



**Alameda County Employees' Retirement Association
BOARD OF RETIREMENT**

**AUDIT COMMITTEE/BOARD MEETING
NOTICE and AGENDA**

THIS MEETING WILL BE CONDUCTED VIA TELECONFERENCE PER GOV'T CODE § 54953(e)

ACERA MISSION:

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

Thursday, June 16, 2022
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 Webinar ID: 879 6337 8479 Passcode: 699406 For help joining a Zoom meeting, see: https://support.zoom.us/hc/en-us/articles/201362193 Call-in Number: 1 669 900 6833	HENRY LEVY, CHAIR	TREASURER
	LIZ KOPPENHAVER, VICE-CHAIR	ELECTED RETIRED
	DALE AMARAL	ELECTED SAFETY
	KEITH CARSON	APPOINTED
	TARRELL GAMBLE	APPOINTED

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

NOTICE and AGENDA, Page 2 of 2 - Thursday, June 16, 2022

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. Review and possible motion to adopt the audited Schedule of Employer Allocations (Pension and OPEB) and the audited Schedule of Pension and OPEB Amounts by Employer based on addenda to the Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74, valuations as of December 31, 2021**

- Lisa Johnson
- Audrey Elbert

Recommendation:

Staff recommends the Audit Committee recommend that the Board of Retirement adopt the audited Schedule of Employer Allocations and Schedule of Pension Amounts by Employer and the audited Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer Based on the Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74, as of December 31, 2021.

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 GASB Statement No. 68 and GASB Statement No. 75 Valuations and Employer Schedules as of December 31, 2021 measurement date and June 30, 2022 reporting date**

- Lisa Johnson
- Andy Yeung
- Eva Yum

Internal Audit

- 1. Progress report on the Internal Audit Plan** - Harsh Jadhav
- 2. Review complete audits** - Harsh Jadhav

Trustee Comment

Future Discussion Items

Establishment of Next Meeting Date

October 20, 2022, at 12:30 pm



MEMORANDUM TO THE AUDIT COMMITTEE

DATE: June 16, 2022
TO: Members of the Audit Committee
FROM: Erica Haywood, Fiscal Services Officer *EK*
SUBJECT: **Audited Schedule of Employer Allocations and Schedule of Pension Amounts by Employer and Audited Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer Based on the Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74, as of December 31, 2021**

Executive Summary

Presented for review and possible adoption are the 2021 audited schedules of employer allocations (pension and OPEB) and schedules of pension and OPEB amounts by employer.

During the June 16, 2022, Audit Committee meeting, staff will present the audited set of schedules prepared by ACERA staff using Segal's addenda to the GASB Statement No. 67 and GASB Statement No. 74 Actuarial Valuations as of December 31, 2021. These worksheets include the audited Schedule of Employer Allocations and Schedule of Pension Amounts by Employer and the audited Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer, with related notes.

In combination with the GASB Statement No. 68 and GASB Statement No. 75 actuarial valuations, the audited allocation schedules contain all the required pension and OPEB liability reporting information employers need to complete their June 30, 2022, fiscal year-end reporting requirements. Once the Board has adopted the audited set of schedules, staff will distribute the audited schedules and the GASB Statement No. 68 and Statement No. 75 actuarial valuations to ACERA's participating employers.

Recommendations

1. Staff recommends the Audit Committee recommend that the Board of Retirement adopt the audited Schedule of Employer Allocations and Schedule of Pension Amounts by Employer and the audited Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer Based on the Governmental Accounting Standards Board (GASB) Statement No. 67 and Statement No. 74, as of December 31, 2021.

Attachments:

1. Schedule of Employer Allocations and Schedule of Pension Amounts by Employer as of 12/31/21
2. Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer as of 12/31/21

**Alameda County Employees' Retirement Association
(ACERA)**

**Schedule of Employer Allocations and Schedule of Pension Amounts
by Employer**

As of and for the Year Ended December 31, 2021

Alameda County Employees' Retirement Association (ACERA)
Schedule of Employer Allocations and Schedule of Pension Amounts by Employer
As of and for the Year Ended December 31, 2021

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Independent Auditor's Report

Board of Retirement
Alameda County Employees' Retirement Association
Oakland, California

Opinion

We have audited the accompanying schedule of employer allocations of the Alameda County Employees' Retirement Association (ACERA); and the specified column totals included in the schedule of pension amounts by employer of ACERA (the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources and total employer pension expense), as of and for the year ended December 31, 2021; and the related notes (collectively the schedules).

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense for ACERA, as of and for the year ended December 31, 2021, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of ACERA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

In preparing the schedules, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about ACERA's ability to continue as a going concern for twelve months beyond the date of the schedules, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the schedule of employer allocations and the specified column totals included in the schedule of pension amounts are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the schedules.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatements of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of ACERA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about ACERA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Report on the Audit of the Financial Statements

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, the financial statements of ACERA, as of and for the year ended December 31, 2021, and our report thereon, dated June __, 2022, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of ACERA management, the Board of Retirement, ACERA employers and their auditors, and is not intended to be and should not be used by anyone other than these specified parties.

Oakland, California
June __, 2022

Alameda County Employees' Retirement Association (ACERA)
Schedule of Employer Allocations as of and for the Year Ended December 31, 2021
Actual Employer Contributions by Employer and Membership Class

Employer	Excluding ACOE and LARPD		ACOE Members Only		LARPD Members Only		All General Members Combined	
	General Contributions	Contribution Percentage ¹	General Contributions	Contribution Percentage	General Contributions	Contribution Percentage	General Contributions	General NPL Percentage
Alameda County	\$ 139,147,479	65.206%	\$ -	0.000%	\$ -	0.000%	\$ 139,147,479	61.251%
Alameda Health System	59,357,100	27.815%	-	0.000%	-	0.000%	59,357,100	26.128%
Superior Court	12,018,963	5.632%	-	0.000%	-	0.000%	12,018,963	5.290%
First 5	1,477,674	0.692%	-	0.000%	-	0.000%	1,477,674	0.650%
Housing Authority	1,398,011	0.655%	-	0.000%	-	0.000%	1,398,011	0.615%
LARPD	-	0.000%	-	0.000%	13,692,329	100.000%	13,692,329	6.027%
ACOE	-	0.000%	89,000	100.000%	-	0.000%	89,000	0.039%
Total for All Employers	\$ 213,399,227	100.000%	\$ 89,000	100.000%	\$ 13,692,329	100.000%	\$ 227,180,556	100.000%

Employer	Safety Members		General and Safety Total		Adjusted Total ^{2,3,4}	
	Safety Contributions	Contribution Percentage	Total Contributions	Contribution Percentage	Adjusted Total Contributions	Adjusted Contribution Percentage ¹
Alameda County	\$ 889,395,284	100.000%	\$ 1,028,542,763	92.117%	\$ 256,292,148 ²	77.170%
Alameda Health System	-	0.000%	59,357,100	5.316%	59,357,100	17.872%
Superior Court	-	0.000%	12,018,963	1.076%	12,018,963	3.619%
First 5	-	0.000%	1,477,674	0.132%	1,477,674	0.445%
Housing Authority	-	0.000%	1,398,011	0.125%	1,398,011	0.421%
LARPD	-	0.000%	13,692,329	1.226%	1,422,470 ³	0.428%
ACOE	-	0.000%	89,000	0.008%	148,854 ⁴	0.045%
Total for All Employers	\$ 889,395,284	100.000%	\$ 1,116,575,840	100.000%	\$ 332,115,220	100.000%

¹ The unrounded percentages are used in the allocation of the NPL amongst the employers.

² This includes \$139,147,479 of County General actual employer contributions and \$117,144,669 of County Safety adjusted employer contributions used for purposes of determining the proportionate share of the non-OPEB SRBR NPL for the County. The County made voluntary County Safety contributions of \$800,000,000 on June 29, 2021 to reduce their Safety UAAL and associated contribution rates. The voluntary County Safety UAAL contributions are amortized to provide a UAAL contribution rate credit for County Safety over 13 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the non-OPEB SRBR NPL, the County Safety's proportionate share of the non-OPEB SRBR NPL is determined by using the County Safety's actual contributions (but excluding \$800 million of voluntary UAAL contributions) made in 2021 in the amount of \$89,395,284 plus the contribution credit applied in 2021 in the amount of \$27,749,385 for a total adjusted County Safety contribution of \$117,144,669.

³ LARPD made voluntary LARPD General contributions of \$12,611,250 on June 29, 2021 to reduce their General UAAL and associated contribution rates. The voluntary LARPD General UAAL contributions are amortized to provide a UAAL contribution rate credit for LARPD General over 16 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the non-OPEB SRBR NPL, LARPD's proportionate share of the non-OPEB SRBR NPL is determined by using LARPD's actual contributions (but excluding \$12,611,250 of voluntary UAAL contributions) made in 2021 in the amount of \$1,081,079 plus the contribution credit applied in 2021 in the amount of \$341,391 for a total adjusted LARPD contribution of \$1,422,470.

⁴ 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 to determine ACOE's proportionate share of the non-OPEB SRBR NPL by using ACOE's required contributions determined in the December 31, 2019 valuation in the amount of \$89,000 based on an April 1, 2021 payment date plus the amortization of the remaining balance of the original \$750,000 lump sum amount (an amount of \$59,854 which represents the additional UAAL Contribution ACOE would have been required to pay had they not made the additional lump sum contribution in 2019).

See accompanying notes, pages 6 - 9.

