Alameda County Employees' Retirement Association
BOARD OF RETIREMENT

AUDIT COMMITTEE/BOARD MEETING 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, April 15, 2021
12:30 p.m.

ZOOM INSTRUCTIONS	COMMITTEE 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: 884 6939 9248 Password: 910274 For help joining a Zoom meeting, see: https://support.zoom.us/hc/en-us/articles/201362193	**HENRY LEVY, CHAIR**	**EX-OFFICIO**
	TARRELL GAMBLE, VICE-CHAIR	**APPOINTED**
	OPHELIA BASGAL	**APPOINTED**
	KEITH CARSON	**APPOINTED**
	DARRYL WALKER	**ELECTED**

This is a meeting of the Audit Committee if a quorum of the Audit Committee attends, and it is a meeting of the Board if a quorum of the Board attends. This is a joint meeting of the Audit Committee and the Board if a quorum of each attends.

The order of agenda items is subject to change without notice. Board and Committee agendas and minutes, and all documents distributed to the Board or a Committee in connection with a public meeting (unless exempt from disclosure), are available online at www.acera.org.

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

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.

AUDIT COMMITTEE/BOARD MEETING

Call to Order: 12:30 p.m.

Roll Call:

Public Comment (Time Limit: 4 minutes per speaker):

Action Items: Matters for Discussion and Possible Motion by the Committee

External Audit:

1. **Presentation of staff recommendation for selection of a Board Approved Service Provider for ACERA's External Auditor for financial years ending 2021- 2025, per ACERA's Service Provider Policy, p.3, IV(B)**

   - Margo Allen

   Recommendation:
   Staff recommends the Audit Committee recommend that the Board of Retirement approve staff's request to retain ACERA's current external auditor (Williams Adley & Co.) for financial audit years 2021-2025.

Information Items: These items are not presented for Committee action but consist of status updates and cyclical reports

External Audit

1. **Presentation and discussion of the draft Governmental Accounting Standards Board Statements No. 67 and 74 Valuations as of December 31, 2020 (Segal)**

   - Margo Allen

Internal Audit

1. **Progress report on the Internal Audit Plan** - Harsh Jadhav

Trustee Comment:

Future Discussion Items:

External Audit

1. Discussion and possible motion to recommend approval of the December 31, 2020 Audited Financial Statements and Independent Auditor's Report.

2. Discussion and possible motion to recommend adoption of the Government Accounting Standards Board (GASB) Statement No. 67 Actuarial Valuation and addendum as of December 31, 2020.

3. Discussion and possible motion to recommend adoption of the Government Accounting Standards Board (GASB) Statement No. 74 Actuarial Valuation and addendum as of December 31, 2020.

Establishment of Next Meeting Date:

May 20, 2021, at 1:00 pm

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

ACERA

MEMORANDUM TO THE AUDIT COMMITTEE

DATE: April 15, 2021

TO: Members of the Audit Committee

FROM: Margo Allen, Fiscal Services Officer

SUBJECT: **External Auditor Selection**

Executive Summary

It is time to consider how to solicit a service provider for ACERA's external audit services. ACERA's current contract is with Williams Adley & Co., and will expire December 31, 2021.

ACERA's Service Provider Policy, Section IV, states "The Board selects and contracts with Board Approved Service Providers. The Board may determine whether to issue a Request for Information (RFI), a Request for Proposal (RFP), or select based upon Staff recommendation or sole source options".

In 2016, fiscal services staff conducted a Request for Proposal (RFP) for an external auditor. Two responses were received: 1). Williams Adley & Co., LLP (WACO), and 2). Brown Armstrong. In March 2021, staff surveyed the State Association of County Retirement Systems (SACRS) to provide a catalog of current external auditors servicing all 37' Act California County Retirement Systems (37' ACT). The table below summarizes the external audit service providers for all twenty 37' Act retirement systems.

Audit Service Providers for 37' Act Retirement Systems		
Auditor	County	Remarks
Williams Adley & Co. (WACO), LLP	Alameda	On March 11, 2021, staff requested updated fee schedules for a 5-year[1] service contract from WACO and Brown Armstrong.
Plant Moran	Los Angles	
Clifton Larson Allen, LLP	Fresno, Kern	
Macias Gini & O'Connell, LLP	Orange, San Diego	
Brown Armstrong	Contra Costa, Imperial, Marin, Mendocino, Merced, Sacramento, Santa Barbara, San Bernardino, San Joaquin, San Mateo, Sonoma, Stanislaus, Tulare, and Ventura	

[1] The Board service provider policy states that "ACERA will not contract with the same Board Approved Service Provider or General Service Provider for more than five (5) consecutive years without Board Approval" (November, 9, 2017).

It appears that there is only one firm that bids on contracts statewide, and that several systems, much like ACERA, contract with a local firm. With consent of ACERA's CEO, Dave Nelsen, staff contacted the only two responding external audit firms from ACERA's 2016 RFP release to obtain an updated fee schedule from each. It should be noted that the scope of work for ACERA's external audit services has not changed since 2016. Attached for review and discussion are the updated 5-year fee schedules (2021–2025) from both WACO and Brown Armstrong.

Recommendation
It is unlikely ACERA will receive any responses to an RFI or RFP from firms other than Williams Adley & Co., LLP and Brown Armstrong. Based upon the updated fee schedules provided from these two firms, there is no material financial difference in the cost proposals. Given ACERA's long and valuable partnership with Williams Adley & Co., LLP, *Staff recommends the Audit Committee recommend that the Board of Retirement approve staff's request to retain ACERA's current external auditor (Williams Adley & Co. LLP) for financial audit years 2021-2025.*

Attachment:
Williams Adley & Co, LLP Bid Proposal
Brown Armstrong Bid Proposal

WILLIAMS
ADLEY

Confidence Earned

AUDIT

CONSULTING

ACCOUNTING

IT

TAX

WILLIAMS ADLEY

Confidence Earned

March 26, 2021

Margo Allen, Fiscal Services Officer
Alameda County Employees' Retirement Association
475-14th Street, Suite 1000
Oakland, CA 94612

Dear Margo:

In response to your request, our updated fee quote for annual audit services is outlined below.

We are proposing to discount our total FY 2020 fee of $156,185 by 10% for Yr 1, with 1% increases for Yrs 2 through 5. The proposed fees will be billed on an hourly basis, not-to-exceed the amounts listed below.

		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Total
ACERA FS	$	131,940	131,940	131,940	131,940	131,940	659,700
GASB 67/68		12,655	12,655	12,655	12,655	12,655	63,275
GASB 74/75		11,590	11,590	11,590	11,590	11,590	57,950
Total		156,185	156,185	156,185	156,185	156,185	780,925
Less: 10% discount		(15,619)	(15,619)	(15,619)	(15,619)	(15,619)	(78,093)
Base fees	$	140,567	140,567	140,567	140,567	140,567	702,833
Total fees with 1% increase for Yrs 2-5	**$**	**140,567**	**141,972**	**143,392**	**144,826**	**146,274**	**717,030**

The fees were determined using the following agreed-upon rates for the FY 2020 audits.

Personnel	Quoted Hourly Rates
Partner	$235
Manager	$171
Supervisor	$126
Staff	$111

Total proposed fees for the five-year period are not-to-exceed $717,030. Our proposed fees as outlined above are negotiable. Please contact me if you have any questions/concerns regarding our fees. We appreciate the opportunity to serve ACERA and look forward to a continuing relationship.

Very truly yours,

Audrey F. Elbert

Audrey F. Elbert, CPA
Partner

Put Williams Adley's Expertise to Work for You

Frankly, we don't believe in applying one-size-fits all solutions to our clients' accounting, auditing and business challenges. We prefer to listen closely to our clients to truly understand their organization's internal and external environments. We then apply an appropriate blend of industry best practices and innovative thinking to create solutions tailored to their unique requirements.

Our diverse knowledge, backgrounds and subject – matter expertise help a wide variety of government agencies, not-for-profit organizations and businesses achieve their financial, program and IT goals. And we incorporate the latest technological advances to ensure that we deliver accurate and timely results.

OUR AREAS OF EXPERTISE

Williams Adley is nationally recognized for providing a comprehensive spectrum of services and solutions:

- Audit and Assurance
- Management Consulting
- Accounting Support
- Information Technology
- Tax and Advisory

WILLIAMS ADLEY

The Industry's Best And Brightest Team

Williams Adley professionals bring more to client engagements than just their individual expertise and experiences. Our team is characterized by high levels of energy, collaboration and diversity of thought.

This is the result of hiring, training and retaining bright and dynamic professionals and providing them with the guidance and resources necessary to accomplish great things.

In short, we're confident that you'll be every bit as impressed with the caliber of our people as you are with the quality of our services. It's yet another way that Williams Adley stands apart from the crowd.

WILLIAMS ADLEY

Proven Results

Since our founding, we've consistently generated the type of results that have earned us both an exceptional client-retention rate and a national reputation for excellence.

Today, we stand ready to put our proven experience to work for *your* organization.

From the complex government accounting and auditing arena to the fast – paced world of business, Williams Adley is firmly committed to providing you with the expertise you need to tackle your largest challenges with confidence.

It's what our work demands, it's what our clients deserve, and it's what we deliver.

WILLIAMS ADLEY

Audit and Assurance Services

As a result of over three decades of successful client outcomes, Williams Adley offers a variety of expert Audit and Assurance services designed to meet the specific needs of federal, state and local government agencies as well as commercial and not-for-profit organizations.

