOE and LARPD (Excl. non-OPEB SRBR NPL)		General ACOE NPL Only (Excl. non-OPEB SRBR NPL)		General LARPD NPL Only (Excl. non-OPEB SRBR NPL)		Total General NPL (Excl. non-OPEB SRBR NPL)	
	NPL	Percentage[1]	NPL	Percentage[1]	NPL	Percentage[1]	NPL	Percentage
Alameda County	$750,950,156	64.606%	$0	0.000%	$0	0.000%	$750,950,156	63.849%
Health System	327,425,563	28.169%	0	0.000%	0	0.000%	327,425,563	27.838%
Superior Court	69,431,235	5.973%	0	0.000%	0	0.000%	69,431,235	5.903%
First 5	7,249,979	0.624%	0	0.000%	0	0.000%	7,249,979	0.616%
Housing Authority	7,293,836	0.628%	0	0.000%	0	0.000%	7,293,836	0.620%
LARPD	0	0.000%	0	0.000%	13,024,823	100.000%	13,024,823	1.107%
ACOE	0	0.000%	793,504	100.000%	0	0.000%	793,504	0.067%
Total for all Employers	**$1,162,350,769**	**100.000%**	**$793,504**	**100.000%**	**$13,024,823**	**100.000%**	**$1,176,169,096**	**100.000%**

Allocation of December 31, 2019 Net Pension Liability

Employer	Safety NPL (Excl. non-OPEB SRBR NPL)		General & Safety Total (Excl. non-OPEB SRBR NPL)		General & Safety Non-OPEB SRBR NPL		Total	
	NPL	Percentage[1]	NPL	Percentage	NPL	Percentage[2]	NPL	Percentage
Alameda County	$810,219,254	100.000%	$1,561,169,410	78.594%	$118,260,007	76.639%	$1,679,429,417	78.452%
Health System	0	0.000%	327,425,563	16.483%	28,093,792	18.207%	355,519,355	16.608%
Superior Court	0	0.000%	69,431,235	3.495%	5,957,344	3.861%	75,388,579	3.522%
First 5	0	0.000%	7,249,979	0.365%	622,063	0.403%	7,872,042	0.368%
Housing Authority	0	0.000%	7,293,836	0.367%	625,826	0.406%	7,919,662	0.370%
LARPD	0	0.000%	13,024,823	0.656%	676,750	0.439%	13,701,573	0.640%
ACOE	0	0.000%	793,504	0.040%	68,828	0.045%	862,332	0.040%
Total for all Employers	**$810,219,254**	**100.000%**	**$1,986,388,350**	**100.000%**	**$154,304,610**	**100.000%**	**$2,140,692,960**	**100.000%**

Notes:

[1] Allocated based on the actual employer contributions within each membership class.

[2] Allocated based on the actual employer contributions in total, with an adjustment to reflect the total annual UAAL contribution ACOE would have made of $132,883 in 2019 if they did not make the additional contribution to partially pay off their UAAL. This approach is outlined in our March 2, 2020 letter and is approved by ACERA.

Based on the January 1, 2019 through December 31, 2019 employer contributions as provided by ACERA.

Pension (excluding non-OPEB SRBR)

The Net Pension Liability (NPL) for each membership class is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position (plan assets). The Total Pension Liability for each membership class is obtained from internal valuation results. The Plan's Fiduciary Net Position for each membership class is obtained by allocating the total Plan's Fiduciary Net Position for Pension (excluding non-OPEB SRBR) proportionally based on the valuation value of assets for each membership class relative to the total valuation value of assets for all membership classes.[1] The total Plan's Fiduciary Net Position for pension as of December 31, 2019 includes the net fair value of assets less SRBR assets. The SRBR assets include the SRBR-OPEB reserve (after reducing the reserve by the SRBR implicit subsidy transfer), the 401(h) reserve, and the Non-OPEB SRBR reserve, plus a proportionate share of one half of the deferred market gains (after adjustment to replenish the balance in the Contingency Reserve) commensurate with the size of those SRBR reserves and 401(h) reserve to valuation and 401(h) reserves.

The General ACOE membership class has only one employer (ACOE), so all of the NPL for General ACOE is allocated to the ACOE. The General LARPD membership class has only one employer (LARPD), so all of the NPL for General LARPD is allocated to LARPD. The Safety membership class also has only one employer (County), so all of the NPL for Safety is allocated to the County.

For General excluding ACOE and LARPD, the NPL is allocated based on the actual employer contributions within the General membership class excluding any contributions made by ACOE and LARPD. The steps used for the allocation are as follows:

-First calculate the ratio of the employer's contributions to the total contributions for the membership class.
-This ratio is multiplied by the NPL for the membership class to determine the employer's proportionate share of the NPL for the membership class.

Non-OPEB SRBR

The non-OPEB SRBR assets include the Non-OPEB SRBR reserve, plus a proportionate share of one half of the deferred market gains (after adjustment to replenish the balance in the Contingency Reserve) commensurate with the size of the non-OPEB to total SRBR reserves.

For non-OPEB SRBR, the NPL is allocated based on the actual employer contributions in total.[2] The steps used for the allocation are as follows:

-First calculate the ratio of the employer's total contributions to the total contributions for all employers.
-This ratio is multiplied by the NPL for the non-OPEB SRBR to determine the employer's proportionate share of the NPL for the non-OPEB SRBR.

Total

The employer's total allocated NPL is the sum of its allocated pension NPL from each membership class and the non-OPEB SRBR. The proportionate share of the total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

[1] As of December 31, 2019, the total Plan's Fiduciary Net Position for Pension (excluding non-OPEB SRBR) is $174.9 million **higher** than the valuation value of assets as of the same date due to the inclusion of deferred market **gains**.

[2] Includes an adjustment to reflect the total annual UAAL contribution ACOE would have made of $132,883 in 2019 if they did not make the additional contribution to partially pay off their UAAL. This approach is outlined in our March 2, 2020 letter and is approved by ACERA.