Alameda County Employees' Retirement Association (ACERA)
Schedule of Employer Allocations as of and for the Year Ended December 31, 2021
Allocation of Net Pension Liability (NPL)

Employer	General NPL, Excluding ACOE and LARPD (Excl. non-OPEB SRBR NPL)		ACOE Members Only (Excl. non-OPEB SRBR NPL)		LARPD Members Only (Excl. non-OPEB SRBR NPL)		All General Members Combined (Excl. non-OPEB SRBR NPL)	
	NPL	Percentage ¹	NPL	Percentage ¹	NPL	Percentage ¹	NPL	General NPL Percentage
Alameda County	\$ 574,956,681	65.206%	\$ -	0.000%	\$ -	0.000%	\$ 574,956,681	65.532%
Alameda Health System	245,263,238	27.815%	-	0.000%	-	0.000%	245,263,238	27.954%
Superior Court	49,662,295	5.632%	-	0.000%	-	0.000%	49,662,295	5.660%
First 5	6,105,742	0.692%	-	0.000%	-	0.000%	6,105,742	0.696%
Housing Authority	5,776,574	0.655%	-	0.000%	-	0.000%	5,776,574	0.658%
LARPD	-	0.000%	-	0.000%	(5,048,710)	100.000%	(5,048,710)	-0.575%
ACOE	-	0.000%	657,384	100.000%	-	0.000%	657,384	0.075%
Total for All Employers	\$ 881,764,530	100.000%	\$ 657,384	100.000%	\$ (5,048,710)	100.000%	\$ 877,373,204	100.000%

Employer	Safety Members (Excl. non-OPEB SRBR NPL)		General and Safety Total (Excl. non-OPEB SRBR NPL)		General and Safety Non-OPEB SRBR NPL		Total	
	NPL	Percentage ¹	NPL	Percentage	NPL	Percentage ²	NPL	Percentage
Alameda County	\$ (123,928,424)	100.000%	\$ 451,028,257	59.863%	\$ 29,974,467	77.170%	\$ 481,002,724	60.710%
Alameda Health System	-	0.000%	245,263,238	32.552%	6,942,068	17.872%	252,205,306	31.833%
Superior Court	-	0.000%	49,662,295	6.591%	1,405,669	3.619%	51,067,964	6.446%
First 5	-	0.000%	6,105,742	0.810%	172,820	0.445%	6,278,562	0.792%
Housing Authority	-	0.000%	5,776,574	0.767%	163,503	0.421%	5,940,077	0.750%
LARPD	-	0.000%	(5,048,710)	-0.670%	166,364	0.428%	(4,882,346)	-0.616%
ACOE	-	0.000%	657,384	0.087%	17,409	0.045%	674,793	0.085%
Total for All Employers	\$ (123,928,424)	100.000%	\$ 753,444,780	100.000%	\$ 38,842,300	100.000%	\$ 792,287,080	100.000%

¹ Allocation 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 \$148,854 in 2021 had they not made the additional contribution in 2019 to partially pay off their UAAL. Following the approach approved by ACERA for ACOE, there is an adjustment to reflect the total annual contribution County Safety would have been required to make of \$117,144,669 in 2021 had they not made the voluntary County Safety UAAL contribution in 2021. There is also an adjustment to reflect the total annual contribution LARPD would have been required to make of \$1,422,470 in 2021 had they not made the voluntary LARPD General UAAL contribution in 2021.

See accompanying notes, pages 6 - 9.

Alameda County Employees' Retirement Association (ACERA)
Schedule of Pension Amounts by Employer
As of and for the Year Ended December 31, 2021

Schedule of Employer Allocations	Deferred Outflows of Resources						Deferred Inflows of Resources					Pension Expense		
	Net Pension Liability	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Proportionate Share of Contributions	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and
Alameda County	\$ 481,002,724	\$ 28,649,387	\$ -	\$ 180,070,279	\$ 8,697,305	\$ 217,416,971	\$ 32,303,031	\$ 477,916,604	\$ 50,464,747	\$ 814,486	\$ 561,498,868	\$ 104,443,433	\$ 1,500,136	\$ 105,943,569
Alameda Health System	252,205,306	6,443,361	-	46,336,602	7,298,377	60,078,340	6,550,616	129,131,936	11,687,604	12,822,543	160,192,699	23,932,083	(527,504)	23,404,579
Superior Court	51,067,964	1,304,688	-	9,382,499	4,307,021	14,994,208	1,326,406	26,147,369	2,366,572	7,348,006	37,188,353	4,845,906	(1,082,657)	3,763,249
First 5 of Alameda County	6,278,562	160,405	-	1,153,533	930,231	2,244,169	163,075	3,214,694	290,959	3,261	3,671,989	595,780	325,520	921,300
Housing Authority	5,940,077	151,758	-	1,091,345	326,368	1,569,471	154,283	3,041,386	275,273	551,220	4,022,162	563,664	(163,751)	399,913
LARPD	(4,882,346)	1,982,931	-	1,127,513	44,796	3,155,240	2,636,768	3,954,693	280,089	69,851	6,941,401	533,460	(33,386)	500,074
ACOE	674,793	464,980	-	31,333	17,861	514,174	4,090	257,996	29,310	12,592	303,988	302,361	(18,358)	284,003
Total for All Employers	\$ 792,287,080	\$ 39,157,510	\$ -	\$ 239,193,104	\$ 21,621,959	\$ 299,972,573	\$ 43,138,269	\$ 643,664,678	\$ 65,394,554	\$ 21,621,959	\$ 773,819,460	\$ 135,216,687	\$ -	\$ 135,216,687

See accompanying notes, pages 6 - 9.

Alameda County Employees' Retirement Association (ACERA)

Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer As of and for the Year Ended December 31, 2021

1. PLAN DESCRIPTION

ACERA is a cost-sharing multiple-employer defined benefit pension plan. The pension plan provides basic lifetime retirement, disability, and death benefits to members who meet the minimum age and length-of-service requirements. ACERA meets member and beneficiary obligations through member contributions, participating employer contributions, and investment income.

2. SUMMARY OF SIGNIFICANT ACCOUNTING AND REPORTING POLICIES

Basis of Accounting

ACERA follows generally accepted accounting principles and reporting guidelines set forth by the Governmental Accounting Standards Board (GASB). The schedule of employer allocations and schedule of pension amounts by employer are prepared on the accrual basis of accounting. Employer and employee contributions are recognized when due, pursuant to formal commitments as well as statutory or contractual requirements.

Estimates

The preparation of the schedule of employer allocations and schedule of pension amounts by employer in accordance with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

Contributions

Member and employer contribution rates are based on recommendations made by an independent actuary and adopted by the Board of Retirement. These rates are based on membership type (General and Safety) and tier (Tiers 1, 2, 3, and 4). Active members are required by statute to contribute toward pension plan benefits. Participating employers are required by statute to contribute the necessary amounts to fund estimated benefits not otherwise funded by member contributions or expected investment earnings.

3. ACTUARIAL METHODS AND ASSUMPTIONS

An actuarial valuation is performed for the pension plan on an annual basis. ACERA retains an independent actuarial firm to conduct the actuarial valuations and to establish the contribution rate requirements for the plan.

Actuarial Methods and Assumptions Used to Determine Total Pension Liability

The components of the collective net pension liability of the plan as of December 31, 2021 and December 31, 2020 are as follows:

<i>(Dollars in thousands)</i>	<u>12/31/2021</u>	<u>12/31/2020</u>
Total Pension Liability	\$11,009,509	\$10,639,300
Less: Plan Fiduciary Net Position	<u>10,217,222</u>	<u>8,444,884</u>
Net Pension Liability	<u>\$ 792,287</u>	<u>\$ 2,194,416</u>

The Net Pension Liability (NPL) was measured as of December 31, 2021 and 2020. Plan Fiduciary Net Position (FNP) was valued as of the measurement date while the Total Pension Liability (TPL) was determined by rolling forward the TPL from actuarial valuations as of December 31, 2020 and 2019, respectively.

Alameda County Employees' Retirement Association (ACERA)

Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer As of and for the Year Ended December 31, 2021

The TPL and plan FNP include liabilities and assets for non-health postemployment benefits (non-OPEB). The assets for non-OPEB are held in the SRBR to pay non-vested Supplemental COLA and the retired death benefit. The TPL as of December 31, 2021 has been adjusted to include an additional \$116.9 million, calculated by rolling forward the total unlimited non-OPEB Actuarial Accrued Liability (AAL) as of December 31, 2020. The TPL as of December 31, 2020 has been adjusted to include an additional \$116.4 million, calculated by rolling forward the total unlimited non-OPEB AAL as of December 31, 2019.

The plan FNP as of December 31, 2021 was also adjusted to include \$78.1 million (\$51.9 million set aside in the SRBR reserve to pay non-OPEB benefits and adding \$26.2 million to reflect the proportionate share of one-half of the net deferred investment gain that is commensurate with the size of the non-OPEB reserve). The plan FNP as of December 31, 2020 was also adjusted to include \$55.5 million (\$41.7 million set aside in the SRBR reserve to pay non-OPEB benefits and adding \$13.8 million to reflect the proportionate share of deferred investment gain that is commensurate with the size of the non-OPEB reserve).

The liability and assets associated with the OPEB component of the SRBR have been excluded from the total pension liability and the fiduciary net position reported above.