Government clients value our extensive knowledge of the CFO Act, GMRA, GPRA and FFMIA, as well as OMB and GAO guidance and FASAB and GASB standards. Similarly, our many commercial and not-for-profit clients rely on Williams Adley to help them comply with applicable accounting and auditing standards.

Williams Adley provides a depth of understanding in the following key areas:

- Audits and Reviews
- Audit Preparation & Resolution
- Financial Statement Compilation
- OMB Circular A-133 Single Audits
- Agreed – Upon Procedures Reviews
- Program- Specific Audits
- Healthcare / Medicaid Audits
- Fraud Prevention / Mitigation
- Construction Audits & Reviews

Our proven professionals provide unmatched support and guidance across the entire audit timeline, from preparation of audited financial statements to audit resolution and corrective action plan implementation. We can provide solutions that pave the way for improved audit opinions and enhanced reliability of financial and program information.

BROWN ARMSTRONG

Certified Public Accountants

ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BID PROPOSAL

ANNUAL AUDIT OF FINANCIAL STATEMENTS

March 26, 2021

Ashley L. Casey, CPA/Partner
1919 Grand Canal Boulevard, Suite C6
Stockton, CA 95207
Acasey@bacpas.com
(661) 324-4971

A. Total All-Inclusive Maximum Price

Description	All-Inclusive Maximum Price For Fiscal Year Ended December 31, 2021	2022	2023	2024	2025	Total for 5 Years
Attest Audit of Financial Statements	$ 113,500	$ 115,770	$ 118,085	$ 120,447	$ 122,856	$ 590,659
GASB 67/68	12,600	12,852	13,109	13,371	13,639	$ 65,571
GASB 74/75	10,600	10,812	11,028	11,249	11,474	$ 55,163
Total All-Inclusive Maximum Price	**$ 136,700**	**$ 139,434**	**$ 142,223**	**$ 145,067**	**$ 147,968**	**$ 711,392**

B. Certification

Ashley L. Casey will be the representative and primary liaison responsible for all services to Alameda County Employees' Retirement Association (ACERA). Ms. Casey is entitled to represent the firm, empowered to submit the bid, and authorized to sign a contract with ACERA.

C. Fixed Fees by Category

The schedule of fees and expenses below supports the total all-inclusive maximum price for the attest audit of financial statements for Year 1 – fiscal year ending December 31, 2021. There will be a 2% per year increase for the remaining contract years (Years 2 through 5).

Staff Level	Hours	Standard Hourly Rates	Quoted Hourly Rates	Total
Partners	98	$250	$210	$ 20,580
Manager	172	$180	$160	27,520
Supervisory Staff	247	$140	$120	29,640
Staff	450	$100	$90	40,500
Other (Clerical)	18	$80	$70	1,260
Other (IT Consultant)	40	$230	$230	9,200
Other (Travel Costs)				8,000
Total	1,025		Total All-Inclusive Maximum Price	$ 136,700

D. Rates for Additional Professional Services

If it should become necessary for ACERA to request us to render any additional services requested in your request for proposals or to perform additional work as a result of the specific recommendations included in any report issued on this engagement, then such additional work will be performed only if set forth in an addendum to the contract between ACERA and our firm. Any such additional work agreed to by ACERA and our firm will be performed at the same rates set forth in the schedule of fees and expenses included in this Bid.

E. Manner of Payment

Progress payments will be made on the basis of hours of work completed during the course of the engagement in accordance with this Bid proposal. Interim billings will cover a period of not less than a calendar month.

ACERA

MEMORANDUM TO THE AUDIT COMMITTEE

DATE: April 15, 2021

TO: Members of the Audit Committee

FROM: Margo Allen, Fiscal Services Officer KM for MA

SUBJECT: Draft Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74 Actuarial Valuations and Addendums as of December 31, 2020

Executive Summary
Staff is in receipt of the draft GASB Statement No. 67 and GASB Statement No. 74 (GASB 67 and GASB 74, respectively) actuarial valuations and addendums as of December 31, 2020. It has been staff's practice to bring the GASB 67 and GASB 74 valuations (***liability reporting)*** to the audit committee for review and approval, as opposed to the pension valuation (***contribution funding***), which staff takes to the actuarial committee.

The GASB 67 valuation measures and reports the Total/Net Pension Liability (TPL/NPL), while the GASB 74 valuation measures and reports the Total/Net OPEB (Other Postemployment Benefits) Liability (TOL/NOL)

GASB Statement No. 67, Reporting the 2020 Net Pension Liability (NPL)
As of December 31, 2020, the Net Pension Liability (NPL) increased from $2,141 million as of December 31, 2019, to $2,194 million as of December 31, 2020. The $53 million increase is primarily a result of changes in the actuarial assumptions (which increased the NPL by approximately $237 million), offset somewhat by the favorable investment return during calendar year 2020 of about $193 million more than assumed.

Consider the following points when reviewing the GASB 67 report:

- The GASB rules only define pension and non-OPEB liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. Employers and plans must still develop and adopt funding policies under current practices.
- When measuring **pension liability,** GASB 67 uses the same actuarial cost method (Entry Age) and the same type of discount rate (expected return on assets) as ACERA uses for funding. This means that the TPL measure for financial reporting shown in the report is determined on generally the same basis as ACERA's Actuarial Accrued Liability (AAL) measure for funding. Note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.
- The **Net Pension Liability** (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) calculated on a market value basis.

GASB Statement No. 74, Reporting the 2019 Net OPEB Liability (NOL)
As of December 31, 2020, the Net OPEB Liability (NOL) decreased from $112.9 million as of December 31, 2019, to $6.7 million as of December 31, 2020. The $106.2 million decrease was primarily the result of favorable investment results during calendar year 2020 of about $193.5 million (for an actual market return of 27.7%[1] versus 7.25% assumed in the valuation), offset somewhat by lowering the discount rate[2] (which on a net basis increased the NOL by about $33.2 million).

Consider the following points when reviewing the GASB 74 report:

- The GASB rules only define OPEB liability and expense for financial reporting purposes, and do not apply to contribution amounts for OPEB plan funding purposes. Employers and plans must still develop and adopt funding policies under current practices.
- When measuring **OPEB liability**, GASB 74 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. This means that the TOL measure for financial reporting shown in this report is determined on the same basis as the Actuarial Accrued Liability (AAL) measure for funding or sufficiency purposes[3].
- 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 market value of assets. The NOL reflects all investment gains and losses as of the measurement date.

Conclusion
Segal Consulting is prepared to discuss the GASB 67 and the GASB 74 reporting valuations/addendums and, if necessary, the methodology used for calculating and reporting the NPL and NOL, which subsequently determines each employer's proportionate share of each liability.

Attachment:
ACERA GASB 67 Valuation Draft
ACERA GASB 67 Addendum Draft
ACERA GASB 74 Valuation Draft
ACERA GASB 74 Addendum Draft

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[1] It should be noted that the 27.7% market value investment return mentioned above for the SRBR is higher than the 11.5% investment return included in the December 31, 2020, 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, 2020.

[2] The discount rate was lowered from 7.25% to 7.00% based on the 7.00% investment rate of return assumption that the Board approved based on the recommended assumption from the Actuarial Experience Study for the period December 1, 2016, through November 30, 2019, dated September 9, 2020.

[3] Note that for the SRBR sufficiency valuation, the AAL has been limited to the value of SRBR assets.

Alameda County Employees' Retirement Association (ACERA)

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

As of December 31, 2020

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

Segal

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

April 6, 2021

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, 2020. 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, 2020. 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, 2019, provided by ACERA[1];
- The assets of the Plan as of December 31, 2020, provided by ACERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the December 31, 2020 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the December 31, 2020 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.

[1] It should be noted that starting with this year's valuation, we have also reflected the actual COLA granted by the Board on the April 1 immediately after the December 31, 2019 actuarial valuation that is used to roll forward the liabilities to determine the December 31, 2020 Net Pension Liability. In the past, we had used the expected COLA in the calculation.

Highlights of the valuation

1. As we disclosed in our December 31, 2020 funding valuation report, the 7.00% investment return assumption that the Board approved on October 15, 2020 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 7.00%.

   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 0.65% of assets over time. This approximated outflow was incorporated into our GASB crossover test[2] (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, 2020 was determined by rolling forward the TPL for the funded benefits as of December 31, 2019. Similar to last year, we have included in the TPL as of December 31, 2020 the non-OPEB unlimited Actuarial Accrued Liability (AAL) of $116.4 million, which was calculated by rolling forward the total unlimited non-OPEB AAL as of December 31, 2019.

3. The results of this valuation reflect an experience study of the actuarial assumptions based on the experience during the period December 1, 2016 through November 30, 2019. Based on that study and the recommendations provided in our report dated September 9, 2020, the Board adopted updated actuarial assumptions for use in this valuation.

4. We have also continued the practice of adjusting the Plan's Fiduciary Net Position as of December 31, 2020 to include the $41.7 million set aside by the Retirement Board in the SRBR reserve to pay non-vested Supplemental COLA and retired member death benefits[3] as of December 31, 2020. It should be noted that as of December 31, 2020, the deferred investment gain for the entire Plan was $643.3 million. Consequently, after first replenishing the Contingency Reserve from $69.0 million to $98.7 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

[2] The purpose of the GASB crossover test is to determine if the full expected return (or 7.00% 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 7.00% investment rate of return assumption can be used as the discount rate to determine the TPL and the resulting NPL.