Schedule of Pension Amounts by Employer as of December 31, 2019

Employer	Net Pension Liability	Deferred Outflows of Resources: Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
Alameda County	$1,679,429,417	$29,709,753	$0	$163,207,471	$6,558,962	$199,476,186
Health System	355,519,355	3,236,186	0	38,885,514	6,333,639	48,455,339
Superior Court	75,388,579	686,240	0	8,245,750	4,077,438	13,009,428
First 5	7,872,042	71,657	0	861,018	591,593	1,524,268
Housing Authority	7,919,662	72,090	0	866,226	43,631	981,947
LARPD	13,701,573	4,084,482	0	934,042	34,430	5,052,954
ACOE	862,332	909,027	0	19,203	35,469	963,699
Total for all Employers	**$2,140,692,960**	**$38,769,435**	**$0**	**$213,019,224**	**$17,675,162**	**$269,463,821**

Segal

Schedule of Pension Amounts by Employer as of December 31, 2019

	Deferred Inflows of Resources					Pension Expense		
Employer	**Differences Between Expected and Actual Experience**	**Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments**	**Changes of Assumptions**	**Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions**	**Total Deferred Inflows of Resources**	**Proportionate Share of Plan Pension Expense**	**Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions**	**Total Employer Pension Expense**
Alameda County	$17,068,065	$248,325,745	$20,653,973	$4,280,444	$290,328,227	$323,282,627	$513,620	$323,796,247
Health System	6,184,756	74,608,604	4,906,548	9,176,298	94,876,206	74,923,370	44,478	74,967,848
Superior Court	1,311,490	15,820,901	1,040,443	3,103,677	21,276,511	15,887,646	-399,040	15,488,606
First 5	136,945	1,652,012	108,643	17,133	1,914,733	1,658,980	136,431	1,795,411
Housing Authority	137,773	1,662,004	109,300	942,801	2,851,878	1,669,016	-257,947	1,411,069
LARPD	489,776	2,128,324	118,194	88,639	2,824,933	2,657,273	-19,698	2,637,575
ACOE	22	38,063	12,021	66,170	116,276	381,986	-17,844	364,142
Total for all Employers	**$25,328,827**	**$344,235,653**	**$26,949,122**	**$17,675,162**	**$414,188,764**	**$420,460,898**	**$0**	**$420,460,898**

Schedule of Pension Amounts by Employer as of December 31, 2019

Notes:

Amounts shown in this exhibit were allocated first by employer within each of the four pension plan membership class (excl. non-OPEB SRBR) and within the non-OPEB SRBR based on the Employer Allocation Percentage calculated in Exhibit A2, and added together to produce the results by employer in total.

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.
- Current-period (i.e., 2019) differences between expected and actual experience and changes of assumptions are recognized over the average of the expected remaining service lives of all employees that are provided with pensions through ACERA determined as of December 31, 2018 (the beginning of the measurement period ending December 31, 2019) and is 5.37 years.
- Prior-period differences between expected and actual experience and changes of assumptions are continued to be recognized based on the expected remaining service lives of all employees calculated as of those prior measurement dates.

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 employees and nonactive and retired members.

Alameda County Employees' Retirement Association

Governmental Accounting Standards Board (GASB) Statement 74 Actuarial Valuation of the Benefits Provided by the Supplemental Retiree Benefits Reserve Other Postemployment Benefits (OPEB) as of December 31, 2019

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. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Segal

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April 7, 2020

Board of Retirement
Alameda County Employees' Retirement Association
475 14th Street, Suite 1000
Oakland, CA 94612

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board (GASB) Statement 74 Actuarial Valuation as of December 31, 2019. It contains various information that will need to be disclosed in order to comply with GASB 74.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Association. The census and financial information on which our calculations were based was prepared by ACERA. 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 health care cost, economic or demographic assumptions; changes in health care trend, and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Thomas Bergman, ASA, MAAA, Enrolled Actuary and Andy Yeung ASA, MAAA, FCA, Enrolled Actuary. The health care trend and other related medical assumptions have been reviewed by Paul Sadro, ASA, MAAA. We are members of the American Academy of Actuaries and we collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Association.

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

Sincerely,

Segal

Andy Yeung, ASA, MAAA, FCA, EA Vice President and Actuary	Thomas Bergman, ASA, MAAA, EA Retiree Health Actuary

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SECTION 1

VALUATION SUMMARY

SECTION 2

GASB 74 INFORMATION

Purpose

This report has been prepared by Segal to present certain disclosure information required for "Other Postemployment Benefits (OPEB)" plans by Statement No. 74 of the Governmental Accounting Standards Board as of December 31, 2019. This valuation is based on:

- The benefit provisions of the OPEB Plan, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of November 30, 2018, provided by ACERA;
- The assets of the Plan as of December 31, 2019, provided by ACERA;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, and health care trends, etc.

General Observations on GASB 74 Actuarial Valuation

The following points should be considered when reviewing this GASB 74 report:

- The Governmental Accounting Standards Board (GASB) rules only define OPEB liability and expense for financial reporting purposes, and do not apply to contribution amounts for OPEB funding purposes. Employers and plans still develop and adopt funding policies, if applicable, under current practices.
- When measuring OPEB liability, GASB uses the same actuarial cost method (Entry Age) and, for benefits that are being fully funded on an actuarial basis, the same expected return on Plan assets as used for funding.[1] This means that the Total OPEB Liability (TOL) measure for financial reporting shown in this report is determined on the same basis as the Actuarial Accrued Liability (AAL) measure for funding.
- The Net OPEB Liability (NOL) is equal to the difference between the TOL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the fair value of assets. The NOL reflects all investment gains and losses as of the measurement date.

[1] See discussions on next page regarding source of funding for payment of OPEB SRBR benefits not covered by current OPEB Plan's Fiduciary Net Position in the SRBR.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The NOL decreased from $232.9 million as of December 31, 2018 to $112.9 million as of December 31, 2019 primarily as a result of favorable investment results during calendar year 2019 of about $135.7 million (for an actual market return of 24.2%[2] versus 7.25% assumed in the valuation), offset somewhat by updating the health trend assumptions[3] (which on a net basis increase the NOL by about $12.5 million). Changes in these values during the last two fiscal years ending December 31, 2019 and 2018 can be found in Exhibit 3.

- As we disclosed in our December 31, 2019 pension funding valuation report, the 7.25% investment return assumption that the Board approved on December 21, 2017 for determining the liabilities for funding purposes and used for establishing the employer and employee contribution rates has continued to be developed without considering the impact of any future 50/50 excess earnings allocation. This is based on our understanding that Article 5.5 of the Statute, which authorizes the allocation of 50% of excess earnings to the SRBR, does not allow for the use of a different investment return for funding than is used for interest crediting. This would appear in effect to preclude the prefunding of the SRBR through the use of an assumption lower than the market earnings assumption of 7.25%.