The TPLs as of December 31, 2021 and 2020 were determined by actuarial valuations as of December 31, 2020 and 2019, respectively. The actuarial assumptions used to develop the December 31, 2021 and 2020 TPLs are the same assumptions used in the December 31, 2021 and 2020 funding valuations, respectively. These assumptions were applied to all periods included in the measurement:

Measurement Date	December 31, 2021	December 31, 2020
Investment Rate of Return	7.00% , net of pension plan investment expense, including inflation	7.00% , net of pension plan investment expense, including inflation
Inflation Rate	2.75%	2.75%
Real Across-the-Board Salary Increases	0.50%	0.50%
Projected Salary Increases	General: 8.35% to 3.65% and Safety: 11.25% to 4.05%, vary by service, including inflation	General: 8.35% to 3.65% and Safety: 11.25% to 4.05%, 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
Date of Experience Study	December 1, 2016 through November 30, 2019	December 1, 2016 through November 30, 2019

Changes to NPL Allocation Methodology

The Board of Retirement adopted the Declining Employer Payroll Policy on October 18, 2018 and determined that the Policy applied to the Alameda County Office of Education (ACOE) and the Livermore Area Recreation and Park District (LARPD) Tier-1 members who were included as part of the General (non-LARPD Tier-3 and Tier-4) membership class in prior funding and GASB valuations. As a result, an asset share calculated in accordance with the Policy was allocated to each of these two employers as of December 31, 2017. In addition, because the allocated assets were less than the actuarial accrued liability (AAL) attributable to these Tier-1 members for each of the two employers, there was also an implicit allocation of unfunded actuarial accrued liability (UAAL).

Alameda County Employees' Retirement Association (ACERA)

Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer As of and for the Year Ended December 31, 2021

Pursuant to the Declining Employer Payroll Policy, (1) changes in assets and AAL for ACOE have been tracked separately since January 1, 2018, and effective with the December 31, 2018 valuation, ACOE is in its own separate membership class and ACOE's NPL was determined separately; (2) changes in assets and AAL for LARPD Tier-1 members have been tracked separately since January 1, 2018, and effective with the December 31, 2018 valuation, the assets and AAL for LARPD Tier-1 members were combined with the assets and AAL for LARPD Tier-3 and Tier-4, forming a new combined membership class that includes LARPD members from all tiers.

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. The non-OPEB SRBR NPL is allocated to the employers in proportion to the total employer contributions made by those employers to the Pension Plan. In order to have a more level allocation of the NPL to ACOE, ACERA approved an approach which determines ACOE's proportionate share of the non-OPEB SRBR NPL by using ACOE's required contributions determined in the 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).

The County made voluntary contributions of \$800.0 million on June 29, 2021 to reduce their Safety UAAL and associated contribution rates. Also on June 29, 2021, LARPD made voluntary contributions of \$12.6 million to reduce their General UAAL and associated contribution rates. The \$800.0 million County Safety UAAL contributions are amortized over 13 years effective with FY 21-22 to provide a UAAL contribution rate credit for County Safety members. The \$12.6 million LARPD General UAAL contributions are amortized over 16 years effective with FY 21-22 to provide a UAAL contribution rate credit for LARPD General members. Similar to the approach approved for ACOE, County Safety and LARPD's proportionate shares of the non-OPEB SRBR NPL are determined by using the County Safety and LARPD's required contributions, respectively, as if they had not made the voluntary UAAL contributions in 2021.

Discount Rate

The discount rate used to measure the TPL as of December 31, 2021 and 2020 was 7.00%. In order to reflect the provisions of Article 5.5 of the Statute, future allocations of 50% excess earnings to the Supplemental Retiree Benefits Reserve (SRBR) have been treated as an additional outflow against the plan's FNP in the Governmental Accounting Standards Board (GASB) crossover test. It is estimated that the additional outflow would average approximately 0.65% of assets over time, based on the results of the actuary's stochastic modeling of the 50% allocation of future excess earnings to the SRBR.

The projection of cash flows used to determine the discount rates assumes plan member contributions will be made at the current member contribution rates, and that employer contributions will be made at rates equal to the actuarially determined contribution rates¹ 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 cost 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 FNP was projected to be available to make all projected future benefit payments for the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of December 31, 2021 and 2020.

Alameda County Employees' Retirement Association (ACERA)
Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer
As of and for the Year Ended December 31, 2021

4. ADDITIONAL FINANCIAL AND ACTUARIAL INFORMATION

Additional financial and actuarial information supporting the schedule of employer allocations and schedule of pension amounts by employer can be obtained from ACERA's Annual Comprehensive Financial Report for the year ended December 31, 2021, and ACERA's GASB 68 Actuarial Valuation Based on December 31, 2021 Measurement Date for Employer Reporting as of June 30, 2022.

¹ *For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.*

**Alameda County Employees' Retirement Association
(ACERA)**

**Schedule of Employer Allocations and Schedule of OPEB Amounts by
Employer**

As of and for the Year Ended December 31, 2021

Alameda County Employees' Retirement Association (ACERA)
Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer
As of and for the Year Ended December 31, 2021

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Independent Auditor's Report

Board of Retirement
Alameda County Employees' Retirement Association
Oakland, California

Opinion

We have audited the accompanying schedule of employer allocations of the Alameda County Employees' Retirement Association (ACERA); and the specified column totals included in the schedule of OPEB amounts by employer of ACERA (the columns titled net OPEB liability (asset), total deferred outflows of resources, total deferred inflows of resources and total employer OPEB expense (income)), as of and for the year ended December 31, 2021; and the related notes (collectively the schedules).

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net OPEB liability (asset), total deferred outflows of resources, total deferred inflows of resources, and total employer OPEB expense (income) for ACERA, as of and for the year ended December 31, 2021, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of ACERA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

In preparing the schedules, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about ACERA's ability to continue as a going concern for twelve months beyond the date of the schedules, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the schedule of employer allocations and the specified column totals included in the schedule of OPEB amounts are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the schedules.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatements of the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of ACERA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the schedule of employer allocations and specified column totals included in the schedule of OPEB amounts by employer.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about ACERA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Report on the Audit of the Financial Statements

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, the financial statements of ACERA, as of and for the year ended December 31, 2021, and our report thereon, dated June __, 2022, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of ACERA management, the Board of Retirement, ACERA employers and their auditors, and is not intended to be and should not be used by anyone other than these specified parties.

Oakland, California
June __, 2022

Alameda County Employees' Retirement Association (ACERA)
Schedule of Employer Allocations as of and for the Year Ended December 31, 2021
Actual Employer Contributions by Employer and Net OPEB Liability (Asset) (NOL/NOA) Allocation

<u>Employer</u>	<u>Actual Employer Contributions by Employer for the Year Ended December 31, 2021¹</u>		<u>Allocation of Net OPEB Liability (Asset) as of December 31, 2021</u>	
	<u>Contributions</u>	<u>Contribution Percentage *</u>	<u>NOL (NOA)</u>	<u>Contribution Percentage</u>
Alameda County ²	\$ 256,292,148	77.170%	\$ (324,547,291)	77.170%
Alameda Health System	59,357,100	17.872%	(75,164,948)	17.872%
Superior Court	12,018,963	3.619%	(15,219,826)	3.619%
First 5	1,477,674	0.445%	(1,871,205)	0.445%
Housing Authority	1,398,011	0.421%	(1,770,326)	0.421%
LARPD ³	1,422,470	0.428%	(1,801,299)	0.428%
Office of Education (ACOE) ⁴	148,854	0.045%	(188,496)	0.045%
Total for All Employers	\$ 332,115,220	100.000%	\$ (420,563,391)	100.000%

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

Notes:

1. Allocated based on the actual January 1, 2021 through December 31, 2021 employer contributions in total as provided by ACERA, with an adjustment to reflect the total annual UAAL contribution ACOE would have been required to make of \$148,854 in 2021 had they not made the additional contribution in 2019 to partially pay off their UAAL for the pension plan. There is an adjustment to reflect the total annual contribution County Safety would have been required to make of \$117,144,669 in 2021 had they not made the voluntary County Safety UAAL contribution in 2021 to the pension plan. There is also an adjustment to reflect the total annual contribution LARPD would have been required to make of \$1,422,470 in 2021 had they not made the voluntary LARPD General UAAL contribution in 2021 to the pension plan.
2. This includes \$139,147,479 of County General actual employer contributions and \$117,144,669 of County Safety adjusted employer contributions used for purposes of determining the proportionate share of the OPEB SRBR NOL(NO A) for the County. The County made voluntary County Safety contributions of \$800,000,000 on June 29, 2021 to reduce their Safety UAAL for the pension plan and associated contribution rates. The voluntary County Safety UAAL contributions are amortized to provide a UAAL contribution rate credit for County Safety over 13 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the OPEB SRBR NOL(NO A), County Safety's proportionate share of the OPEB SRBR NOL(NO A) is determined by using the County Safety's actual contributions (but excluding \$800 million of voluntary UAAL contributions) made in 2021 in the amount of \$89,395,284 plus the contribution credit applied in 2021 in the amount of \$27,749,385 for a total adjusted County Safety contribution of \$117,144,669.
3. LARPD made voluntary LARPD General contributions of \$12,611,250 on June 29, 2021 to reduce their General UAAL for the pension plan and associated contribution rates. The voluntary LARPD General UAAL contributions are amortized to provide a UAAL contribution rate credit for LARPD General over 16 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the OPEB SRBR NOL(NO A), LARPD's proportionate share of the OPEB SRBR NOL(NO A) is determined by using LARPD's actual contributions (but excluding \$12,611,250 of voluntary UAAL contributions) made in 2021 in the amount of \$1,081,079 plus the contribution credit applied in 2021 in the amount of \$341,391 for a total adjusted LARPD contribution of \$1,422,470.
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(NO A) to ACOE, ACERA approved an approach to determine ACOE's proportionate share of the OPEB SRBR NOL(NO A) by using ACOE's required contributions determined in the December 31, 2019 valuation in the amount of \$89,000 based on an April 1, 2021 payment date plus the amortization of the remaining balance of the original \$750,000 lump sum amount (an amount of \$59,854 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).