[3] 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.

investment gain that is commensurate with the size of the non-OPEB SRBR reserve, or $13.8 million. The net effect of the adjustments to the Plan's Fiduciary Net Position as of December 31, 2020 for non-OPEB SRBR benefits was an addition of $55.5 million.

Note that the proportionate share of one-half of the net deferred market gain as of December 31, 2020 for the Pension Plan was equal to $306.4 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.

5. The $60.9 million difference between the $116.4 million added to the TPL and the net $55.5 million added to the Plan's Fiduciary Net Position as of December 31, 2020 represents the NPL attributable to non-OPEB SRBR benefits.
6. The NPL increased from $2,141 million as of December 31, 2019 to $2,194 million as of December 31, 2020 primarily as a result of the changes in the actuarial assumptions (which increased the NPL by about $237 million), offset somewhat by the favorable investment return during calendar year 2020 of about $193 million[4] more than assumed. Changes in these values during the last two fiscal years ending December 31, 2019 and December 31, 2020 can be found in *Section 2*, *Schedule of Changes in Net Pension Liability* on page 20.
7. The discount rates used to measure the TPL and NPL as of December 31, 2020 and December 31, 2019 were 7.00% and 7.25%, respectively, following the same assumptions used by ACERA in the pension funding valuations as of December 31, 2020 and December 31, 2019, respectively. The detailed calculations used in the derivation of the 7.00% discount rate as of December 31, 2020 can be found in *Section 3, Appendix A*. Various other information that is required to be disclosed can be found throughout *Section 2*.
8. It is important to note that this actuarial valuation is based on plan assets as of December 31, 2020. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. The plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after December 31, 2020. While it is impossible to determine how the pandemic will affect market conditions and other demographic experience of the plan in future valuations, Segal is available to prepare projections of potential outcomes upon request.
9. On July 30, 2020, the California Supreme Court issued a decision in the case of Alameda County Deputy Sheriffs' Association et al. v. Alameda County Employees' Retirement Association and Board of Retirement of ACERA. We were informed that the decision will not affect the Additional Cashout pay elements for Legacy members. Also, ACERA further indicated that they "will await the Trial Court ruling to determine any future changes which should be minor and only impact a few pay items." In early March 2021, ACERA informed us that there were no new updates on the Trial Court ruling. It should be noted that neither the

[4] This amount represents the investment income on the Plan's Fiduciary Net Position for the Pension Plan and non-OPEB SRBR that is above the assumed earnings (at 7.25%) for the year ending December 31, 2020.

December 31, 2020 assets provided by ACERA nor the liabilities we calculated using the membership data provided by ACERA reflect the financial impact of the Supreme Court decision, if any.

Summary of key valuation results

Measurement Date		December 31, 2020	December 31, 2019
Disclosure elements for fiscal year ending December 31:	• Service cost[1]	$221,824,117	$215,625,191
	• Total Pension Liability	10,639,300,371	9,959,791,606
	• Plan's Fiduciary Net Position[2]	8,444,884,496	7,819,098,646
	• Net Pension Liability	2,194,415,875	2,140,692,960
Schedule of contributions for fiscal year ending December 31:	• Actuarially determined contributions	$309,758,947	$298,526,950
	• Actual contributions[3]	309,752,998	298,526,950
	• Contribution deficiency / (excess)	5,949	0
Demographic data for plan year ending December 31:[4]	• Number of retired members and beneficiaries	10,292	10,078
	• Number of inactive vested members[5]	3,028	2,821
	• Number of active members	11,322	11,336
Key assumptions as of December 31:	• Investment rate of return	7.00%	7.25%
	• Inflation rate	2.75%	3.00%
	• Projected salary increases[6]	General: 8.35% to 3.65% and Safety: 11.25% to 4.05%	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, 2020 and December 31, 2019 measurement date values are based on the valuations as of December 31, 2019 and December 31, 2018, respectively. Both service costs have been calculated using the assumptions shown in the December 31, 2019 measurement date column, as there had been no changes in the actuarial assumptions between the December 31, 2018 and December 31, 2019 valuations.

(2) For 2020, the Plan's Fiduciary Net Position amount shown ($8,444,884,496) includes the net fair value of assets ($9,629,767,350) less OPEB-related SRBR assets ($1,184,882,854). The OPEB-related SRBR assets include $882,528,291 in the SRBR-OPEB reserve (after reducing the reserve by the $7,548,683 SRBR implicit subsidy transfer), and $9,051,620 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 ($293,302,943). 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).

(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). For the year ending December 31, 2020, the actual employer contributions are less than the actuarially determined contributions by $5,949 due to an underpayment by the Alameda County Office of Education in 2020.

(4) Data as of December 31, 2019 is used in the measurement of the TPL as of December 31, 2020.

(5) Includes members who left their contributions on deposit even though they have less than five years of service.

(6) Includes inflation at 2.75% (3.00% for the December 31, 2019 measurement date) 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.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 1: Actuarial Valuation Summary

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

The valuation is prepared at the request of the Board to assist 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, 2020, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	10,292
Inactive vested members entitled to but not yet receiving benefits[1]	3,028
Active members	11,322
Total	24,642

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

Note: Data as of December 31, 2020 is not used in the measurement of the TPL as of December 31, 2020.

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, 2020 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, 2020 for 2020 (based on the December 31, 2018 valuation for the second half of 2019/2020 and on the December 31, 2019 valuation for the first half of 2020/2021) was 27.86% 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, 2020 for 2020 (based on the December 31, 2018 valuation for the second half of 2019/2020 and on the December 31, 2019 valuation for the first half of 2020/2021) was 9.54% of compensation.

Net pension liability

Measurement Date	December 31, 2020	December 31, 2019
Components of the Net Pension Liability		
Total Pension Liability	$10,639,300,371	$9,959,791,606
Plan's Fiduciary Net Position	(8,444,884,496)	(7,819,098,646)
Net Pension Liability	$2,194,415,875	$2,140,692,960
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	79.37%	78.51%

The Net Pension Liability for the plan was measured as of December 31, 2020 and 2019. 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, 2019 and 2018, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of December 31, 2020 and 2019 are the same as those used in ACERA's funding valuations as of December 31, 2020 and 2019, respectively.

Actuarial assumptions. The TPL as of December 31, 2020 that was measured by an actuarial valuation as of December 31, 2019 used the following actuarial assumptions, which were based on the results of an experience study for the period December 1, 2016 through November 30, 2019, applied to all periods included in the measurement. They are the same assumptions used in the December 31, 2020 funding valuation for ACERA.

Inflation:	2.75%
Salary increases:	General: 8.35% to 3.65% and Safety: 11.25% to 4.05%, vary by service, including inflation
Investment rate of return:	7.00%, net of pension plan investment expense, including inflation
Other assumptions:	See analysis of actuarial experience during the period December 1, 2016 through November 30, 2019

Section 2: GASB 67 Information

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

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments[5] was determined in 2020 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, 2020 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
US Large Cap Equity	22.40%	5.43%
US Small Cap Equity	2.50%	6.21%
International Developed Equity	17.00%	6.67%
International Small Cap Equity	3.00%	7.36%
Emerging Markets Equity	5.00%	8.58%
Core Plus Fixed Income	11.50%	1.10%
High Yield Bonds	1.60%	2.91%
Global Fixed Income	3.00%	-0.63%
Private Equity	10.50%	10.00%
Core Real Estate	8.00%	4.58%
Commodities	0.75%	3.46%
Infrastructure	1.75%	7.80%
Private Credit	4.00%	8.50%
Absolute Return	9.00%	3.70%
Total	**100.00%**	

[5] 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.)

Section 2: GASB 67 Information

Discount rate. The discount rate used to measure the Total Pension Liability (TPL) was 7.00% as of December 31, 2020 and 7.25% as of December 31, 2019. 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 0.65% 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[6] 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, 2020 and December 31, 2019.

[6] 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, 2020, calculated using the discount rate of 7.00%, as well as what ACERA's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate.

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability as of December 31, 2020	$3,575,600,730	$2,194,415,875	$1,056,555,878

Schedule of changes in Net Pension Liability – Last two fiscal years

Measurement Date	December 31, 2020	December 31, 2019
Total Pension Liability		
• Service cost[1]	$221,824,117	$215,625,191
• Interest	718,926,969	688,654,389
• Change of benefit terms	0	0
• Differences between expected and actual experience	33,007,683	24,548,056
• Changes of assumptions	236,513,333	0
• Benefit payments, including refunds of member contributions	(530,763,337)	(504,184,139)
Net change in Total Pension Liability	**$679,508,765**	**$424,643,497**
Total Pension Liability – beginning	**9,959,791,606**	**9,535,148,109**
Total Pension Liability – ending	**$10,639,300,371**	**$9,959,791,606**
Plan's Fiduciary Net Position		
• Contributions – employer[2]	$309,752,998	$298,526,950
• Contributions – member	106,104,226	103,117,022
• Net investment income	755,501,876	1,165,766,104
• Benefit payments, including refunds of member contributions	(530,763,337)	(504,184,139)
• Administrative expense	(14,809,913)	(15,273,425)
• Other	0	0
Net change in Plan's Fiduciary Net Position	**$625,785,850**	**$1,047,952,512**
Plan's Fiduciary Net Position[3] – beginning	**7,819,098,646**	**6,771,146,134**
Plan's Fiduciary Net Position[3] – ending	**$8,444,884,496**	**$7,819,098,646**
Net Pension Liability – ending	**$2,194,415,875**	**$2,140,692,960**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	**79.37%**	**78.51%**
Covered payroll[4]	**$1,111,848,569**	**$1,081,586,887**
Plan Net Pension Liability as percentage of covered payroll	**197.37%**	**197.92%**

(1) The Service Cost is based on the previous year's valuation, meaning the December 31, 2020 and December 31, 2019 measurement date values are based on the valuations as of December 31, 2019 and December 31, 2018, respectively. Both service costs have been calculated using the assumptions shown in the December 31, 2019 measurement date column on page 8, as there had been no changes in the actuarial assumptions between the December 31, 2018 and December 31, 2019 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 8 for a discussion on the development of the 2020 "Plan's Fiduciary Net Position – beginning" amount of $7,819,098,646 and the 2020 "Plan's Fiduciary Net Position – ending" amount of $8,444,884,496.