  As required by the Actuarial Standard of Practice (ASOP) No. 4 ("Measuring Pension Obligations and Determining Pension Plan Costs or Contributions"), we performed a stochastic model to estimate the impact of the 50% allocation of future excess earnings to the SRBR. The results of our model indicated that the 50/50 allocation of future excess earnings would have about the same impact as an "outflow" (i.e., assets not available to fund the benefits included in the determination of the Total Pension Liability) that would average approximately 0.60% of assets over time. This approximated outflow was incorporated into our GASB crossover test for the pension benefits (reference: Exhibit 5 of our GASB 67 report as of December 31, 2019), along with the additional future employer contributions that would result from those future allocations of excess earnings to the SRBR under ACERA's funding policy.

  Furthermore, note (6) provided in Exhibit 5 of the GASB 67 report indicates that the present value of outflows from the 0.60% of assets over time is expected to be higher than the present values of the remaining OPEB and non-OPEB SRBR

[2] Note that the 24.2% market value investment return mentioned above for the SRBR is higher than the 17.9% investment return included in the December 31, 2019 Pension Funding Valuation for Association's entire portfolio. The higher return for the SRBR is primarily a result of including the 50% of future excess earnings allocated to the SRBR for the deferred investment gains as of December 31, 2019.

[3] In particular, there is an increase in the long term annual trend from 4.00% to 4.50% for Medicare Part B which increased the NOL by $17.1 million. Also, the repeal of the Health Insurance Tax (HIT) effective in 2021 reduced the 2020 non-Medicare and Medicare trends which decreased the NOL by $4.6 million.

benefits that could be paid after the exhaustion of assets currently available in the SRBR.

Therefore, in developing the crossover test for the OPEB SRBR in Exhibit 5 of this report, we have only included the projected benefits so that on a present value basis they are equal to the OPEB assets currently available in the SRBR as the remaining OPEB SRBR benefits would be paid from future excess earnings.

- The TOL as of December 31, 2019 was determined by rolling forward the liability results used in determining the sufficiency of the SRBR to provide medical and dental subsidy benefits as of December 31, 2018. That TOL has been adjusted to reflect the health care trend assumptions recommended for the upcoming sufficiency study for the SRBR as of December 31, 2019 (reference: our DRAFT letter dated March 12, 2020).
- We have also continued the practice of adjusting the Plan's Fiduciary Net Position as of December 31, 2019 to include the $888.2 million set aside by the Retirement Board in the SRBR reserve to pay OPEB benefits as of December 31, 2019. This includes $877.8 million in the OPEB-related SRBR reserve (after reducing the reserve by the $6.5 million SRBR implicit subsidy transfer), and $10.4 million in the 401(h) reserve. It should be noted that as of December 31, 2019, the deferred investment gain for the entire Plan was $260.7 million. Consequently, after first replenishing the Contingency Reserve from $0 to $89.4 million (1% of total assets), we have added to the Plan's Fiduciary Net Position the proportionate share of one-half of the net deferred investment gain that is commensurate with the size of the OPEB SRBR reserve to total SRBR and 401(h) reserve to valuation and 401(h) reserve, or $82.0 million (which will cause the future interest crediting rate to the SRBR reserve to be raised above 7.25% per year).

Summary of Key Valuation Results

	2019	2018
Disclosure elements for fiscal year ending December 31:		
Service cost[1]	$27,678,194	$31,577,168
Total OPEB Liability	1,083,114,679	1,054,337,014
Plan's Fiduciary Net Position[2]	970,180,405	821,440,435
Net OPEB Liability	112,934,274	232,896,579
Schedule of contributions for fiscal year ending December 31:		
Actuarially determined contributions	N/A	N/A
Actual contributions[3]	N/A	N/A
Contribution deficiency / (excess)	0	0
Demographic data for plan year ending December 31[4]:		
Number of retired members and beneficiaries receiving medical benefits	TBD	6,385
Number of retired members and beneficiaries receiving dental and vision benefits	TBD	7,519
Number of vested terminated members	TBD	410
Number of active members	TBD	11,349
Key assumptions as of December 31:		
Discount rate	7.25%	7.25%
Health care premium trend rates[5]		
Non-Medicare medical plan	Graded from 6.75% to ultimate 4.50% over 9 years	Graded from 7.00% to ultimate 4.50% over 10 years
Medicare medical plan	Graded from 6.25% to ultimate 4.50% over 7 years	Graded from 6.50% to ultimate 4.50% over 8 years
Dental/Vision	4.00%	4.00%
Medicare Part B	4.50%	4.00%

[1] *The service cost is based on the previous year's valuation, meaning the 2019 and 2018 values are based on the valuations as of December 31, 2018 and December 31, 2017 measurements, respectively. The 2019 service cost has been calculated using the assumptions shown in the 2018 column, and the 2018 service cost has been calculated using the following assumptions:*

Key assumptions as of December 31, 2017:	
Discount rate	*7.25%*
Health care premium trend rates	
Non-Medicare medical plan	*Graded from 7.00% to ultimate 4.50% over 10 years*
Medicare medical plan	*Graded from 6.50% to ultimate 4.50% over 8 years*
Dental/Vision and Medicare Part B	*4.50%*

(2) For 2019, the Plan's Fiduciary Net Position shown ($970,180,405) includes the OPEB-related SRBR reserve of $877,769,175 (after reducing the reserve by the SRBR implicit subsidy transfer of $6,510,876) and 401(h) reserve ($10,415,538), plus the proportionate share of one-half of the net deferred investment gain that is commensurate with the size of the OPEB SRBR reserve to total SRBR and 401(h) reserve to valuation and 401(h) reserve ($81,995,692), after first replenishing the Contingency Reserve from $0 to $89.4 million (1% of total assets). For 2018, the Plan's Fiduciary Net Position amount shown ($821,440,435) includes the SRBR and 401(h) account ($889,953,169), less the SRBR implicit subsidy transfer ($6,939,808), less a proportionate share of the deferred market losses (after adjustment to include the balance in the Contingency Reserve) commensurate with the size of the OPEB reserves ($61,572,926). Note that amounts may not total properly due to rounding.