See accompanying notes, pages 5 - 7.

Alameda County Employees' Retirement Association (ACERA)
Schedule of OPEB Amounts by Employer
As of and for the Year Ended December 31, 2021

Schedule of Employer Allocations	Deferred Outflows of Resources						Deferred Inflows of Resources					OPEB Expense		
	Net OPEB Liability (Asset)	Differences Between Actual and Expected Experience	Net Difference Between Projected and Actual Investment Earnings on OPEB Plan Investments	Changes of Assumptions	Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Actual and Projected Investment Earnings on OPEB Plan Investments	Changes of Assumptions	Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan OPEB Expense (Income)	Proportionate Share of Contributions	Total Employer OPEB Expense (Income)
Alameda County	\$ (324,547,291)	\$ -	\$ -	\$ 47,611,249	\$ 1,074,053	\$ 48,685,302	\$ 53,424,715	\$ 349,163,091	\$ 26,947,006	\$ 168,756	\$ 429,703,568	\$ (85,979,721)	\$ 154,949	\$ (85,824,772)
Alameda Health System	(75,164,948)	-	-	11,026,735	861,301	11,888,036	12,373,131	80,865,952	6,240,910	1,531,205	101,011,198	(19,912,849)	(91,530)	(20,004,379)
Superior Court	(15,219,826)	-	-	2,232,756	415,395	2,648,151	2,505,382	16,374,198	1,263,695	723,880	20,867,155	(4,032,067)	(70,885)	(4,102,952)
First 5 of Alameda County	(1,871,205)	-	-	274,507	90,869	365,376	308,025	2,013,129	155,365	922	2,477,441	(495,722)	20,970	(474,752)
Housing Authority	(1,770,326)	-	-	259,708	30,133	289,841	291,419	1,904,599	146,989	63,518	2,406,525	(468,997)	(12,895)	(481,892)
LARPD	(1,801,299)	-	-	264,251	90,047	354,298	296,517	1,937,921	149,561	115,314	2,499,313	(477,204)	(11,196)	(488,400)
ACOE	(188,496)	-	-	27,653	44,852	72,505	31,029	202,793	15,651	3,055	252,528	(49,936)	10,587	(39,349)
Total for All Employers	\$ (420,563,391)	\$ -	\$ -	\$ 61,696,859	\$ 2,606,650	\$ 64,303,509	\$ 69,230,218	\$ 452,461,683	\$ 34,919,177	\$ 2,606,650	\$ 559,217,728	\$ (111,416,496)	\$ -	\$ (111,416,496)

See accompanying notes, pages 5 - 7.

Alameda County Employees' Retirement Association (ACERA)
Notes to the Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer
As of and for the Year Ended December 31, 2021

1. PLAN DESCRIPTION

ACERA administers a non-vested medical benefits program for eligible retired members. The benefits include medical, dental and vision subsidies as well as Medicare Part B premium reimbursement. The subsidies are paid from the 401(h) account in the form of a monthly medical allowance. The maximum levels of the monthly medical allowances are reviewed annually by the Board of Retirement.

Retired members with a minimum of ten years of service credit or those retired with service connected disability are eligible to receive monthly medical, dental and vision allowance benefits if they enroll in one of the ACERA sponsored medical plans or Medicare exchange. Retired members eligible for the monthly medical allowance benefit may also be reimbursed for the lowest standard Medicare Part B premium with proof of enrollment in Medicare Part B.

2. SUMMARY OF SIGNIFICANT ACCOUNTING AND REPORTING POLICIES

Basis of Accounting

ACERA follows generally accepted accounting principles and reporting guidelines set forth by the Governmental Accounting Standards Board (GASB). The schedule of employer allocations and schedule of OPEB amounts by employer are prepared on the accrual basis of accounting. Employer and employee contributions are recognized when due, pursuant to formal commitments as well as statutory or contractual requirements.

Estimates

The preparation of the schedule of employer allocations and schedule of OPEB amounts by employer in accordance with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

Contributions

There are no legal or contractual contribution requirements for the OPEB plan. Funding for the OPEB plan relies entirely on semi-annual earnings allocations from the total fund to the Supplemental Retiree Benefits Reserve (SRBR) as mandated by Article 5.5 of the 1937 Act. The OPEB assets are held in the 401(h) account and the SRBR to pay the non-vested benefits.

3. ACTUARIAL METHODS AND ASSUMPTIONS

An actuarial valuation is performed for the OPEB plan on an annual basis. ACERA retains an independent actuarial firm to conduct the actuarial valuations.

Actuarial Methods and Assumptions Used to Determine Total OPEB Liability

The components of the collective Net OPEB Liability (Asset) of the plan as of December 31, 2021 and December 31, 2020 are as follows:

<i>(Dollars in thousands)</i>	<u>12/31/2021</u>	<u>12/31/2020</u>
Total OPEB Liability	\$ 1,203,078	\$ 1,191,571
Less: Plan Fiduciary Net Position	<u>1,623,641</u>	<u>1,184,883</u>
Net OPEB Liability (Asset)	<u>\$ (420,563)</u>	<u>\$ 6,688</u>

The TOL as of December 31, 2021 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, 2020. The TOL has been adjusted to reflect the health care trend assumptions recommended for the sufficiency study for the SRBR as of December 31, 2021.

Alameda County Employees' Retirement Association (ACERA)
Notes to the Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer
As of and for the Year Ended December 31, 2021

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. The TOL has been adjusted to reflect the health care trend assumptions used for the sufficiency study for the SRBR as of December 2020.

The OPEB plan's FNP as of December 31, 2021 of \$1,623.6 million was determined by taking the \$1,088.4 million in the SRBR and 401(h) account set aside by the Retirement Board to pay OPEB benefits as of December 31, 2021, less the estimated implicit subsidy SRBR transfer to the Employers' Advance Reserve of \$5.7 million, 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 of \$540.9 million. The OPEB plan's FNP as of December 31, 2020 of \$1,184.9 million was determined by taking the \$899.1 million in the SRBR and 401(h) account set aside by the Retirement Board to pay OPEB benefits as of December 31, 2020, less the estimated implicit subsidy SRBR transfer to the Employers' Advance Reserve of \$7.5 million, 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 of \$293.3 million, after first replenishing the Contingency Reserve from \$69.0 to \$98.7 million (1% of total assets).

These assumptions were applied to all periods included in the measurement:

Valuation Date	December 31, 2021	December 31, 2020
Investment Rate of Return	7.00%, net of pension plan investment expense, including inflation.	7.00%, net of pension plan investment expense, including inflation.
Inflation	2.75%	2.75%
Health Care Premium Trend Rates	Used to project health care costs after calendar year 2022:	Used to project health care costs after calendar year 2021:
Non-Medicare Medical Plan	Graded from 7.50% in 2022 to ultimate 4.50% over 12 years.	Graded from 6.75% in 2021 to ultimate 4.50% over 9 years.
Medicare Medical Plan	Graded from 6.50% in 2022 to ultimate 4.50% over 8 years.	Graded from 6.25% in 2021 to ultimate 4.50% over 7 years.
Dental	0.00% for the first year to reflect a three-year rate guarantee (premiums fixed at 2021 level for 2022 and 2023) and 4.00% thereafter.	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 three years to reflect a five-year rate guarantee (premiums fixed at 2021 level for 2022, 2023, 2024 and 2025) and 4.00% thereafter.	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 B¹	4.50%	4.50%
Other Assumptions	Same as those proposed in the experience study for the period December 1, 2016 through November 30, 2019.	Same as those proposed in the experience study for the period December 1, 2016 through November 30, 2019.

¹ The actual calendar year 2021 trend of 14.55% reflecting the standard 2022 calendar year premium of \$170.10 per month was reflected in the current year GASB 74 valuation with December 31, 2021 measurement date.

Discount Rate

The discount rate used to measure the TOL as of December 31, 2021 and 2020 was 7.00%. In order to reflect the provisions of Article 5.5 of the Statute, future allocation of excess earnings to the SRBR have been treated as an additional outflow against the pension plan's FNP. Based on the results of the actuary's stochastic modeling of 50% allocation of future excess earnings to the SRBR would have the same impact as an outflow that would average approximately 0.65% of pension plan assets over time. This approximated outflow along with the additional future employer contributions that would result from those future allocations of excess earnings to the SRBR were incorporated into the GASB 67 crossover test for

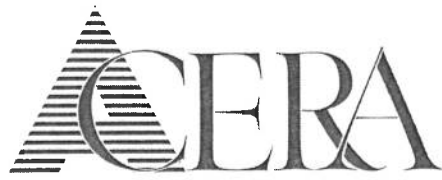
Alameda County Employees' Retirement Association (ACERA)
Notes to the Schedule of Employer Allocations and Schedule of OPEB Amounts by Employer
As of and for the Year Ended December 31, 2021

the pension plan. The crossover test for the OPEB SRBR includes projected benefits which equal to the OPEB assets currently available in the SRBR as the remaining OPEB SRBR benefits would be paid from future excess earnings.

The projection of cash flows used to determine the discount rates 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 benefit payments for the current plan members. Therefore the long-term expected rate of return on the OPEB plan investments was applied to all periods of projected benefit payments to determine the Total OPEB Liability as of December 31, 2021 and December 31, 2020.