(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
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%
2020	309,758,947	309,752,998	5,949[3]	1,111,848,569	27.86%

(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.

(3) Actuarially Determined Contribution for the Alameda County Office of Education of $78,000 less actual contributions paid of $72,051.

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 2020 (or the second half of fiscal year 2019/2020) are calculated based on the December 31, 2018 valuation. Actuarially determined contribution rates for the last six months of calendar year 2020 (or the first half of fiscal year 2020/2021) are calculated based on the December 31, 2019 valuation.
Actuarial cost method:	Entry Age Actuarial Cost Method
Amortization method:	Level percent of payroll (3.50% payroll growth assumed in the December 31, 2019 valuation and 3.50% payroll growth assumed in the December 31, 2018 valuation)
Remaining amortization period:	**<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. **<u>December 31, 2019 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 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.
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, 2018 Valuation**	**December 31, 2019 Valuation**
Investment rate of return:	7.25%, net of pension plan administrative and investment expense, including inflation	7.25%, net of pension plan administrative and 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, 2018 funding actuarial valuation	Same as those used in the December 31, 2019 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, 2020

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)
2020	7,819	416	531	15	657	8,346 **
2021	8,346 **	441	622	16	574	8,724
2022	8,724	438	652	17	599	9,092
2023	9,092	439	683	17	624	9,454
2024	9,454	437	715	18	648	9,806
2025	9,806	438	747	19	671	10,150
2026	10,150	440	778	19	694	10,487
2027	10,487	448	809	20	717	10,822
2028	10,822	456	840	21	739	11,157
2044	12,115	225	1,198	23	807	11,926
2045	11,926	230	1,206	23	794	11,721
2046	11,721	236	1,205	22	780	11,511
2047	11,511	234	1,194	22	765	11,294
2089	286	38	115	1	17	226
2090	226	34	97	0 *	13	175
2091	175	30	82	0 *	10	133
2092	133	27	68	0 *	8	100
2093	100	24	56	0 *	6	73
2094	73	21	45	0 *	4	53
2095	53	18	37	0 *	3	37
2096	37	16	29	0 *	2	26
2097	26	14	23	0 *	1	18
2098	18	12	18	0 *	1	12
2099	12	10	14	0 *	1	8
2100	8	9	11	0 *	0 *	6
2110	2	1	2	0 *	0 *	1
2111	1	1	1	0 *	0 *	1
2112	1	1	1	0 *	0 *	0 *
2113	0 *	0 *	1	0 *	0 *	0 *
2114	0 *	0 *	0 *	0 *	0 *	0 *
2134	0 *	0 *	0 *	0	0 *	0 *
2135	0 *	0 *	0	0	0 *	0 *
2135	Discounted Value: 0 *,**					

* Less than $1M, when rounded.

** Excludes $69.0 million in the Contingency Reserve plus $29.7 million required to bring the Contingency Reserve to 1% of total assets as of December 31, 2020. See Note 2.

Notes

1. Amounts may not total exactly due to rounding.
2. Amounts shown in the year beginning January 1, 2020 row are actual amounts, based on the financial statements provided by ACERA. The Plan Fiduciary Net Position as of December 31, 2020 differs from the amount used for other GASB 67 purposes in that it excludes the $69.0 million Contingency Reserve plus the $29.7 million of the Gross Market Stabilization Reserve expected to be used to bring the Contingency Reserve up to 1% of total assets ($98.7 million). These assets are not used in developing the projected total contributions in column (b).
3. Years 2029-2043, 2048-2088, 2101-2109, and 2115-2133 have been omitted from this table.
4. Column (a): Except for the "discounted value" shown for 2135, 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, 2019); 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, 2019. The projected benefit payments reflect the cost of living increase assumption of 2.75% 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 7.00% 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 0.65% 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 $0.99 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 $0.08 billion as well as the remaining present value of the OPEB SRBR benefits of $0.26 billion.
7. Column (d): Projected administrative expenses are calculated as approximately 0.19% of the beginning plan fiduciary net position amount. The 0.19% portion was based on the actual fiscal year 2020 administrative expenses as a percentage of the beginning plan fiduciary net position amount as of January 1, 2020. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.
9. As illustrated in this 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 7.00% per annum was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2020 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.
10. This projection is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 67. The terms may have different meanings in other contexts.

Actuarial Present Value of Projected Benefit Payments:	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation:	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date:	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution:	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs):	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad Hoc Postemployment Benefit Changes:	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Automatic Cost-of-Living Adjustments (Automatic COLAs):	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic Postemployment Benefit Changes:	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Cost-of-Living Adjustments:	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan):	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered Payroll:	Payroll on which contributions to 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.

Segal

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VIA E-MAIL

April 6, 2021

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, 2020

Dear Margo:

In our Governmental Accounting Standards (GASB) Statement 67 actuarial valuation report dated April 6, 2021, 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 report dated April 6, 2021. 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, 2019 and December 31, 2020, respectively.

The Alameda County Office of Education (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 ACOE's required contributions determined had they not make the additional lump sum contribution in 2019. We have continued to use that method in determining ACOE's proportionate share of the non-OPEB SRBR NPL in this letter.

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

Schedule of Employer Allocations as of December 31, 2019

Actual Employer Contributions by Employer and Membership Class
January 1, 2019 to December 31, 2019

	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	$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

	Safety Members		Total		Adjusted Total[2]	
Employer	**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

	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	$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

	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	$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 Employer Allocations as of December 31, 2020

Actual Employer Contributions by Employer and Membership Class
January 1, 2020 to December 31, 2020

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	$129,742,973	65.180%	$0	0.000%	$0	0.000%	$129,742,973	64.672%
Health System	54,283,769	27.271%	0	0.000%	0	0.000%	54,283,769	27.059%
Superior Court	12,372,365	6.216%	0	0.000%	0	0.000%	12,372,365	6.167%
First 5	1,329,139	0.668%	0	0.000%	0	0.000%	1,329,139	0.663%
Housing Authority	1,323,493	0.665%	0	0.000%	0	0.000%	1,323,493	0.660%
LARPD	0	0.000%	0	0.000%	1,490,917	100.000%	1,490,917	0.743%
ACOE	0	0.000%	72,051	100.000%	0	0.000%	72,051	0.036%
Total for all Employers	**$199,051,739**	**100.000%**	**$72,051**	**100.000%**	**$1,490,917**	**100.000%**	**$200,614,707**	**100.000%**

Actual Employer Contributions by Employer and Membership Class
January 1, 2020 to December 31, 2020

Employer	Safety Members		Total		Adjusted Total[2]	
	Contributions	Percentage	Contributions	Percentage	Contributions	Percentage[1]
Alameda County	$109,138,291	100.000%	$238,881,264	77.121%	$238,881,264	77.104%
Health System	0	0.000%	54,283,769	17.525%	54,283,769	17.521%
Superior Court	0	0.000%	12,372,365	3.994%	12,372,365	3.993%
First 5	0	0.000%	1,329,139	0.429%	1,329,139	0.429%
Housing Authority	0	0.000%	1,323,493	0.427%	1,323,493	0.427%
LARPD	0	0.000%	1,490,917	0.481%	1,490,917	0.481%
ACOE	0	0.000%	72,051	0.023%	138,832[2]	0.045%
Total for all Employers	**$109,138,291**	**100.000%**	**$309,752,998**	**100.000%**	**$309,819,779**	**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 ACOE's required contributions determined in our December 31, 2018 valuation in the amount of $78,000 based on an April 1, 2020 payment date plus the amortization of the remaining balance of the original $750,000 lump sum amount (an amount of $60,832 which represents the additional UAAL contribution ACOE would have been required to pay if they did not make the additional lump sum contribution in 2019). Note that in 2020, the actual contribution made by ACOE is $72,051 which is $5,949 less than the required contribution. Since $5,949 is part of the required contributions, we included this amount for purposes of determining ACOE's proportionate share of the non-OPEB SRBR NPL.