(3) Employer contributions are on a net basis. Benefits are funded by employer contributions to the 401(h) account and similar amounts are transferred from the SRBR to the Employers Advance Reserve to backfill the employer contributions that would have otherwise been made to the Retirement Plan.

(4) The December 31, 2018 data is used in the measurement of the TOL as of December 31, 2019. The following data as of December 31, 2017 was used in the measurement of the TOL as of December 31, 2018:

Number of retired members and beneficiaries receiving medical benefits	*6,225*
Number of retired members and beneficiaries receiving dental and vision benefits	*7,270*
Number of vested terminated members	*381*
Number of active members	*11,323*

The demographic data as of December 31, 2019 will be used in the sufficiency study for the SRBR as of December 31, 2019 as well as in the next year's GASB 74 valuation when we roll forward the liability from December 31, 2019 to December 31, 2020.

(5) The trends for 2020 as of the December 31, 2019 measurement are before reflecting the recent repeal of the Health Insurance Tax (HIT) taking effect in 2021 that would further reduce 1.20% from non-Medicare plan trend of 6.75% and 0.90% from Medicare plan trend of 6.50%. The trends for 2019 as of the December 31, 2018 measurement are before reflecting a one-time adjustment to reflect the estimated impact of the reinstatement of the HIT. The weighted average increase amongst all carriers is approximately 1.20% for Non-Medicare plans and 0.90% for Medicare plans.

Important Information about Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a postretirement health plan. It is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare an actuarial 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 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 ACERA. 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 fair value of assets as of the valuation date, as provided by ACERA. The Association uses an actuarial value of assets that differs from fair value of assets to gradually reflect six-month changes in the fair value of assets in the SRBR sufficiency valuation.
- **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 health care trends. 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.

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 sponsors of the Fund in preparing items related to the OPEB SRBR 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 ACERA 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. ACERA 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 ACERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to ACERA.

EXHIBIT 1

General Information – "Financial Statements", Note Disclosures and Required Supplementary Information for a Cost-Sharing OPEB Plan

Plan Description

Plan administration. The Alameda County Employees' Retirement Association (ACERA) was established by the Alameda County Board of Supervisors in 1947. ACERA is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.). ACERA is a cost-sharing, multiple employer, defined benefit, public employee retirement system whose main function is to provide service retirement, disability, death, and survivor benefits to the General and Safety members employed by the County of Alameda. ACERA also provides retirement benefits to the employee members of First 5 Alameda County, Housing Authority of the County of Alameda, Alameda Health System, Livermore Area Recreation and Park District (LARPD), Superior Court of California—County of Alameda, and Alameda County Office of Education.

The management of ACERA is vested with the ACERA Board of Retirement. The Board consists of nine members and two alternates. The County Treasurer is a member of the Board of Retirement by law and is elected by the general public. Four members are appointed by the Board of Supervisors, one of whom may be a County Supervisor. Two active members are elected by the General members; one active member and one alternate are elected by the Safety members; one retired member and one alternate are elected by the retired members. 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 December 31, 2019, OPEB plan membership consisted of the following:

Retired members or beneficiaries currently receiving medical benefits	TBD
Retired members or beneficiaries currently receiving dental and vision benefits	TBD
Vested terminated members entitled to, but not yet receiving benefits	TBD
Active members	TBD

Note: Data as of December 31, 2019 is not used in the measurement of the TOL as of December 31, 2019. It will be used for the sufficiency study for the SRBR as of December 31, 2019 as well as in next year's GASB 74 valuation.

Benefits provided. ACERA provides benefits to eligible employees.

Membership Eligibility:

Service Retirees: Retired with at least 10 years of service (including deferred vested members who terminate employment and receive a retirement benefit from ACERA)

Disabled Retirees: A minimum of 10[4] years of service is required for non-duty disability.

There is no minimum service requirement for duty disability.

Benefit Eligibility:

1. Monthly Medical Allowance

Service Retirees: For retirees not purchasing individual insurance through the Individual Medicare Insurance Exchange, a Maximum Monthly Medical Allowance of $558.00 per month was provided, effective January 1, 2019 and through December 31, 2019. For the period January 1, 2020 through December 31, 2020, the maximum allowance is $578.65 per month.

For those purchasing insurance through the Individual Medicare Exchange, the Maximum Monthly Medical Allowance was $427.46 per month for 2019 and is $443.28 for 2020.

These Allowances are subject to the following subsidy schedule:

Completed Years of Service	Percentage Subsidized
10-14	50%
15-19	75%
20+	100%

[4] The 10 years of service requirement is only used for determining eligibility for health benefits. For pension benefits, the eligibility requirement is 5 years of service.

Disabled Retirees:	Non-duty disabled retirees receive the same Monthly Medical Allowance as service retirees. Duty disabled retirees receive the same Monthly Medical Allowance as those service retirees with 20 or more years of service.

2. Medicare Benefit Reimbursement Plan:

The SRBR reimburses the full Medicare Part B premium to qualified retired members.

To qualify for reimbursement, a retiree must:

- Have at least 10 years of ACERA service,
- Be eligible for Monthly Medical Allowance,
- Provide proof of enrollment in Medicare Part B.

3. Dental and Vision Plans:

The SRBR provides dental and vision benefits for retirees only. The maximum combined monthly dental and vision premium was $48.39 in 2019 and is $46.28 in 2020. The eligibility for these premiums is as follows:

Service Retirees:	Retired with at least 10 years of service.
Disabled Retirees:	For non-duty disabled retirees, 10 years of service is required. For grandfathered non-duty disabled retirees (with effective retirement dates on or before January 31, 2014), there is no minimum service requirement. For duty disabled retirees, there is no minimum service requirement.

Note about Monthly Medical Allowance:

The maximum levels of subsidy are reviewed by the Board annually and are not indexed to increase automatically.

In addition, the Monthly Medical Allowance can only be used to pay for retiree medical benefits. There is no benefit payable to beneficiaries, current spouses, former spouses or dependents.

If the actual cost of coverage is less than the Monthly Medical Allowance, the difference is not paid in cash or applied towards the coverage for beneficiaries, current spouses, former spouses or dependents.

Deferred Benefit: Members who terminate employment with 10 or more years of service before reaching Pension eligibility commencement age may elect deferred MMA and/or dental/vision benefits.