4. ADDITIONAL FINANCIAL AND ACTUARIAL INFORMATION

Additional financial and actuarial information supporting the schedule of employer allocations and schedule of OPEB amounts by employer can be obtained from ACERA's Annual Comprehensive Financial Report for the year ended December 31, 2021, and ACERA's GASB 75 Actuarial Valuation Based on December 31, 2021 Measurement Date for Employer Reporting as of June 30, 2022.



MEMORANDUM TO THE AUDIT COMMITTEE

DATE: June 16, 2022
TO: Members of the Audit Committee
FROM: Erica Haywood, Fiscal Services Officer *EH*
SUBJECT: **Governmental Accounting Standards Board (GASB) Statement No. 68 and GASB Statement No. 75 Actuarial Valuations Based on December 31, 2021, Measurement Date for Employer Reporting as of June 30, 2022**

Executive Summary

Provided for review and discussion are the GASB Statement No. 68 and Statement No. 75 Actuarial Valuations (GASB 68/75 actuarial valuations) based on December 31, 2021, Measurement Date for Employer Reporting as of June 30, 2022. The purpose of the GASB 68/75 actuarial valuations is to provide information required for employer pension and OPEB liability reporting, respectively.

During the June 16, 2022, Audit Committee meeting, Andy Yeung and Eva Yum, Segal, will present and discuss the GASB 68/75 actuarial valuations, which include a complete set of schedules, note disclosures, and required supplementary information necessary for the participating employers to complete their June 30, 2022, fiscal year-end financial reporting requirements.

Once the Board adopts the audited set of schedules, staff will distribute the schedules and the GASB 68/75 actuarial valuations to ACERA's participating employers accompanied by the following statement:

“To complete financial statements, each participating employer will need to record its own proportionate share of the collective pension and OPEB amounts for all benefits provided through the Alameda County Employees' Retirement Association's (ACERA) cost-sharing, multi-employer, defined-benefit pension plan. ACERA has provided the *Schedule of Employer Allocations (Pension and OPEB)* and the *Schedules of Pension and OPEB Amounts by Employer*, with related notes, prepared by ACERA using Segal's Addenda to the Governmental Accounting Standards Board Statement No. 67 and Statement No. 74 Valuations as of December 31, 2021, and audited by independent auditor Williams, Adley & Company-CA, LLP, in accordance with the AICPA recommendation. The Governmental Accounting Standards Board Statement No. 68 and Statement No. 75 Actuarial Valuations Based on December 31, 2021, Measurement Date for Employer Reporting as of June 30, 2022, were prepared in accordance with the methodology set forth in the Governmental Accounting Standards Board Statement No. 68 and Statement No. 75 and are based on data maintained and provided by ACERA. Please note that ACERA is not responsible for employers' compliance with the requirements of Governmental Accounting Standards Board Statement No. 68 and Statement No. 75. Employers are solely responsible for accurately presenting financial statements within the requirements of the Governmental Accounting Standards Board Statement No. 68 and Statement No. 75.”

Attachments:

1. GASB 68 Actuarial Valuation based on 12/31/21 Measurement Date for Employer Reporting as of 6/30/22
2. GASB 75 Actuarial Valuation based on 12/31/21 Measurement Date for Employer Reporting as of 6/30/22

Alameda County Employees' Retirement Association (ACERA)

Governmental Accounting Standards Board Statement 68 (GASB 68) Actuarial Valuation

Actuarial Valuation Based on December 31, 2021
Measurement Date for Employer Reporting
as of June 30, 2022



This report has been prepared at the request of the Board of Retirement to assist the sponsors of the Fund in preparing their financial report for their liabilities associated with the ACERA pension plan. 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.

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Segal



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June 8, 2022

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 68 (GASB 68) Actuarial Valuation based on a December 31, 2021 measurement date for employer reporting as of June 30, 2022. It contains various information that will need to be disclosed in order for ACERA employers to comply with GASB 68.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the sponsors in preparing their financial report for their liabilities associated with the ACERA pension plan. 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; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); 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 the Retirement Association.

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

Sincerely,

Segal

Handwritten signature of Andy Yeung in blue ink.

Andy Yeung, ASA, MAAA, FCA, EA
Vice President and Actuary

Handwritten signature of Eva Yum in blue ink.

Eva Yum, FSA, MAAA, EA
Vice President and 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 68 (GASB 68) for employer reporting as of June 30, 2022. The results used in preparing this GASB 68 report are comparable to those used in preparing the Governmental Accounting Standards Board (GASB) Statement 67 report for the plan based on a reporting date and a measurement date as of December 31, 2021. This valuation is based on:

- The benefit provisions of ACERA, 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, 2020, provided by ACERA;¹
- The assets of the Plan as of December 31, 2021, provided by ACERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the December 31, 2021 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the December 31, 2021 valuation.

General observations on GASB 68 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 determined on generally 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.

¹ It should be noted that we have also reflected the actual COLA granted by the Board on the April 1 immediately after the December 31, 2020 actuarial valuation that is used to roll forward the liabilities for nonactive members to determine the December 31, 2021 Net Pension Liability.

Section 1: Actuarial Valuation Summary

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) calculated on a market value basis.

Highlights of the valuation

1. For this report, the reporting dates for the employers are June 30, 2022 and June 30, 2021. The NPLs measured as of December 31, 2021 and 2020 have been determined by rolling forward the TPL as of December 31, 2020 and 2019, respectively. The Plan's Fiduciary Net Positions were valued as of the measurement dates. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected. Consistent with the provisions of GASB 68, the assets and liabilities measured as of December 31, 2021 and 2020 are not adjusted or rolled forward to the June 30, 2022 and June 30, 2021 reporting dates, respectively.
2. As we disclosed in our December 31, 2021 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 test¹ (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.

3. The County made voluntary County Safety contributions of \$800 million on around June 29, 2021 to reduce their Safety UAAL and associated contribution rates. The Livermore Area Recreation and Park District (LARPD) also made voluntary LARPD General contributions of \$12.611 million on around June 29, 2021 to reduce LARPD General UAAL and associated contribution

¹ 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.

Section 1: Actuarial Valuation Summary

rates. The County Safety and LARPD General actuarially determined contributions were determined to reflect the amortization of these voluntary contributions.

4. The NPL measured as of December 31, 2021 was determined by rolling forward the TPL for the funded benefits as of December 31, 2020. Similar to last year, we have included in the TPL as of December 31, 2021 the non-OPEB unlimited Actuarial Accrued Liability (AAL) of \$116.9 million, which was calculated by rolling forward the total unlimited non-OPEB AAL as of December 31, 2020.
5. We have also continued the practice of adjusting the Plan's Fiduciary Net Position as of December 31, 2021 to include the \$51.9 million set aside by the Retirement Board in the SRBR reserve to pay non-vested Supplemental COLA and retired member death benefits¹ as of December 31, 2021. It should be noted that as of December 31, 2021, the deferred investment gain for the entire Plan was \$1,133 million. Consequently, we have added to the Plan's Fiduciary Net Position the proportionate share of one-half of the net deferred investment gain that is commensurate with the size of the non-OPEB SRBR reserve, or \$26.2 million. The net effect of the adjustments to the Plan's Fiduciary Net Position as of December 31, 2021 for non-OPEB SRBR benefits was an addition of \$78.1 million.

Note that the proportionate share of one-half of the net deferred market gain as of December 31, 2021 for the Pension Plan was equal to \$565.9 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.

6. The \$38.8 million difference between the \$116.9 million added to the TPL and the net \$78.1 million added to the Plan's Fiduciary Net Position as of December 31, 2021 represents the NPL attributable to non-OPEB SRBR benefits.
7. 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 as if they had not made 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 valuation.
8. The County made voluntary County Safety contributions of \$800 million on around June 29, 2021 to reduce their Safety UAAL and associated contribution rates. The Livermore Area Recreation and Park District (LARPD) also made voluntary LARPD General contributions of \$12.611 million on around June 29, 2021 to reduce their General UAAL and associated contribution rates. We have amortized the voluntary County Safety UAAL contributions over 13 years effective FY 21-22 to provide a UAAL contribution rate credit for County Safety and the voluntary LARPD General UAAL contributions over 16 years effective FY 21-22 to provide a UAAL contribution rate credit for LARPD General. Similar to the approach approved by ACERA as described in the

¹ 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.

Section 1: Actuarial Valuation Summary

previous item for determining ACOE's proportionate share of the non-OPEB SRBR NPL, we have determined the County Safety and LARPD's proportionate share of the non-OPEB SRBR NPL by using the County Safety and LARPD's required contributions, respectively, as if they had not made the voluntary UAAL contributions in 2021.

9. The NPL decreased from \$2,194 million as of December 31, 2020 to \$792 million as of December 31, 2021 primarily as a result of \$813 million in total additional voluntary County Safety and LARPD General contributions made by the two employers to reduce their UAAL and associated contribution rates, and favorable investment return during calendar year 2021 of about \$502 million¹ more than assumed. Changes in these values during the last two fiscal years ending December 31, 2020 and December 31, 2021 can be found in *Section 2, Schedule of Changes in Net Pension Liability* on page 19.
10. There was a decrease in the total employer pension expense from \$271.8 million calculated last year to \$135.2 million calculated this year. The primary cause of the decrease is the recognition of a credit of \$100.4 million in this year's pension expense that is associated with investment income on the Plan's Fiduciary Net Position that is above the assumed earnings (at 7.00%) for the year ending December 31, 2021 for a gain of \$502 million.
11. The discount rate used to measure the TPL and NPL as of December 31, 2021 and December 31, 2020 was 7.00%, following the same assumptions used by ACERA in the pension funding valuations as of December 31, 2021 and December 31, 2020, respectively. The detailed calculations used in the derivation of the discount rate of 7.00% as of December 31, 2021 can be found in *Section 3, Appendix A*. Various other information that is required to be disclosed can be found throughout *Section 2*.
12. It is important to note that this actuarial valuation is based on plan assets as of December 31, 2021. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. The plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after December 31, 2021. 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.
13. 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. ACERA 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." We understand that as part of the trial court's proceeding, the Board made changes to how much vacation cashout and sell back can be included in "compensation earnable" and eliminated "straddling" for members with retirement date after June 17, 2021. It should be noted that any impact of these changes to the additional cashout assumptions will be reviewed based on actual experience in the next experience study.