Schedule of Employer Allocations as of December 31, 2020

Allocation of December 31, 2020 Net Pension Liability

Employer	General NPL, Excluding ACOE and LARPD (Excl. non-OPEB SRBR NPL) NPL	Percentage[1]	General ACOE NPL Only (Excl. non-OPEB SRBR NPL) NPL	Percentage[1]	General LARPD NPL Only (Excl. non-OPEB SRBR NPL) NPL	Percentage[1]	Total General NPL (Excl. non-OPEB SRBR NPL) NPL	Percentage
Alameda County	$826,710,745	65.180%	$0	0.000%	$0	0.000%	$826,710,745	64.436%
Health System	345,891,373	27.271%	0	0.000%	0	0.000%	345,891,373	26.959%
Superior Court	78,835,615	6.216%	0	0.000%	0	0.000%	78,835,615	6.145%
First 5	8,469,156	0.668%	0	0.000%	0	0.000%	8,469,156	0.660%
Housing Authority	8,433,180	0.665%	0	0.000%	0	0.000%	8,433,180	0.657%
LARPD	0	0.000%	0	0.000%	13,833,231	100.000%	13,833,231	1.078%
ACOE	0	0.000%	832,627	100.000%	0	0.000%	832,627	0.065%
Total for all Employers	**$1,268,340,069**	**100.000%**	**$832,627**	**100.000%**	**$13,833,231**	**100.000%**	**$1,283,005,927**	**100.000%**

Allocation of December 31, 2020 Net Pension Liability

Employer	Safety NPL (Excl. non-OPEB SRBR NPL) NPL	Percentage[1]	General & Safety Total (Excl. non-OPEB SRBR NPL) NPL	Percentage	General & Safety Non-OPEB SRBR NPL NPL	Percentage[2]	Total NPL	Percentage
Alameda County	$850,522,497	100.000%	$1,677,233,242	78.614%	$46,946,231	77.104%	$1,724,179,473	78.572%
Health System	0	0.000%	345,891,373	16.212%	10,668,139	17.521%	356,559,512	16.248%
Superior Court	0	0.000%	78,835,615	3.695%	2,431,484	3.993%	81,267,099	3.703%
First 5	0	0.000%	8,469,156	0.397%	261,210	0.429%	8,730,366	0.398%
Housing Authority	0	0.000%	8,433,180	0.395%	260,100	0.427%	8,693,280	0.396%
LARPD	0	0.000%	13,833,231	0.648%	293,003	0.481%	14,126,234	0.644%
ACOE	0	0.000%	832,627	0.039%	27,284	0.045%	859,911	0.039%
Total for all Employers	**$850,522,497**	**100.000%**	**$2,133,528,424**	**100.000%**	**$60,887,451**	**100.000%**	**$2,194,415,875**	**100.000%**

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 been required to make of $138,832 in 2020 if they did not make the additional contribution in 2019 to partially pay off their UAAL. This approach is outlined in our March 2, 2020 letter and is approved by ACERA.

Notes:

Based on the January 1, 2020 through December 31, 2020 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, 2020 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, 2020, the total Plan's Fiduciary Net Position for Pension (excluding non-OPEB SRBR) is $306.4 million **higher** than the valuation value of assets as of the same date due to the inclusion of deferred market **gains**. The total Plan's Fiduciary Net Position also includes the Contingency Reserve and the deferred market gains for replenishing the Contingency Reserve from $69.0 million to $98.7 million.

[2] Includes an adjustment to reflect the total annual UAAL contribution ACOE would have been required to make of $138,832 in 2020 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, 2020

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	$1,724,179,473	$42,239,675	$0	$293,037,119	$11,520,977	$346,797,771
Health System	356,559,512	8,559,363	0	72,609,580	3,818,149	84,987,092
Superior Court	81,267,099	1,950,851	0	16,549,187	5,881,353	24,381,391
First 5	8,730,366	209,576	0	1,777,847	923,064	2,910,487
Housing Authority	8,693,280	208,686	0	1,770,295	438,903	2,417,884
LARPD	14,126,234	3,162,181	0	1,809,278	59,936	5,031,395
ACOE	859,911	705,561	0	48,179	26,280	780,020
Total for all Employers	**$2,194,415,875**	**$57,035,893**	**$0**	**$387,601,485**	**$22,668,662**	**$467,306,040**

Schedule of Pension Amounts by Employer as of December 31, 2020

	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	$7,854,374	$286,812,664	$73,087,610	$2,547,465	$370,302,113	$214,728,025	$1,555,596	$216,283,621
Health System	2,621,704	80,123,553	16,608,548	17,345,961	116,699,766	42,784,267	-2,168,534	40,615,733
Superior Court	597,539	18,261,773	3,785,423	1,987,380	24,632,115	9,751,396	483,130	10,234,526
First 5	64,192	1,961,827	406,661	10,197	2,442,877	1,047,575	281,813	1,329,388
Housing Authority	63,919	1,953,493	404,933	693,125	3,115,470	1,043,122	-118,356	924,766
LARPD	156,944	2,342,976	456,158	45,153	3,001,231	2,129,738	-16,303	2,113,435
ACOE	1,159	106,696	42,477	39,381	189,713	344,092	-17,346	326,746
Total for all Employers	**$11,359,831**	**$391,562,982**	**$94,791,810**	**$22,668,662**	**$520,383,285**	**$271,828,215**	**$0**	**$271,828,215**

Schedule of Pension Amounts by Employer as of December 31, 2020

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., 2020) 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, 2019 (the beginning of the measurement period ending December 31, 2020) and is 5.26 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.

There was a decrease in the total employer pension expense from $420.5 million calculated last year to $271.8 million calculated this year. The primary cause of the decrease was due to the full recognition of: (a) expense from assumption changes implemented in the December 31, 2014 valuation and (b) investment loss from the December 31, 2015 valuation used in developing last year's pension expense.

Alameda County Employees' Retirement Association (ACERA)

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, 2020

DRAFT – FOR DISCUSSION WITH CLIENT

DRAFT

Segal

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April 6, 2021

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, 2020. 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
Senior Actuary

/mv

Table of Contents

Section 1: Actuarial Valuation Summary

Purpose and basis

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, 2020. 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, 2019, provided by ACERA;
- The assets of the Plan as of December 31, 2020, provided by ACERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the December 31, 2020 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, and health care trends etc. adopted by the Board for the December 31, 2020 valuation.

General observations on GASB 74 actuarial valuation

1. 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.
2. 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.
3. 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.

Highlights of the valuation

1. The NOL decreased from $112.9 million as of December 31, 2019 to $6.7 million as of December 31, 2020 primarily as a result of favorable investment return during calendar year 2020 of about $193.5 million (for an actual market return of 27.7%[2] versus 7.25% assumed in the valuation), offset somewhat by lowering the discount rate[3] (which on a net basis increased the NOL by about $33.2 million). Changes in these values during the last two fiscal years ending December 31, 2020 and 2019 can be found in *Section 2, Schedule of Changes in Net OPEB Liability* on page 16.

2. As we disclosed in our December 31, 2020 pension funding valuation report, the 7.00% investment return assumption that the Board approved 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 7.00%.

   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 0.65% of assets over time. This approximated outflow was incorporated into our GASB crossover test for the pension benefits (reference: *Section 2, Schedule of Changes in Net Pension Liability* of our GASB 67 report as of December 31, 2020), 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 *Section 3, Appendix A* of the GASB 67 report indicates that the present value of outflows from the 0.65% of assets over time is expected to be higher than the present values of the remaining OPEB and non-OPEB SRBR 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 *Section 2, Schedule of Changes in Net OPEB Liability* on page 16 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.

[2] Note that the 27.7% market value investment return mentioned above for the SRBR is higher than the 11.5% investment return included in the December 31, 2020 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, 2020.

[3] The discount rate was lowered from 7.25% to 7.00% based on the 7.00% investment rate of return assumption that the Board approved based on the recommended assumption from the Actuarial Experience Study for the period December 1, 2016 through November 30, 2019, dated September 9, 2020.

3. The TOL as of December 31, 2020 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, 2019. 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, 2020 (reference: our letter dated March 22, 2021) and the assumptions approved by the Board from the Actuarial Experience Study for the period December 1, 2016 through November 30, 2019, dated September 9, 2020.
4. We have also continued the practice of adjusting the Plan's Fiduciary Net Position as of December 31, 2020 to include the $891.6 million set aside by the Retirement Board in the SRBR reserve to pay OPEB benefits as of December 31, 2020. This includes $882.5 million in the OPEB-related SRBR reserve (after reducing the reserve by the $7.5 million SRBR implicit subsidy transfer), and $9.1 million in the 401(h) reserve. It should be noted that as of December 31, 2020, the deferred investment gain for the entire Plan was $643.3 million. Consequently, after first replenishing the Contingency Reserve from $69.0 million to $98.7 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 $293.3 million (which will cause the future interest crediting rate to the SRBR reserve to be raised above 7.00% per year).
5. The Coronavirus (COVID-19) pandemic is rapidly evolving and has had a significant impact on the US economy in 2020, including most retiree health plans, and will likely continue to have an impact in the future. Our results do not include the impact of the following:
   - Direct or indirect effects of COVID-19 on short-term health plan costs
   - Short-term or long-term impacts on mortality of the covered population
   - The potential for federal or state fiscal relief

   Each of the above factors could significantly impact the results prepared using these assumptions. The net effect of the above factors generally have not affected our assumptions for the December 31, 2020 valuation. Given the high level of uncertainty and fluidity of the current events, we will monitor to assess any potential changes in the assumptions proposed here.