Death Benefit: Surviving spouses/domestic partners of members who die before the member commences retiree health benefits may enroll in an ACERA group medical plan on the date that the member would have been eligible to commence benefits. The surviving spouse/domestic partner must pay 100% of the premium. Because premiums for surviving spouses/domestic partners under age 65 are calculated together with active participants for purposes of underwriting, the surviving spouses/domestic partners receive an implicit subsidy, which creates a liability for the SRBR.

EXHIBIT 2
Net OPEB Liability

The components of the Net OPEB Liability of ACERA are as follows:

	December 31, 2019	December 31, 2018
Total OPEB Liability	$1,083,114,679	$1,054,337,014
Plan's Fiduciary Net Position	970,180,405	821,440,435
Net OPEB Liability	$112,934,274	$232,896,579
Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability	89.57%	77.91%

The Net OPEB Liability was measured as of December 31, 2019 and 2018. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date, while the Total OPEB Liability was determined by rolling forward the Total OPEB Liability as of December 31, 2018 and 2017, respectively.

Plan provisions. The plan provisions used in the measurement of the NOL as of December 31, 2019 and 2018 is the same as those used in ACERA's SRBR sufficiency valuation as of December 31, 2018 and 2017, respectively.

Actuarial assumptions. The actuarial assumptions used for the December 31, 2019 valuation were based on the results of the experience study for the period from December 1, 2013 through November 30, 2016 that were approved by the Board effective with the December 31, 2017 valuation and the health care trend assumptions recommended for the upcoming sufficiency study for the SRBR as of December 31, 2019 (reference: our DRAFT letter dated March 12, 2020). The assumptions used in the December 31, 2019 SRBR OPEB actuarial valuation for ACERA were applied to all periods included in the measurement:

December 31, 2019

Investment rate of return	7.25%, net of OPEB plan investment expense, including inflation
Inflation	3.00%
Health care premium trend rates*	
Non-Medicare medical plan	Graded from 6.75% to ultimate 4.50% over 9 years
Medicare medical plan	Graded from 6.25% to ultimate 4.50% over 7 years
Dental/Vision	4.00%
Medicare Part B	4.50%
Other assumptions	Same as those proposed in the experience study for the period December 1, 2013 through November 30, 2016

December 31, 2018

Investment rate of return	7.25%, net of OPEB plan investment expense, including inflation
Inflation	3.00%
Health care premium trend rates**	
Non-Medicare medical plan	Graded from 7.00% to ultimate 4.50% over 10 years
Medicare medical plan	Graded from 6.50% to ultimate 4.50% over 8 years
Dental/Vision and Medicare Part B	4.00%
Other assumptions	Same as those proposed in the experience study for the period December 1, 2013 through November 30, 2016

* The trend rates shown above for 2020 as of the December 31, 2019 measurement do not include a one-time reduction of 1.20% to the first year non-Medicare trend of 6.75% and 0.90% to the first year Medicare trend of 6.25% to reflect the recent repeal of the Health Insurance Tax (HIT) taking effect in 2021.

** The trend rates shown above for 2019 as of the December 31, 2018 measurement are before reflecting a one-time adjustment to reflect the impact of the Health Insurance Tax (HIT). The weighted average increase amongst all carriers is approximately 1.2% for Non-Medicare and 0.9% for Medicare plans.

The long-term expected rate of return on OPEB plan investments[5] was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and 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 and by adding expected inflation and subtracting expected investment expenses and a risk margin. This information will change every three years based on the results of an actuarial experience study.

[5] Note that the investment return assumption for SRBR sufficiency testing (and pension plan funding) purposes was developed net of both investment and administrative expenses; however, the same investment return assumption was used for financial reporting purposes, and it was considered gross of administrative expenses for financial reporting purposes. (This resulted in an increase in the margin for adverse deviation when using that investment return assumption for financial reporting.)

The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption for the December 31, 2019 valuation are summarized in the following table. This information is subject to change every three years.

Asset Class	Target Allocation	Long-Term (Arithmetic) Expected Real Rate of Return
Domestic Large Cap Equity	22.40%	5.75%
Domestic Small Cap Equity	5.60%	6.37%
Developed International Equity	19.50%	6.89%
Emerging Markets Equity	6.50%	9.54%
U.S. Core Fixed Income	11.25%	1.03%
High Yield Bonds	1.50%	3.99%
International Bonds	2.25%	0.19%
TIPS	2.00%	0.98%
Real Estate	8.00%	4.47%
Commodities	3.00%	3.78%
Hedge Funds	9.00%	4.30%
Private Equity	9.00%	7.60%
Total	100.00%	

Discount rate: The discount rate used to measure the Total OPEB Liability was 7.25% as of December 31, 2019 and December 31, 2018. The projection of cash flows used to determine the discount rate assumed benefits are paid out of current OPEB SRBR assets. Based on those assumptions, the SRBR OPEB Plan's Fiduciary Net Position was projected to be available to make all projected future benefits payments for current plan members.[6] Therefore the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the Total OPEB Liability as of December 31, 2019 and December 31, 2018.

[6] See discussions in Section 1 regarding source of funding for payment of OPEB SRBR benefits not covered by current OPEB SRBR Plan's Fiduciary Net Position.

Sensitivity of the Net OPEB Liability to changes in the discount rate. The following presents the Net OPEB Liability of ACERA as of December 31, 2019, calculated using the discount rate of 7.25%, as well as what ACERA's Net OPEB Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1% Decrease (6.25%)	Current Discount (7.25%)	1% Increase (8.25%)
Net OPEB Liability as of December 31, 2019	$252,174,716	$112,934,274	-$2,659,312

Sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rate. The following presents the Net OPEB Liability of ACERA as of December 31, 2019, calculated using the current trend rate as well as what ACERA's Net OPEB Liability would be if it were calculated using a trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease*	Current Trend Rates*	1% Increase*
Net OPEB Liability as of December 31, 2019	-$15,481,252	$112,934,274	$271,127,869

* *Current trend rates: 6.75% graded down to 4.50% over 9 years for Non-Medicare medical plan costs; 6.25% graded down to 4.50% over 7 years for Medicare medical plan costs, 4.00% for all years for Dental and Vision costs, and 4.50% for all years for Medicare Part B costs. The medical trend rates shown above for 2020 (6.75% and 6.25% for non-Medicare and Medicare plans, respectively) do not include a one-time reduction of 1.20% to the non-Medicare plan trend of 6.75% and 0.90% to the Medicare plan trend of 6.50% to reflect the recent repeal of the Health Insurance Tax (HIT) taking effect in 2021.*