¹ 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 7.00%) for the year ending December 31, 2021. It also includes the change in the Contingency Reserve from last year to this year.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

Reporting Date for Employer under GASB 68 ¹		June 30, 2022	June 30, 2021
Measurement Date for Employer under GASB 68		December 31, 2021	December 31, 2020
Disclosure elements for fiscal year ending December 31:	• Service cost ²	\$235,098,619	\$221,824,117
	• Total Pension Liability	11,009,508,484	10,639,300,371
	• Plan's Fiduciary Net Position ³	10,217,221,404	8,444,884,496
	• Net Pension Liability	792,287,080	2,194,415,875
	• Pension expense	135,216,687	271,828,215
Schedule of contributions for plan year ending December 31:	• Actuarially determined contributions	\$303,964,590	\$309,758,947
	• Actual contributions ⁴	1,116,575,840	309,752,998
	• Contribution deficiency / (excess)	(812,611,250)	5,949
Demographic data for plan year ending December 31:⁵	• Number of retired members and beneficiaries	10,536	10,292
	• Number of inactive vested members ⁶	3,265	3,028
	• Number of active members	11,326	11,322
Key assumptions as of December 31:	• Investment rate of return	7.00%	7.00%
	• Inflation rate	2.75%	2.75%
	• Projected salary increases ⁷	General: 8.35% to 3.65% Safety: 11.25% to 4.05%	General: 8.35% to 3.65% Safety: 11.25% to 4.05%

¹ The reporting date and measurement date for the plan are December 31, 2021 and December 31, 2020, respectively.

² The Service Cost is based on the previous year's valuation, meaning the December 31, 2021 and December 31, 2020 measurement date values are based on the valuations as of December 31, 2020 and December 31, 2019, respectively. The December 31, 2021 measurement date service cost has been calculated using the assumptions shown in the December 31, 2020 measurement date column, and the December 31, 2020 measurement date service cost has been calculated using the following assumptions as of December 31, 2019:

Investment rate of return	7.25%	Inflation rate	3.00%
Projected salary increases*	General: 8.30% to 3.90% and Safety: 11.30% to 4.30%		

* Includes inflation of 3.00% plus real across-the-board salary increases of 0.50% plus merit and promotion increases.

³ For the December 31, 2021 measurement date, the Plan's Fiduciary Net Position amount shown (\$10,217,221,404) includes the net fair value of assets (\$11,840,862,896) less OPEB-related SRBR assets (\$1,623,641,492). The OPEB-related SRBR assets include \$1,073,475,020 in the SRBR-OPEB reserve (after reducing the reserve by the \$5,652,613 SRBR implicit subsidy transfer), and \$9,229,285 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, if any) commensurate with the size of the OPEB to total SRBR and 401(h) reserve to valuation and 401(h) reserves (\$540,937,187). For the December 31, 2020 measurement date, 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).

⁴ 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, 2021, the actual employer contributions are greater than the actuarially determined contributions by \$813 million due to voluntary County Safety and LARPD General contributions made by the two employers to reduce their UAAL and associated contribution rates.

⁵ Data as of December 31, 2020 is used in the measurement of the TPL as of December 31, 2021.

⁶ Includes members who left their contributions on deposit even though they have less than five years of service.

⁷ Includes inflation at 2.75% plus real across-the-board salary increase of 0.50% plus merit and promotion increases.

Section 1: Actuarial Valuation Summary

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	This valuation is based on the fair value of assets as of the measurement date, as provided by ACERA.
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 of 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 the sponsors of the Fund 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 68 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), 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, 2021, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	10,536
Inactive vested members entitled to but not yet receiving benefits ¹	3,265
Active members	<u>11,326</u>
Total	25,127

Note: Data as of December 31, 2021 is not used in the measurement of the TPL as of December 31, 2021.

¹ Includes terminated members due a refund of member contributions.

Section 2: GASB 68 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, 2021 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:

Section 2: GASB 68 Information

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 68 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, 2021 for 2021 (based on the December 31, 2019 valuation for the second half of 2020/2021 and on the December 31, 2020 valuation for the first half of 2021/2022) was 26.34% 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, 2021 for 2021 (based on the December 31, 2019 valuation for the second half of 2020/2021 and on the December 31, 2020 valuation for the first half of 2021/2022) was 9.63% of compensation.

Section 2: GASB 68 Information

Net Pension Liability

Reporting Date for Employer under GASB 68	June 30, 2022	June 30, 2021
Measurement Date for Employer under GASB 68	December 31, 2021	December 31, 2020
Components of the Net Pension Liability		
Total Pension Liability	\$11,009,508,484	\$10,639,300,371
Plan's Fiduciary Net Position	(10,217,221,404)	(8,444,884,496)
Net Pension Liability	\$792,287,080	\$2,194,415,875
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	92.80%	79.37%

The Net Pension Liability (NPL) was measured as of December 31, 2021 and 2020. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date and the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of December 31, 2020 and 2019, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of December 31, 2021 and 2020 are the same as those used in the ACERA actuarial valuations as of December 31, 2021 and 2020, respectively.

Actuarial assumptions. The TPLs as of December 31, 2021 and 2020 that were measured by actuarial valuations as of December 31, 2020 and 2019, respectively, used the same actuarial assumptions as the December 31, 2021 and 2020 funding valuations, respectively. The actuarial assumptions used in the December 31, 2021 and 2020 funding valuations were based on the results of an experience study for the period December 1, 2016 through November 30, 2019. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

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

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Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments¹ 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, 2021 actuarial valuation. This information will be subject to change every three years based on the results of an actuarial experience study.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
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%

¹ Note that the investment return assumption for funding purposes was developed net of both investment and administrative expenses; however, the same investment return assumption was used for financial reporting purposes, and it was considered gross of administrative expenses for financial reporting purposes. (This resulted in an increase in the margin for adverse deviation when using that investment return assumption for financial reporting.)

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Discount rate. The discount rate used to measure the Total Pension Liability (TPL) was 7.00% as of December 31, 2021 and December 31, 2020. 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 rates¹ 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, 2021 and December 31, 2020.

¹ For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

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Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL as of December 31, 2021, calculated using the discount rate of 7.00%, as well as what the NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Alameda County	\$1,547,041,746	\$481,002,724	\$(396,003,376) ¹
Health System	530,043,001	252,205,306	22,552,861
Superior Court	107,326,119	51,067,964	4,566,631
First 5	13,195,233	6,278,562	561,445
Housing Authority	12,483,864	5,940,077	531,177
LARPD	2,687,276	(4,882,346)	(11,066,426)
ACOE	<u>1,059,882</u>	<u>674,793</u>	<u>339,869</u>
Total for all Employers	\$2,213,837,121	\$792,287,080	\$(378,517,819)

¹ Using a discount rate of 8.00%, the County is overfunded because the Safety membership group is overfunded, but not the General membership group.

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Schedule of changes in Net Pension Liability — Last two plan years

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Total Pension Liability		
• Service cost ¹	\$235,098,619	\$221,824,117
• Interest	741,738,512	718,926,969
• Change of benefit terms	0	0
• Differences between expected and actual experience	(50,359,948)	33,007,683
• Changes of assumptions	0	236,513,333
• Benefit payments, including refunds of member contributions	<u>(556,269,070)</u>	<u>(530,763,337)</u>
Net change in Total Pension Liability	\$370,208,113	\$679,508,765
Total Pension Liability – beginning	<u>10,639,300,371</u>	<u>9,959,791,606</u>
Total Pension Liability – ending	<u>\$11,009,508,484</u>	<u>\$10,639,300,371</u>
Plan’s Fiduciary Net Position		
• Contributions – employer ²	\$1,116,575,840	\$309,752,998
• Contributions – member	111,091,264	106,104,226
• Net investment income	1,115,978,652	755,501,876
• Benefit payments, including refunds of member contributions	(556,269,070)	(530,763,337)
• Administrative expense	(15,039,778)	(14,809,913)
• Other	<u>0</u>	<u>0</u>
Net change in Plan’s Fiduciary Net Position	\$1,772,336,908	\$625,785,850
Plan’s Fiduciary Net Position³ – beginning	<u>8,444,884,496</u>	<u>7,819,098,646</u>
Plan’s Fiduciary Net Position³ – ending	<u>\$10,217,221,404</u>	<u>\$8,444,884,496</u>
Net Pension Liability – ending	<u>\$792,287,080</u>	<u>\$2,194,415,875</u>
Plan’s Fiduciary Net Position as a percentage of the Total Pension Liability	92.80%	79.37%
Covered payroll⁴	\$1,153,918,121	\$1,111,848,569
Plan Net Pension Liability as percentage of covered payroll	68.66%	197.37%

¹ The Service Cost is based on the previous year’s valuation, meaning the December 31, 2021 and December 31, 2020 measurement date values are based on the valuations as of December 31, 2020 and December 31, 2019, respectively. See page 8 for the assumptions used in calculating the Service Cost.