   Due to the COVID-19 pandemic, market conditions have varied significantly during 2020. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the Plan Year. While it is impossible to determine how the pandemic will continue to affect market conditions, health care costs, and other demographic experience of the Plan prior to next year's valuation, Segal is available to prepare projections of potential outcomes upon request.

Summary of key valuation results

Measurement Date		December 31, 2020	December 31, 2019
Disclosure elements for fiscal year ending December 31:	• Service cost[(1)]	$31,510,436	$27,678,194
	• Total OPEB Liability	1,191,570,896	1,083,114,679
	• Plan's Fiduciary Net Position[(2)]	1,184,882,854	970,180,405
	• Net OPEB Liability	6,688,042	112,934,274
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 receiving medical benefits[(5)]	TBD	6,575
	• Number of retired members receiving dental and vision benefits	TBD	7,741
	• Number of vested terminated members	TBD	430
	• Number of active members	TBD	11,336
Key assumptions as of December 31:	• Discount rate	7.00%	7.25%
	• Health care premium trend rates		
	Non-Medicare medical plan	Graded from 6.75% to ultimate 4.50% over 9 years	Graded from 6.75% to ultimate 4.50% over 9 years[(7)]
	Medicare medical plan	Graded from 6.25% to ultimate 4.50% over 7 years	Graded from 6.25% to ultimate 4.50% over 7 years[(7)]
	Dental/Vision	4.00%[(6)]	4.00%
	Medicare Part B	4.50%	4.50%

(1) The Service Cost is based on the previous year's valuation, meaning the December 31, 2020 and December 31, 2019 measurement date values are based on the valuations as of December 31, 2019 and December 31, 2018, respectively. The December 31, 2020 service cost has been calculated using the assumptions shown in the December 31, 2019 column, and the December 31, 2019 service cost has been calculated using the following assumptions:

Key assumptions as of December 31, 2018:	
Discount rate	7.25%
Health care premium trend rates	
Non-Medicare medical plan[(7)]	Graded from 7.00% to ultimate 4.50% over 10 years
Medicare medical plan[(7)]	Graded from 6.50% to ultimate 4.50% over 8 years
Dental/Vision and Medicare Part B	4.00%

(2) For 2020, the Plan's Fiduciary Net Position shown ($1,184,882,854) includes the OPEB-related SRBR reserve of $882,528,291 (after reducing the reserve by the SRBR implicit subsidy transfer of $7,548,683) and 401(h) reserve ($9,051,620), 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 ($293,302,942), after first replenishing the Contingency Reserve from $69.0 million to $98.7 million (1% of total assets). 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). Note that amounts may not total exactly 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, 2019 data is used in the measurement of the TOL as of December 31, 2020. The following data as of December 31, 2018 was used in the measurement of the TOL as of December 31, 2019:

Number of retired members receiving medical benefits	6,385
Number of retired members receiving dental and vision benefits	7,519
Number of vested terminated members	410
Number of active members	11,349

The demographic data as of December 31, 2020 will be used in the sufficiency study for the SRBR as of December 31, 2020 as well as in the next year's GASB 74 valuation when we roll forward the liability from December 31, 2020 to December 31, 2021. The December 31, 2020 demographic data will be included in the final version.

(5) The retiree count excludes beneficiaries under 65 receiving an implicit subsidy.

(6) The first two years of trend for dental were updated to reflect the three-year rate guarantee (premiums would be fixed at the 2021 levels for 2022 and 2023). The first four years of trend for vision were updated to reflect the five-year rate guarantee (premiums would be fixed at 2021 levels for 2022, 2023, 2024 and 2025).

(7) The trend rates for 2020 as of the December 31, 2019 measurement are before reflecting the 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 6.25%. 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 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	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, 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 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.

Section 1: Actuarial Valuation Summary

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

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

The valuation is prepared at the request of the Board to assist ACERA 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. 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 74 Information

General information about the 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 (ACOE).

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, 2020, OPEB plan membership consisted of the following:

Retired members currently receiving medical benefits	TBD
Retired members currently receiving dental and vision benefits	TBD
Vested terminated members entitled to, but not yet receiving benefits	TBD
Active members	TBD
Total	TBD

Note: Data as of December 31, 2020 is not used in the measurement of the TOL as of December 31, 2020. It will be used for the sufficiency study for the SRBR as of December 31, 2020 as well as in next year's GASB 74 valuation. The December 31, 2020 demographic data will be included in the final version.

The retiree count excludes beneficiaries under 65 receiving an implicit subsidy.

Section 2: GASB 74 Information

Benefits provided. ACERA provides benefits to eligible employees under the following terms and conditions.

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.
Other Postemployment Benefits (OPEB):	
Monthly Medical Allowance	
Service Retirees:	For retirees not purchasing individual insurance through the Medicare Insurance Exchange, a Maximum Monthly Medical Allowance of $578.65 per month is provided, effective January 1, 2020. For the period January 1, 2021 through December 31, 2021, the maximum allowance will remain at $578.65 per month. For those purchasing individual insurance through the Individual Medicare Insurance Exchange, the Maximum Monthly Medical Allowance is $443.28 per month for 2020 and 2021. These Allowances are subject to the following subsidy schedule:
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.
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.

Subsidy schedule (Service Retirees):

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 requirements is 5 years of service.

Dental and Vision Plans:	The SRBR provides dental and vision benefits for retirees only. The maximum combined monthly dental and vision premium was $46.28 in 2020 and is $48.12 in 2021. 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 include active participants for purposes of underwriting, the surviving spouses/domestic partners receive an implicit subsidy from the actives, which creates a liability for the SRBR.

Net OPEB Liability

Measurement Date	December 31, 2020	December 31, 2019
Components of the Net OPEB Liability		
Total OPEB Liability	$1,191,570,896	$1,083,114,679
Plan's Fiduciary Net Position	1,184,882,854	970,180,405
Net OPEB Liability	$6,688,042	$112,934,274
Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability	99.44%	89.57%

The Net OPEB Liability (NOL) was measured as of December 31, 2020 and 2019. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date, while the Total OPEB Liability (TOL) was determined by rolling forward the TOL as of December 31, 2019 and 2018, respectively.

Plan provisions. The plan provisions used in the measurement of the NOL as of December 31, 2020 and 2019 are the same as those used in ACERA's SRBR sufficiency valuation as of December 31, 2019 and 2018, respectively.

Actuarial assumptions. The actuarial assumptions used for the December 31, 2020 valuation were based on the results of the experience study for the period from December 1, 2016 through November 30, 2019 that were approved by the Board effective with the December 31, 2020 valuation and the health care trend assumptions recommended for the upcoming sufficiency study for the SRBR as of December 31, 2020 (reference: our letter dated March 22, 2021). The assumptions used in the December 31, 2020 SRBR OPEB actuarial valuation for ACERA were applied to all periods included in the measurement:

Investment rate of return	7.00%, net of OPEB plan investment expense, including inflation
Inflation	2.75%
Health care premium trend rates (used to project health care costs after calendar year 2021):	
Non-Medicare medical plan	Graded from 6.75% in 2021 to ultimate 4.50% over 9 years
Medicare medical plan	Graded from 6.25% in 2021 to ultimate 4.50% over 7 years
Dental	0.00% for the first two years to reflect a three-year rate guarantee (premiums fixed at 2021 level for 2022 and 2023) and 4.00% thereafter.
Vision	0.00% for the first four years to reflect a five-year rate guarantee (premiums fixed at 2021 level for 2022, 2023, 2024 and 2025) and 4.00% thereafter.
Medicare Part B[5]	4.50%
Other assumptions:	Same as those proposed in the experience study for the period December 1, 2016 through November 30, 2019.

[5] The actual calendar year 2020 trend of 2.70% reflecting the standard 2021 calendar year premium of $148.50 per month, consistent with Segal's Medicare Part B memo dated November 12, 2020 was reflected in the current year GAS 74 valuation with December 31, 2020 measurement date.

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 sufficiency study for the SRBR as of December 31, 2019 (reference: our letter dated May 6, 2020). The assumptions used in the December 31, 2019 SRBR OPEB actuarial valuation for ACERA were applied to all periods included in the measurement:

Investment rate of return	7.25%, net of OPEB plan investment expense, including inflation
Inflation	3.00%
Health care premium trend rates (used to project health care costs after calendar year 2020):	
Non-Medicare medical plan[6]	Graded from 6.75% in 2020 to ultimate 4.50% over 9 years
Medicare medical plan[6]	Graded from 6.25% in 2020 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.

[6] 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.

Determination of discount rate and investment rates of return

The long-term expected rate of return on OPEB plan investments[7] was determined in 2020 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, 2020 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
US large Cap Equity	22.40%	5.43%
US Small Cap Equity	2.50%	6.21%
International Developed Equity	17.00%	6.67%
International Small Cap Equity	3.00%	7.36%
Emerging Markets Equity	5.00%	8.58%
Core Plus Fixed Income	11.50%	1.10%
High Yield Bonds	1.60%	2.91%
Global Fixed Income	3.00%	-0.63%
Private Equity	10.50%	10.00%
Core Real Estate	8.00%	4.58%
Commodities	0.75%	3.46%
Infrastructure	1.75%	7.80%
Private Credit	4.00%	8.50%
Absolute Return	9.00%	3.70%
Total	100.00%	5.56%

[7] Note that the investment return assumption for SRBR sufficiency (and pension 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 7.00% and 7.25% as of December 31, 2020 and December 31, 2019, respectively. 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.[8] 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, 2020 and December 31, 2019.