EXHIBIT 3
Schedules of Changes in Net OPEB Liability – Last Two Fiscal Years

	2019	2018
Total OPEB Liability		
Service cost[1]	$27,678,194	$31,577,168
Interest	73,843,280	73,426,531
Change of benefit terms	0	0
Differences between expected and actual experience	-41,706,128	-27,712,610
Changes of assumptions	12,524,469	-11,429,923
Benefit payments	-43,562,150	-40,878,670
Net change in Total OPEB Liability	$28,777,665	$24,982,496
Total OPEB Liability – beginning	1,054,337,014	1,029,354,518
Total OPEB Liability – ending (a)	$1,083,114,679	$1,054,337,014
Plan's Fiduciary Net Position		
Contributions – employer[2]	N/A	N/A
Contributions – employee	N/A	N/A
Net investment income	$193,656,620	-$138,332,627
Benefit payments	-43,562,150	-40,878,670
Administrative expense	-1,354,500	-1,224,500
Other	0	0
Net change in Plan's Fiduciary Net Position	$148,739,970	-$180,435,797
Plan's Fiduciary Net Position – beginning[3]	821,440,435	1,001,876,232
Plan's Fiduciary Net Position – ending (b)[3]	$970,180,405	$821,440,435
Net OPEB Liability – ending (a) – (b)	$112,934,274	$232,896,579
Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability	89.57%	77.91%
Covered-employee payroll[4]	N/A	N/A
Plan Net OPEB Liability as percentage of covered-employee payroll	N/A	N/A

(1) The service cost is always based on the previous year's valuation, meaning the valuation as of December 31, 2018 and 2017, respectively.

(2) Employer contributions are on a net basis. Benefits are funded by employer contributions to the 401(h) account and similar amounts are transferred from the SRBR to the Employers Advance Reserve to backfill the employer contributions that would have otherwise been made to the Retirement Plan.

(3) See footnote (2) on page v for a discussion on the development of the 2019 "Plan's Fiduciary Net Position – beginning" amount of $821,440,435 and the 2019 "Plan's Fiduciary Net Position – ending" amount of $970,180,405.

(4) Covered-employee payroll is not shown as contributions to the OPEB plan are not based on a measure of pay. Covered-employee payroll represents Compensation Earnable and Pensionable Compensation. Only Compensation Earnable and Pensionable Compensation that would go into the determination of retirement benefits would otherwise be included.

EXHIBIT 4

Schedule of Employer Contributions – Last Ten Fiscal Years

Year Ended December 31	Actuarially Determined Contributions[1]	Contributions in Relation to the Actuarially Determined Contributions[1]	Contribution Deficiency / (Excess)	Covered-Employee Payroll[2]	Contributions as a Percentage of Covered-Employee Payroll
2010	N/A	N/A	0	N/A	N/A
2011	N/A	N/A	0	N/A	N/A
2012	N/A	N/A	0	N/A	N/A
2013	N/A	N/A	0	N/A	N/A
2014	N/A	N/A	0	N/A	N/A
2015	N/A	N/A	0	N/A	N/A
2016	N/A	N/A	0	N/A	N/A
2017	N/A	N/A	0	N/A	N/A
2018	N/A	N/A	0	N/A	N/A
2019	N/A	N/A	0	N/A	N/A

(1) *Benefits are funded by employer contributions to the 401(h) account and similar amounts are transferred from the SRBR to the Employers Advance Reserve to backfill the employer contributions that would have otherwise been made to the Retirement Plan.*

(2) *Covered-employee payroll is not shown as contributions to the OPEB plan are not based on a measure of pay. Covered-employee payroll represents Compensation Earnable and Pensionable Compensation. Only Compensation Earnable and Pensionable Compensation that would go into the determination of retirement benefits would otherwise be included.*

EXHIBIT 5

Projection of OPEB Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of December 31, 2019 ($ in millions)

Year Beginning January 1,	Projected Beginning OPEB Plan's Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending OPEB Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2019	$821	$0	$44	$1	$194	$970
2020	970	0	54	2	68	983
2021	983	0	57	2	69	994
2022	994	0	61	2	70	1,001
2023	1,001	0	65	2	70	1,004
2024	1,004	0	69	2	70	1,004
2025	1,004	0	73	2	70	999
2026	999	0	77	2	70	989
2027	989	0	81	2	69	975
2028	975	0	85	2	68	956
2029	956	0	89	2	66	931
2030	931	0	93	2	64	901
2031	901	0	97	1	62	864
2032	864	0	101	1	59	821
2033	821	0	105	1	56	771
2034	771	0	108	1	52	714
2035	714	0	111	1	48	649
2036	649	0	114	1	43	576
2037	576	0	117	1	38	496
2038	496	0	120	1	32	407
2039	407	0	122	1	25	309
2040	309	0	125	1	18	201
2041	201	0	127	0 *	10	84
2042	84	0	87	0 *	3	0
2043	0	0	0	0	0	0
2044	0	0	0	0	0	0
2045	0	0	0	0	0	0
2046	0	0	0	0	0	0
2133	0	0	0	0	0	0
2134	0	0	0	0	0	0
2134	Discounted Value: 0					

* *Less than $1 M, when rounded.*

EXHIBIT 5

Projection of OPEB Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of December 31, 2019 ($ in millions) - continued

Notes:

(1) Amounts may not total exactly due to rounding.

(2) Amounts shown in the year beginning January 1, 2019 row are actual amounts, based on the financial statements provided by ACERA.

(3) Years 2047 - 2132 have been omitted from this table.

(4) Column (a): Except for the "discounted value" shown for 2134, all of the projected beginning Plan's Fiduciary Net Position amounts shown have not been adjusted for the time value of money.

(5) Column (b): $0. Benefits are funded by employer contributions to the 401(h) account and similar amounts are transferred from the SRBR to the Employers Advance Reserve to backfill the employer contributions that would have otherwise been made to the Retirement Plan.

(6) Column (c): Projected benefit payments have been determined in accordance with paragraph 43-47 of GASB Statement No. 74, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of November 30, 2018. The projected benefit payments reflect future health care trends. The projected benefit payments include the OPEB SRBR benefits to the extent the current OPEB SRBR (including the portion of deferred investment gain as of December 31, 2019 that is expected to be allocated to the SRBR) supports those benefits*. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 35 b.(2)(e) of GASB Statement No. 74, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the discount rate.