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). Also, the County and LARPD made voluntary contributions of \$800 million (County Safety) and \$12.611 million (LARPD General), respectively, in 2021.

³ See footnote (3) on page 8 for a discussion on the development of the December 31, 2021 measurement date “Plan’s Fiduciary Net Position – beginning” amount of \$8,444,884,496 and the December 31, 2021 measurement date “Plan’s Fiduciary Net Position – ending” amount of \$10,217,221,404.

⁴ Covered payroll represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based.

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Schedule of employer contributions — Last ten plan 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
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%
2021	303,964,590	1,116,575,840	(812,611,250) ⁴	1,153,918,121	96.76% ⁵

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.

⁴ Voluntary County Safety contributions of \$800,000,000 and LARPD General contributions of \$12,611,250 to reduce their UAAL contribution rates.

⁵ Contributions as a percentage of covered payroll is 26.34% if excluding the voluntary County Safety and LARPD General contributions.

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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 2021 (or the second half of fiscal year 2020/2021) are calculated based on the December 31, 2019 valuation. Actuarially determined contribution rates for the last six months of calendar year 2021 (or the first half of fiscal year 2021/2022) are calculated based on the December 31, 2020 valuation. Moreover, actuarially determined contribution rates after reflecting the voluntary County Safety and LARPD General contributions are provided in our June 4, 2021 letter for County Safety and in our June 10, 2021 letter for LARPD General.
Actuarial Cost Method:	Entry Age Actuarial Cost Method
Amortization Method	Level percent of payroll (3.25% payroll growth assumed in the December 31, 2020 valuation and 3.50% payroll growth assumed in the December 31, 2019 valuation)
Remaining Amortization Period:	<p><u>December 31, 2019 valuation</u></p> <p>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.</p> <p><u>December 31, 2020 valuation</u></p> <p>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 12 years remaining as of December 31, 2020). 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. The voluntary County Safety contributions are amortized over a 13-year period effective July 1, 2021. The voluntary LARPD General contributions are amortized over a 16-year period effective July 1, 2021.</p>
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.

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Actuarial assumptions		
Valuation Date	December 31, 2019 Valuation	December 31, 2020 Valuation
Investment rate of return:	7.25%, net of pension plan administrative and investment expense, including inflation	7.00%, net of pension plan administrative and investment expense, including inflation
Inflation rate:	3.00%	2.75%
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: 8.35% to 3.65% and Safety: 11.25% to 4.05%, 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	2.75% 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, 2019 funding actuarial valuation	Same as those used in the December 31, 2020 funding actuarial valuation

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Determination of proportionate share

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 LARP		General ACOE Members Only		General LARP 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%
LARP	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%
LARP	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.

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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)		General ACOE NPL Only (Excl. non-OPEB SRBR NPL)		General LARPD NPL Only (Excl. non-OPEB SRBR NPL)		Total General NPL (Excl. non-OPEB SRBR NPL)	
	NPL	Percentage ¹	NPL	Percentage ¹	NPL	Percentage ¹	NPL	Percentage
Alameda County	\$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)		General & Safety Total (Excl. non-OPEB SRBR NPL)		General & Safety Non-OPEB SRBR NPL		Total	
	NPL	Percentage ¹	NPL	Percentage	NPL	Percentage ²	NPL	Percentage
Alameda County	\$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.

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Notes regarding determination of proportionate share as of December 31, 2020 measurement date

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.

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Schedule of Employer Allocations as of December 31, 2021

Actual Employer Contributions by Employer and Membership Class January 1, 2021 to December 31, 2021

Employer	General Members, Excluding ACOE and LARP		General ACOE Members Only		General LARP Members Only		All General Members Combined	
	Contributions	Percentage ¹	Contributions	Percentage	Contributions	Percentage	Contributions	Percentage
Alameda County	\$139,147,479	65.206%	\$0	0.000%	\$0	0.000%	\$139,147,479	61.251%
Health System	59,357,100	27.815%	0	0.000%	0	0.000%	59,357,100	26.128%
Superior Court	12,018,963	5.632%	0	0.000%	0	0.000%	12,018,963	5.290%
First 5	1,477,674	0.692%	0	0.000%	0	0.000%	1,477,674	0.650%
Housing Authority	1,398,011	0.655%	0	0.000%	0	0.000%	1,398,011	0.615%
LARP	0	0.000%	0	0.000%	13,692,329	100.000%	13,692,329	6.027%
ACOE	0	0.000%	89,000	100.000%	0	0.000%	89,000	0.039%
Total for all Employers	\$213,399,227	100.000%	\$89,000	100.000%	\$13,692,329	100.000%	\$227,180,556	100.000%

¹ The unrounded percentages are used in the allocation of the NPL amongst the employers.

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Schedule of Employer Allocations as of December 31, 2021

Actual Employer Contributions by Employer and Membership Class January 1, 2021 to December 31, 2021

Employer	Safety Members		Total		Adjusted Total ^{1,2,3}	
	Contributions	Percentage	Contributions	Percentage	Contributions	Percentage ⁴
Alameda County	\$889,395,284	100.000%	\$1,028,542,763	92.117%	\$256,292,148 ¹	77.170%
Health System	0	0.000%	59,357,100	5.316%	59,357,100	17.872%
Superior Court	0	0.000%	12,018,963	1.076%	12,018,963	3.619%
First 5	0	0.000%	1,477,674	0.132%	1,477,674	0.445%
Housing Authority	0	0.000%	1,398,011	0.125%	1,398,011	0.421%
LARPD	0	0.000%	13,692,329	1.226%	1,422,470 ²	0.428%
ACOE	0	0.000%	89,000	0.008%	148,854 ³	0.045%
Total for all Employers	\$889,395,284	100.000%	\$1,116,575,840	100.000%	\$332,115,220	100.000%

- ¹ This includes \$139,147,479 of County General actual employer contributions and \$117,144,669 of County Safety adjusted employer contributions used for purposes of determining the proportionate share of the non-OPEB SRBR NPL for the County. The County made voluntary County Safety contributions of \$800,000,000 on around June 29, 2021 to reduce their Safety UAAL and associated contribution rates. We have amortized the voluntary County Safety UAAL contributions to provide a UAAL contribution rate credit for County Safety over 13 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the non-OPEB SRBR NPL, we determined the County Safety's proportionate share of the non-OPEB SRBR NPL by using the County Safety's actual contributions (but excluding \$800 million of voluntary UAAL contributions) made in 2021 in the amount of \$89,395,284 plus the contribution credit applied in 2021 in the amount of \$27,749,385 for a total adjusted County Safety contribution of \$117,144,669.
- ² LARPD made voluntary LARPD General contributions of \$12,611,250 on around June 29, 2021 to reduce their General UAAL and associated contribution rates. We have amortized the voluntary LARPD General UAAL contributions to provide a UAAL contribution rate credit for LARPD General over 16 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the non-OPEB SRBR NPL, we determined LARPD's proportionate share of the non-OPEB SRBR NPL by using LARPD's actual contributions (but excluding \$12,611,250 of voluntary UAAL contributions) made in 2021 in the amount of \$1,081,079 plus the contribution credit applied in 2021 in the amount of \$341,391 for a total adjusted LARPD contribution of \$1,422,470.
- ³ 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, 2019 valuation in the amount of \$89,000 based on an April 1, 2021 payment date plus the amortization of the remaining balance of the original \$750,000 lump sum amount (an amount of \$59,854 which represents the additional UAAL contribution ACOE would have been required to pay had they not made the additional lump sum contribution in 2019).
- ⁴ The unrounded percentages are used in the allocation of the NPL amongst the employers.

Section 2: GASB 68 Information

Schedule of Employer Allocations as of December 31, 2021

Allocation of December 31, 2021 Net Pension Liability

Employer	General NPL, Excluding ACOE and LARPD (Excl. non-OPEB SRBR NPL)		General ACOE NPL Only (Excl. non-OPEB SRBR NPL)		General LARPD NPL Only (Excl. non-OPEB SRBR NPL)		Total General NPL (Excl. non-OPEB SRBR NPL)	
	NPL	Percentage ¹	NPL	Percentage ¹	NPL	Percentage ¹	NPL	Percentage
Alameda County	\$574,956,681	65.206%	\$0	0.000%	\$0	0.000%	\$574,956,681	65.532%
Health System	245,263,238	27.815%	0	0.000%	0	0.000%	245,263,238	27.954%
Superior Court	49,662,295	5.632%	0	0.000%	0	0.000%	49,662,295	5.660%
First 5	6,105,742	0.692%	0	0.000%	0	0.000%	6,105,742	0.696%
Housing Authority	5,776,574	0.655%	0	0.000%	0	0.000%	5,776,574	0.658%
LARPD	0	0.000%	0	0.000%	(5,048,710)	100.000%	(5,048,710)	(0.575)%
ACOE	0	0.000%	657,384	100.000%	0	0.000%	657,384	0.075%
Total for all Employers	\$881,764,530	100.000%	\$657,384	100.000%	\$(5,048,710)	100.000%	\$877,373,204	100.000%

Allocation of December 31, 2021 Net Pension Liability

Employer	Safety NPL (Excl. non-OPEB SRBR NPL)		General & Safety Total (Excl. non-OPEB SRBR NPL)		General & Safety Non-OPEB SRBR NPL		Total	
	NPL	Percentage ¹	NPL	Percentage	NPL	Percentage ²	NPL	Percentage
Alameda County	\$(123,928,424)	100.000%	\$451,028,257	59.863%	\$29,974,467	77.170%	\$481,002,724	60.710%
Health System	0	0.000%	245,263,238	32.552%	6,942,068	17.872%	252,205,306	31.833%
Superior Court	0	0.000%	49,662,295	6.591%	1,405,669	3.619%	51,067,964	6.446%
First 5	0	0.000%	6,105,742	0.810%	172,820	0.445%	6,278,562	0.792%
Housing Authority	0	0.000%	5,776,574	0.767%	163,503	0.421%	5,940,077	0.750%
LARPD	0	0.000%	(5,048,710)	(0.670)%	166,364	0.428%	(4,882,346)	(0.616)%
ACOE	0	0.000%	657,384	0.087%	17,409	0.045%	674,793	0.085%
Total for all Employers	\$(123,928,424)	100.000%	\$753,444,780	100.000%	\$38,842,300	100.000%	\$792,287,080	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 \$148,854 in 2021 had they not made 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. Following this approach, there is an adjustment to reflect the total annual contribution County Safety would have been required to make of \$117,144,669 in 2021 had they not made the voluntary County Safety UAAL contribution in 2021. There is also an adjustment to reflect the total annual contribution LARPD would have been required to make of \$1,422,470 in 2021 had they not made the voluntary LARPD General UAAL contribution in 2021.