[8] 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.

Discount rate and trend sensitivity

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, 2020, calculated using the discount rate of 7.00%, as well as what ACERA's NOL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate.

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net OPEB Liability as of December 31, 2020	$161,734,615	$6,688,042	-$121,795,777

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, 2020, 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, 2020	-$146,614,305	$6,688,042	$196,585,237

* *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 after the first two years and four years for Dental and Vision costs, respectively; and 4.50% for all years for Medicare Part B costs. The first two years of trend for dental were 0.00% to reflect three-year rate guarantee (premiums fixed at 2021 levels for 2022 and 2023). The first four years of trend for vision were 0.00% to reflect five-year rate guarantee (premiums fixed at 2021 levels for 2022, 2023, 2024 and 2025).*

Schedule of changes in Net OPEB Liability – Last two fiscal years

Measurement Date	December 31, 2020	December 31, 2019
Total OPEB Liability		
• Service cost[1]	$31,510,436	$27,678,194
• Interest	79,142,070	73,843,280
• Change of benefit terms	0	0
• Differences between expected and actual experience	-13,871,821	-41,706,128
• Changes of assumptions	57,696,237	12,524,469
• Benefit payments	-46,020,705	-43,562,150
Net change in Total OPEB Liability	**$108,456,217**	**$28,777,665**
Total OPEB Liability – beginning	**1,083,114,679**	**1,054,337,014**
Total OPEB Liability – ending	**$1,191,570,896**	**$1,083,114,679**
Plan's Fiduciary Net Position		
• Contributions – employer[2]	N/A	N/A
• Contributions – member	N/A	N/A
• Net investment income	$262,139,154	$193,656,620
• Benefit payments	-46,020,705	-43,562,150
• Administrative expense	-1,416,000	-1,354,500
• Other	0	0
Net change in Plan's Fiduciary Net Position	**$214,702,449**	**$148,739,970**
Plan's Fiduciary Net Position[3] – beginning	**970,180,405**	**821,440,435**
Plan's Fiduciary Net Position[3] – ending	**$1,184,882,854**	**$970,180,405**
Net OPEB Liability – ending	**$6,688,042**	**$112,934,274**
Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability	**99.44%**	**89.57%**
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 based on the previous year's valuation, meaning the December 31, 2020 and December 31, 2019 measurement date values are based on the valuations as of December 31, 2019 and December 31, 2018, 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 5 for a discussion on the development of the 2020 "Plan's Fiduciary Net Position – beginning" amount of $970,180,405 and the 2020 "Plan's Fiduciary Net Position – ending" amount of $1,184,882,854.

(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.

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
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
2020	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.

Section 3: Appendices

Appendix A: Projection of OPEB Plan's Fiduciary Net Position ($ in millions) for use in the Calculation of Discount Rate as of December 31, 2020

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 Positions (f) = (a)+(b)-(c)-(d)+(e)
2020	$970	$0	$46	$1	$262	$1,185
2021	1,185	0	57	2	81	1,207
2022	1,207	0	61	2	82	1,226
2023	1,226	0	65	2	84	1,242
2024	1,242	0	70	2	84	1,255
2025	1,255	0	74	2	85	1,264
2026	1,264	0	79	2	86	1,270
2027	1,270	0	83	2	86	1,271
2028	1,271	0	87	2	86	1,267
2029	1,267	0	91	2	86	1,260
2030	1,260	0	96	2	85	1,247
2031	1,247	0	100	2	84	1,229
2032	1,229	0	104	2	82	1,206
2033	1,206	0	108	2	81	1,176
2034	1,176	0	112	2	78	1,141
2035	1,141	0	116	2	76	1,099
2036	1,099	0	119	2	73	1,051
2037	1,051	0	122	2	69	997
2038	997	0	126	1	65	935
2039	935	0	128	1	61	866
2040	866	0	131	1	56	790
2041	790	0	134	1	51	706
2042	706	0	136	1	45	613
2043	613	0	138	1	38	512
2044	512	0	140	1	31	402
2045	402	0	142	1	23	283
2046	283	0	143	0*	15	154
2047	154	0	144	0*	6	16
2048	16	0	17	0*	1	0
2134	0	0	0	0	0	0
2135	0	0	0	0	0	0
2135	Discounted value: 0					

* Less than $1 million, when rounded

Notes

1. Amounts may not total exactly due to rounding.
2. Amounts shown in the year beginning January 1, 2020 row are actual amounts, based on the financial statements provided by ACERA.
3. Years 2049 – 2133 have been omitted from this table.
4. Column (a): Except for the "discounted value" shown for 2135, 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, 2019. 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, 2020 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 7.00% 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 0.15% of the beginning OPEB SRBR Plan's Fiduciary Net Position amount. The 0.15% portion was based on the actual fiscal year 2020 administrative expenses as a percentage of the beginning OPEB SRBR Plan's Fiduciary Net Position amount as of January 1, 2020. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.
9. As illustrated in this 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 7.00% per annum was applied to all periods of projected benefit payments to determine the total OPEB liability as of December 31, 2020 shown earlier in this report, pursuant to paragraph 48 of GASB Statement No. 74.

** See discussion on page 2 regarding source of funding for payment of OPEB SRBR benefits not covered by current OPEB Plan's Fiduciary Net Position in the SRBR.*

Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 74. The terms may have different meanings in other contexts.

Actuarially Determined Contribution:	A target or recommended contribution to an OPEB plan for the reporting period based on the most recent measurement available.
Assumptions or Actuarial Assumptions:	The estimates on which the cost of the Plan is calculated including: a) Investment return — the rate of investment yield that the Plan will earn over the long-term future; b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates; c) Retirement rates — the rate or probability of retirement at a given age; d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.
Covered Employee Payroll:	The payroll of the employees that are provided OPEB benefits
Discount Rate:	The single rate of return, that when applied to all projected benefit payments results in an actuarial present value that is the sum of the following: 1) the actuarial present value of projected benefit payments projected to be funded by plan assets using a long term rate of return, and 2) the actuarial present value of projected benefit payments that are not included in (1) using a yield or index rate for 20 year tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher.
Entry Age Actuarial Cost Method:	An actuarial cost method where the present value of the projected benefits for an individual is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age.
Healthcare Cost Trend Rates:	The rate of change in per capita health costs over time.
Net OPEB Liability:	The Total OPEB Liability less the Plan Fiduciary Net Position.
Plan Fiduciary Net Position:	Market Value of Assets
Real Rate of Return:	The rate of return on an investment after removing inflation.
Service Cost:	The amount of contributions required to fund the benefit allocated to the current year of service.
Total OPEB Liability:	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 74.

Valuation Date:	The date at which the actuarial valuation is performed

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Segal

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Via Email **DRAFT – FOR DISCUSSION WITH CLIENT**

April 6, 2021

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, 2020

Dear Margo:

In our Governmental Accounting Standards Board (GASB) Statement 74 actuarial valuation report draft dated March 31, 2021, 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 report draft dated March 31, 2021. 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, 2019 and December 31, 2020, 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, 2019 and December 31, 2020 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 2019 and 2020, 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	Thomas Bergman, ASA, MAAA, EA
Vice President and Actuary	Senior Actuary

TJH/

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 ACOE (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 to the pension plan.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 NPL and 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.

Schedule of Employer Allocations as of December 31, 2020

	Actual Employer Contributions by Employer January 1, 2020 to December 31, 2020	
Employer	**Contributions**	**Percentage***
Alameda County	$238,881,264	77.104%
Health System	54,283,769	17.521%
Superior Court	12,372,365	3.993%
First 5	1,329,139	0.429%
Housing Authority	1,323,493	0.427%
LARPD	1,490,917	0.481%
ACOE	138,832	0.045%
Total for all Employers	**$309,819,779**	**100.000%**

* The unrounded percentages are used in the allocation of the NOL amongst employers.

	Allocation of December 31, 2020 Net OPEB Liability	
Employer	**NOL**	**Percentage**
Alameda County	$5,156,701	77.104%
Health System	1,171,817	17.521%
Superior Court	267,081	3.993%
First 5	28,692	0.429%
Housing Authority	28,570	0.427%
LARPD	32,184	0.481%
ACOE	2,997	0.045%
Total for all Employers	**$6,688,042**	**100.000%**

Notes:

1. With the exception of an adjustment for the lump sum contribution made by ACOE (see item 4), the above is based on the January 1, 2020 through December 31, 2020 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 UAAL to the pension plan. 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 and NOL to ACOE, ACERA approved an approach outlined in our March 2, 2020 letter to determine ACOE's proportionate share of the OPEB SRBR NOL by using ACOE's required contributions determined in our December 31, 2018 valuation in the amount of $78,000 based on an April 1, 2020 payment date plus the amortization of the remaining balance of the original $750,000 lump sum amount (an amount of $60,832 which represents the additional UAAL contribution ACOE would have been required to pay if they did not make the additional lump sum contribution in 2019). Note that in 2020, the actual contribution made by ACOE is $72,051 which is $5,949 less than the required contribution. Since $5,949 is part of the required contributions, we included this amount for purposes of determining ACOE's proportionate share of the OPEB SRBR NOL.