(7) Column (d): Projected administrative expenses are calculated as approximately 0.16% of the beginning OPEB SRBR Plan's Fiduciary Net Position amount. The 0.16% portion was based on the actual fiscal year 2019 administrative expenses as a percentage of the beginning OPEB SRBR Plan's Fiduciary Net Position amount as of January 1, 2019. Administrative expenses are assumed to occur halfway through the year, on average.

(8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.25% per annum.

(9) As illustrated in this Exhibit, the OPEB SRBR Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.25% per annum was applied to all periods of projected benefit payments to determine the total OPEB liability as of December 31, 2019 shown earlier in this report, pursuant to paragraph 48 of GASB Statement No. 74.

* See discussion on page ii regarding source of funding for payment of OPEB SRBR benefits not covered by current OPEB Plan's Fiduciary Net Position in the SRBR.

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Via Email

April 7, 2020

Ms. Margo Allen
Fiscal Services Officer
Alameda County Employees' Retirement Association
475 14th Street, Suite 1000
Oakland, CA 94612

**Re: Alameda County Employees' Retirement Association (ACERA)
Addendum to the Governmental Accounting Standards Board (GASB)
Statement 74 Actuarial Valuation as of December 31, 2019**

Dear Ms. Allen:

In our Governmental Accounting Standards Board (GASB) Statement 74 actuarial valuation draft report dated March 30, 2020, we provided the Net OPEB Liability (NOL) and other elements that are required for completing the Plan's financial reporting requirements under GASB Statement 74. In this letter, we have provided as an Addendum to that report two additional schedules for use in allocating the NOL and OPEB expense by employer, before we issue the full companion report for the employer's financial reporting for ACERA under GASB Statement 75. This is similar to a recommendation made by the American Institute of Certified Public Accountants (AICPA) State and Local Government Expert Panel to have comparable schedules prepared for the Pension Plan when we implemented GASB Statements 67 and 68.

The attached schedules have been developed based on the assumptions, methods, and results shown in our draft report dated March 30, 2020. Exhibits A1 and A2 detail the method used for allocating the NOL and the NOL amounts allocated to the seven employers at ACERA as of December 31, 2018 and December 31, 2019, respectively.[1]

Exhibit B summarizes the allocated NOL, deferred outflows and inflows of resources, and OPEB expense by the seven employers. Additional information required under GASB Statement 75 that each of the employers will need to disclose will be provided in a separate report.

[1] The December 31, 2018 and December 31, 2019 NOL has been allocated to the different employers in proportion to the total employer contributions made by those employers to the Pension Plan during calendar years 2018 and 2019, respectively, based on prior discussions and approval provided by the Board.

The actuarial calculations were completed under the supervision of Thomas Bergman, ASA, MAAA, Enrolled Actuary and Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. The health care trend and other related medical assumptions have been reviewed by Paul C. Sadro, ASA, MAAA. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please give us a call if you have any questions.

Sincerely,

Andy Yeung, ASA, MAAA, FCA, EA
Vice President and Actuary

Thomas Bergman, ASA, MAAA, EA
Retiree Health Actuary

TJH/gxk

EXHIBIT A1 - Schedule of Employer Allocations as of December 31, 2018

Actual Employer Contributions by Employer
January 1, 2018 to December 31, 2018

Employer	Contributions	Percentage*
Alameda County	$205,905,618	76.351%
Health System	50,652,924	18.782%
Superior Court	9,789,834	3.630%
First 5	1,022,889	0.379%
Housing Authority	1,213,308	0.450%
LARPD	1,100,236	0.408%
ACOE	0	0.000%
Total for all Employers	$269,684,809	100.000%

* The unrounded percentages are used in the allocation of the NOL amongst employers.

Allocation of December 31, 2018 Net OPEB Liability

Employer	NOL	Percentage
Alameda County	$177,817,632	76.351%
Health System	$43,743,260	18.782%
Superior Court	$8,454,384	3.630%
First 5	$883,354	0.379%
Housing Authority	$1,047,799	0.450%
LARPD	$950,150	0.408%
ACOE	0	0.000%
Total for all Employers	$232,896,579	100.000%

Notes:

1. Based on the January 1, 2018 through December 31, 2018 employer contributions in total as provided by ACERA.
2. The Net OPEB Liability (NOL) is the Total OPEB Liability (TOL) minus the OPEB SRBR Plan's Fiduciary Net Position (plan assets).
3. The employer's share of the total plan NOL is the ratio of the employer's total contributions to the total contributions for all employers.
4. ACOE was not required to make any Pension Plan contributions during 2018 because their payroll was $0 in 2018. However, they are required to make a contribution under the Declining Employer Payroll Policy starting in 2019. As they would be expected to make a large lump sum contribution to partially pay off their liability in 2019, we would consult with the auditor on whether any special adjustment needs to be made when we report their NOL next year

Segal

EXHIBIT A2 - Schedule of Employer Allocations as of December 31, 2019

Actual Employer Contributions by Employer
January 1, 2019 to December 31, 2019

Employer	Contributions	Percentage*
Alameda County	$228,319,939	76.639%
Health System	54,239,577	18.207%
Superior Court	11,501,609	3.861%
First 5	1,200,993	0.403%
Housing Authority	1,208,258	0.406%
LARPD	1,306,574	0.439%
ACOE	132,883	0.045%
Total for all Employers	$297,909,833	100.000%

* The unrounded percentages are used in the allocation of the NOL amongst employers.

Allocation of December 31, 2019 Net OPEB Liability

Employer	NOL	Percentage
Alameda County	$86,553,526	76.639%
Health System	20,561,615	18.207%
Superior Court	4,360,131	3.861%
First 5	455,283	0.403%
Housing Authority	458,037	0.406%
LARPD	495,308	0.439%
ACOE	50,374	0.045%
Total for all Employers	$112,934,274	100.000%

Notes:

1. With the exception of an adjustment for the lump sum contribution made by ACODE (see item 4.), the above is based on the January 1, 2019 through December 31, 2019 employer contributions in total as provided by ACERA.
2. The Net OPEB Liability (NOL) is the Total OPEB Liability (TOL) minus the OPEB SRBR Plan's Fiduciary Net Position (plan assets).
3. The employer's share of the total plan NOL is the ratio of the employer's total contributions to the total contributions for all employers.
4. ACOE made a lump sum contribution of $750,000 in 2019 to partially pay off their liability.That lump sum is greater than the amount that ACOE would have had to make on an installment basis over 20 years. In order to have a more level allocation of the NOL to ACOE, ACERA approved an approach outlined in our letter dated March 2, 2020 to determine ACOE's proportionate share of OPEB SRBR NOL by using the total annual UAAL contribution ACOE would have made of $132,883 in 2019 if they did not make the additional contribution to partially pay off their UAAL.