Schedule of OPEB Amounts by Employer as of December 31, 2020

Employer	Net OPEB Liability	Deferred Outflows of Resources: Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on OPEB 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	$5,156,701	$0	$0	$62,650,700	$1,206,194	$63,856,894
Health System	1,171,817	0	0	14,236,848	487,409	14,724,257
Superior Court	267,081	0	0	3,244,865	$520,054	3,764,919
First 5	28,692	0	0	348,589	82,806	431,395
Housing Authority	28,570	0	0	347,109	$36,785	383,894
LARPD	32,184	0	0	391,019	111,646	502,665
ACOE	2,997	0	0	36,411	57,241	93,652
Total for all Employers	**$6,688,042**	**$0**	**$0**	**$81,255,541**	**$2,502,135**	**$83,757,676**

Schedule of OPEB Amounts by Employer as of December 31, 2020

Employer	Deferred Inflows of Resources					OPEB Expense		
	Differences Between Expected and Actual Experience	Net Difference Between Actual and Projected Investment Earnings on OPEB 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 OPEB Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer OPEB Expense
Alameda County	$49,931,864	$145,945,820	$4,849,048	$269,207	$200,995,939	-$11,797,830	$135,447	-$11,662,383
Health System	11,346,599	33,164,967	1,101,905	1,901,560	47,515,031	-2,680,959	-194,808	-2,875,767
Superior Court	2,586,118	7,558,964	251,146	203,737	10,599,965	-611,045	39,192	-571,853
First 5	277,822	812,045	26,980	1,470	1,118,317	-65,642	16,289	-49,353
Housing Authority	276,642	808,595	26,866	71,474	1,183,577	-65,365	-11,061	-76,426
LARPD	311,637	910,884	30,264	49,812	1,302,597	-73,635	4,357	-69,278
ACOE	29,019	84,820	2,818	4,875	121,532	-6,857	10,584	3,727
Total for all Employers	**$64,759,701**	**$189,286,095**	**$6,289,027**	**$2,502,135**	**$262,836,958**	**-$15,301,333**	**$0**	**-$15,301,333**

Schedule of OPEB Amounts by Employer as of December 31, 2020

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., 2020) 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, 2019 (the beginning of the measurement period ending December 31, 2020) and is 6.53 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

4. There was an decrease in the total employer OPEB expense from $18.2 million calculated last year to (negative) -$15.2 million calculated this year. The primary cause of the decrease was due to the favorable return on the market value of assets for the year ended December 31, 2020 which lowered the OPEB expense by $38.7 million.

[1] The remaining service lives of all employees of 6.53 years used here for GASB 75 is different from the 5.26 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.

ACERA

MEMORANDUM TO THE AUDIT COMMITTEE

DATE: April 15, 2021

TO: Members of the Audit Committee

FROM: Harsh Jadhav, Chief of Internal Audit

SUBJECT: Progress on the 2021 Internal Audit Program

Executive Summary

The Audit Committee meeting in April 2021 will feature the progress on the 2021 Internal Audit Program. The Internal Audit Department's objective is to perform three internal audits, one policy audit, complete the Alameda Health System (AHS) employer audit, and implement three special projects. In addition, the audit staff will provide fraud training to ACERA staff. In Q2 2021, we will start the review of the proposed internal controls related to key workflows used in the upgraded pension administration system. The Internal Audit Department is also working closely with PRISM to conduct a Cybersecurity and Data Security Self-Assessment.

2021 Audit Schedule

Internal Audit Plan (2021)	Service Line	Assigned	Status	Q1	Q2	Q3	Q4
Felony Forfeiture Policy Audit	Policy Audit	Caxton	Not Started				
Pension Benefits Calculation Audit	Internal Audit	Caxton	In Progress				
Cash Management (Positive Pay) Audit	Internal Audit	Caxton	Not Started				
Prevent Member Identity Theft Audit	Internal Audit	Lyndon	Not Started				
Employer Audit - Alameda Health	Employer Audit	Caxton/Harsh	In Progress				
2021 Annual Risk Assessment	Administration	Harsh	Completed				
2022 Annual Risk Assessment	Administration	Harsh	Not Started				
Fraud Hotline Management	Administration	Lyndon	Continuous				
Fraud Training	Administration	Lyndon/Caxton	Not Started				
Internal Controls Review - PAS Project	Special Project	Harsh/Team	Not Started				
Operations Manual Update	Special Project	Lyndon	Completed				
Cybersecurity and Data Security Self-Assessment	Special Project	Vijay/Harsh	In Progress				

2021 Audit Program

Policy Audits

Audit - Felony Forfeiture Policy

The purpose of the audit is to review compliance with the ACERA Felony Forfeiture Policy. This policy provides guidance on how participating employers handle felony forfeitures of retirement benefits. The Public Employees' Pension Reform Act of 2013 ("PEPRA") added two forfeiture statutes applicable to all public employees convicted of felonies on or after January 1, 2013. The audit also examines participating employer compliance by selecting employers to determine if the employer implemented effective procedures to report felony forfeitures to ACERA.

Internal Audits and Reviews

Review – Prevent Member Identity Theft
The purpose of this audit is to strengthen internal fraud controls to prevent third parties from making unauthorized changes to member accounts and banking information. The examination will review the business process and explore technology solutions to enhance identity management controls.

Audit – Cash Management (Positive Pay)
The purpose of the audit is to identify internal control weaknesses and recommend strategies to improve cash management. The Positive Pay process is a bank control that systematically compares checks presented for payment to the issued-check files to detect serial numbers and dollar amounts that don't match. This audit will review the payee validation process to ensure ACERA has implemented the necessary internal controls to safeguard against fraud.

Audit – Pension Benefits Calculation Audit
The purpose of the audit is to sample retired members to verify if the final pensionable salary calculation was accurate. The amount of final pensionable salary depends on member type and membership tier. It is a function of the highest salary earned over the qualifying period (i.e., the highest salary earned over 36 months for Tier II General Members).

Employer Audits

Audit – PEPRA Employer Audit of Alameda Health System
The employer audit of the Alameda Health System will assess the participating employer's compliance with state laws, rules, regulations, and administrative policies regarding the enrollment of members, reporting of member data, and the reporting and remittance of employer contributions in accordance with the Public Employees' Pension Reform Act of 2013.

Special Projects

Special Project – Pension Administration System Internal Controls Review
The objective of this special project will be for the Internal Audit Department to support the business with technical guidance on risk and internal controls as the leadership plans to roll out the Pension Gold (Version 3) to the organization.

Special Project - Cybersecurity and Data Security Self-Assessment
The objective of this special project will be to work with the PRISM Department to determine if adequate firewall, access controls, employee training, and processes for incident response, business recovery, and threat analysis are in place to ensure sensitive organizational data and member data are protected and secure.

Special Project - Operation Manual Update
The Internal Audit Department is updating the existing department operations manual to reflect changes in the department operations, internal audit best practices, and audit procedures. The objective is to ensure documentation exists for business continuity and as training for new internal audit employees.

Summary

We are focused on meeting the 2021 Audit Program objectives. I want to acknowledge my staff for their strong effort and dedication to delivering quality work. The Internal Audit Staff will continue to do a great job partnering with management, servicing the Board of Retirement, and protecting our members.

Alameda County Employees' Retirement Association
Internal Audit Department

Internal Audit Department
2021 Internal Audit Plan

April 15, 2021

2021 Internal Audit Plan

Internal Audit Plan (2021)	Service Line	Assigned	Status	Q1	Q2	Q3	Q4
Felony Forfeiture Policy Audit	Policy Audit	Caxton	Not Started				
Pension Benefits Calculation Audit	Internal Audit	Caxton	In Progress				
Cash Management (Positive Pay) Audit	Internal Audit	Caxton	Not Started				
Prevent Member Identity Theft Audit	Internal Audit	Lyndon	Not Started				
Employer Audit - Alameda Health	Employer Audit	Caxton/Harsh	In Progress				
2021 Annual Risk Assessment	Administration	Harsh	Completed				
2022 Annual Risk Assessment	Administration	Harsh	Not Started				
Fraud Hotline Management	Administration	Lyndon	Continuous				
Fraud Training	Administration	Lyndon/Caxton	Not Started				
Internal Controls Review - PAS Project	Special Project	Harsh/Team	Not Started				
Operations Manual Update	Special Project	Lyndon	Completed				
Cybersecurity and Data Security Self-Assessment	Special Project	Vijay/Harsh	In Progress				

9,000 Employees Targeted in Phishing Attack Against California Agency –SC Media, March 24, 2021, by Steve Zurier

On March 18th, 2021, the California State Controller's Office (SCO) Unclaimed Property Division was victimized by a phishing incident in which an employee clicked on a link that provided access to the employee's account for some 24 hours. During that time, the attackers allegedly stole social security numbers and sensitive files on thousands of state workers and then sent targeted phishing messages to at least 9,000 other state workers and their contacts, according to a report by *KrebsOnSecurity*.

Best Practice Recommendations:

Pass

– "This event supports the idea that all organizations need to educate and phish their employees regularly to ensure they are aware of and know how to spot and report socially-engineered emails," said James McQuiggan, security awareness advocate at KnowBe4. **(ACERA has already implemented this)**

Pass

– "Organizations want to ensure they have an email feature that alerts users of external emails. A banner or bolded text at the top of the email informing the employee that they are reading an external email tells them to pay extra attention, as it could be malicious with attachments or phishing links." **(ACERA has already implemented this, too)**

Questions