EXHIBIT B

Schedule of OPEB Amounts by Employer as of December 31, 2019

		Deferred Outflows of Resources				
Employer	Net OPEB Liability	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on OPEB Plan Investments	Changes of Assumptions	Changes in Proportion of Employer Contributions	Total Deferred Outflows of Resources
Alameda County	$86,553,526	$0	$0	$33,045,891	$511,790	$33,557,681
Health System	20,561,615	0	0	7,850,366	662,956	8,513,322
Superior Court	4,360,131	0	0	1,664,686	358,019	2,022,705
First 5	455,283	0	0	173,826	47,639	221,465
Housing Authority	458,037	0	0	174,877	$0	174,877
LARPD	495,308	0	0	189,107	47,508	236,615
ACOE	50,374	0	0	19,233	69,232	88,465
Total for all Employers	**$112,934,274**	**$0**	**$0**	**$43,117,986**	**$1,697,144**	**$44,815,130**

EXHIBIT B
Schedule of OPEB Amounts by Employer as of December 31, 2019 - continued

	Deferred Inflows of Resources					OPEB Expense		
Employer	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on OPEB Plan Investments	Changes of Assumptions	Changes in Proportion of Employer Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan OPEB Expense	Net Amortization of Deferred Amounts from Changes in Proportion of Employer Contributions	Total Employer OPEB Expense
Alameda County	$51,130,217	$43,329,122	$6,133,287	$369,658	$100,962,284	$13,941,938	($7,019)	$13,934,919
Health System	12,146,471	10,293,245	1,457,021	893,328	24,790,065	3,312,041	16,308	3,328,349
Superior Court	2,575,683	2,182,703	308,964	269,204	5,336,554	702,324	(1,649)	700,675
First 5	268,952	227,917	32,262	2,018	531,149	73,337	8,325	81,662
Housing Authority	270,579	229,296	32,457	89,187	621,519	73,780	(17,713)	56,067
LARPD	292,596	247,953	35,098	67,054	642,701	79,785	(8,773)	71,012
ACOE	29,758	25,218	3,570	6,695	65,241	8,114	10,521	18,635
Total for all Employers	**$66,714,256**	**$56,535,454**	**$8,002,659**	**$1,697,144**	**$132,949,513**	**$18,191,319**	**$0**	**$18,191,319**

Segal

EXHIBIT B
Schedule of OPEB Amounts by Employer as of December 31, 2019 - continued

Notes:

1. Amounts shown in this exhibit were allocated by employer based on the Employer Allocation Percentage calculated in Exhibit A2.

2. In determining the OPEB expense:
   - Any differences between projected and actual investment earnings on OPEB plan investments are recognized over a period of five years beginning with the year in which they occur.
   - Current-period (i.e., 2019) changes in assumptions and differences between expected and actual experience are recognized over the average of the expected remaining service lives of all employees that are provided with OPEB benefits through ACERA determined as of December 31, 2018 (the beginning of the measurement period ending December 31, 2019) and is 6.61 years.[1]

3. 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 employees and nonactive and retired members.

[1] The remaining service lives of all employees of 6.61 years used here for GASB 75 is different from the 5.37 years used for GASB 68 because the number of payees and nonactive members (with 0 years of expected remaining service lives) receiving health benefits under the SRBR Plan is less than the number of payees and nonactive members receiving pension benefits.

NEW BUSINESS

7.F. Chief Executive Officer's Report.

Office of the Chief Executive Officer
Office of Administration

DATE: May 21, 2020

TO: Members of the Board of Retirement

FROM: Dave Nelsen, Chief Executive Officer DN

SUBJECT: Chief Executive Officer's Report

Senior Manager Recruitment

None

Committee/Board Action Items

ASSIGNED FOLLOW-UP ITEMS				
Follow-Up Board Item	**Assigned Senior Leader**	**Estimated Completion Date**	**Completion Date**	**Notes**
Schedule Joint Board of Supervisors and Board of Retirement meeting.	Dave Nelsen	Spring of 2020		The meeting was scheduled for 3/24/2020. It was canceled due to the COVID-19 crisis. This will be rescheduled to a later date.

Conference/Event Schedule

None Scheduled

Other Items

COVID-19 Responses

While the current Shelter-in-Place order extends through May, and may be extended longer, we are planning for the return of team members and customers to our building. It is critical that while we do this, we are taking into account the safety of our team members and our customers, while still providing value added services. This includes keeping common areas cleaned, and allowing for interactions while preserving social distancing. Additionally, we are looking at Board and Committee meetings with some public interaction on-site, again while respecting the safety of Trustees, participants and visitors.

As we consider the continued functionality of the organization in this "new normal", it is likely we will continue maintaining a portion of our workforce at home. We are evaluating those functions that truly need on-site interaction, even if less than full-time, and those that can be effective virtually. One benefit of this pandemic is the building of new processes and functionality to work remotely. This will set us up well for a thoughtful reintegration of team members to the work force and for future business resumption activities. In the meantime, we will continue to focus on serving our customers and performing our critical functions, while keeping folks safe, until we can resume the full scope of our duties.

Pension Administration System Update

The project is continuing those aspects that can be done, given the limited availability of people to work on this, and the focus on performing critical functions first. We have come up with a process to work on the design aspects of the system, balancing remote and on-site availability of project participants with the on-going needs of critical processing. At this point, we don't anticipate any significant delays in the project.

Personnel Items and Budget

As you no doubt have heard, revenue for government entities has been severely impacted by this crisis. The State budget is expected to be over 1/3 less than projected, and local governments are also likely to be similarly affected. What this means for ACERA is largely unknown, but you can anticipate discussions similar to what occurred during the 08-09 financial crisis. As those discussions progress, we will let you know what we hear, particularly since many personnel and payroll decisions have an impact on retirement.