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Notes regarding determination of proportionate share as of December 31, 2021 measurement date

Based on the January 1, 2021 through December 31, 2021 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.

As of December 31, 2021, the total Plan's Fiduciary Net Position for Pension (excluding non-OPEB SRBR) is \$686.1 million **higher** than the valuation value of assets as of the same date. Out of the \$686.1 million, \$565.9 million is due to the inclusion of deferred market **gains** and \$120.2 million is due to inclusion of the Contingency Reserve in the total Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position for Pension for each membership class is obtained as follows:

- The deferred market gains and losses accumulated up to June 30, 2021 are allocated to each membership class proportionately based on the valuation value of assets for each membership class relative to the total valuation value of assets for all membership classes, both excluding the valuation value of assets for the County Safety UAAL Advance Reserve and the LARPD General UAAL Advance Reserve.¹
- The deferred market gains and losses accumulated after June 30, 2021 are allocated to each membership class proportionately based on the valuation value of asset for each membership class relative to the total valuation value of assets for all membership classes, both including the valuation value of assets for the County Safety UAAL Advance Reserve and the LARPD General UAAL Advance Reserve.
- The Contingency Reserve is allocated to each membership class proportionately based on the valuation value of asset for each membership class relative to the total valuation value of assets for all membership classes, both including the valuation value of assets for the County Safety UAAL Advance Reserve and the LARPD General UAAL Advance Reserve.

The total Plan's Fiduciary Net Position for pension as of December 31, 2021 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, if applicable) 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, if applicable) commensurate with the size of the non-OPEB to total SRBR reserves.

¹ Based on the Board's funding policy and interest crediting policy, the County Safety UAAL Advance Reserve and LARPD General Advance Reserve are subject to a separate 5-year asset smoothing schedule that excludes the allocation of any deferred investment gains or losses accumulated up to June 30, 2021 for interest crediting purposes.

Section 2: GASB 68 Information

For non-OPEB SRBR, the NPL is allocated based on the actual employer contributions in total.¹ 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 Includes an adjustment to reflect the total annual UAAL contribution ACOE would have been required to make of \$148,854 in 2021 had they not made the additional contribution to partially pay off their UAAL. This approach is outlined in our March 2, 2020 letter and is approved by ACERA. Following this approach, there is an adjustment to reflect the total annual contribution County Safety would have been required to make of \$117,144,669 in 2021 had they not made the voluntary County Safety UAAL contribution in 2021. There is also an adjustment to reflect the total annual contribution LARPD would have been required to make of \$1,422,470 in 2021 had they not made the voluntary LARPD General UAAL contribution in 2021.

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The following items are allocated based on the corresponding proportionate share within each membership class:

- a. Net Pension Liability
- b. Service cost
- c. Interest on the Total Pension Liability
- d. Current-period benefit changes
- e. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- f. Expensed portion of current-period changes of assumptions or other inputs
- g. Member contributions
- h. Projected earnings on plan investments
- i. Expensed portion of current-period differences between actual and projected earnings on plan investments
- j. Administrative expense
- k. Recognition of beginning of year deferred outflows of resources as pension expense
- l. Recognition of beginning of year deferred inflows of resources as pension expense

Section 2: GASB 68 Information

Pension expense

Total for All Employers

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$235,098,619	\$221,824,117
• Interest on the Total Pension Liability	741,738,512	718,926,969
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(9,972,267)	6,275,224
• Expensed portion of current-period changes of assumptions or other inputs	0	44,964,513
• Member contributions	(111,091,264)	(106,104,226)
• Projected earnings on plan investments	(614,114,454)	(562,182,446)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(100,372,840)	(38,663,887)
• Administrative expense	15,039,778	14,809,913
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	311,790,480	255,647,833
• Recognition of beginning of year deferred inflows of resources as pension expense	(332,899,877)	(283,669,795)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>0</u>	<u>0</u>
Pension Expense	\$135,216,687	\$271,828,215

Section 2: GASB 68 Information

Pension expense (continued)

Alameda County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$174,741,981	\$164,523,259
• Interest on the Total Pension Liability	552,831,551	535,739,051
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	81,077	1,568,554
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(7,480,608)	4,487,316
• Expensed portion of current-period changes of assumptions or other inputs	0	33,332,427
• Member contributions	(82,567,544)	(78,710,319)
• Projected earnings on plan investments	(458,384,522)	(412,635,729)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(74,975,696)	(28,493,313)
• Administrative expense	11,046,245	10,859,641
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	233,277,760	192,315,762
• Recognition of beginning of year deferred inflows of resources as pension expense	(244,045,734)	(206,690,070)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>1,419,059</u>	<u>(12,958)</u>
Pension Expense	\$105,943,569	\$216,283,621

Section 2: GASB 68 Information

Pension expense (continued)

Health System

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$47,532,536	\$44,093,982
• Interest on the Total Pension Liability	147,148,518	139,741,027
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	1,480,424	(2,443,667)
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(1,479,103)	1,355,788
• Expensed portion of current-period changes of assumptions or other inputs	0	8,942,262
• Member contributions	(22,443,518)	(21,072,616)
• Projected earnings on plan investments	(121,118,278)	(114,224,879)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(19,774,523)	(7,780,291)
• Administrative expense	3,113,741	3,016,814
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	60,314,822	47,441,395
• Recognition of beginning of year deferred inflows of resources as pension expense	(69,362,112)	(58,729,215)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(2,007,928)	275,133
Pension Expense	\$23,404,579	\$40,615,733

Section 2: GASB 68 Information

Pension expense (continued)

Superior Court

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$9,624,658	\$10,049,907
• Interest on the Total Pension Liability	29,795,469	31,849,796
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(1,587,646)	647,023
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(299,497)	309,011
• Expensed portion of current-period changes of assumptions or other inputs	0	2,038,122
• Member contributions	(4,544,491)	(4,802,874)
• Projected earnings on plan investments	(24,524,717)	(26,034,152)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(4,004,058)	(1,773,285)
• Administrative expense	630,488	687,593
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	12,212,888	10,812,850
• Recognition of beginning of year deferred inflows of resources as pension expense	(14,044,834)	(13,385,572)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>504,989</u>	<u>(163,893)</u>
Pension Expense	\$3,763,249	\$10,234,526

Section 2: GASB 68 Information

Pension expense (continued)

First 5

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$1,183,305	\$1,079,642
• Interest on the Total Pension Liability	3,663,210	3,421,561
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	67,253	117,913
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(36,821)	33,197
• Expensed portion of current-period changes of assumptions or other inputs	0	218,951
• Member contributions	(558,723)	(515,963)
• Projected earnings on plan investments	(3,015,197)	(2,796,798)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(492,280)	(190,500)
• Administrative expense	77,515	73,867
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	1,501,516	1,161,603
• Recognition of beginning of year deferred inflows of resources as pension expense	(1,726,745)	(1,437,985)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>258,267</u>	<u>163,900</u>
Pension Expense	\$921,300	\$1,329,388

Section 2: GASB 68 Information

Pension expense (continued)

Housing Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$1,119,512	\$1,075,056
• Interest on the Total Pension Liability	3,465,723	3,407,027
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(26,610)	100,112
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(34,836)	33,056
• Expensed portion of current-period changes of assumptions or other inputs	0	218,021
• Member contributions	(528,602)	(513,772)
• Projected earnings on plan investments	(2,852,644)	(2,784,918)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(465,740)	(189,692)
• Administrative expense	73,337	73,553
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	1,420,568	1,156,669
• Recognition of beginning of year deferred inflows of resources as pension expense	(1,633,654)	(1,431,878)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>(137,141)</u>	<u>(218,468)</u>
Pension Expense	\$399,913	\$924,766

Section 2: GASB 68 Information

Pension expense (continued)

LARPD

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$895,576	\$1,000,053
• Interest on the Total Pension Liability	4,520,572	4,443,764
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(14,500)	10,017
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(648,976)	43,636
• Expensed portion of current-period changes of assumptions or other inputs	0	213,402
• Member contributions	(448,386)	(488,682)
• Projected earnings on plan investments	(3,963,018)	(3,441,580)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(620,619)	(221,404)
• Administrative expense	91,645	91,219
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	2,704,023	2,418,917
• Recognition of beginning of year deferred inflows of resources as pension expense	(1,997,357)	(1,929,587)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(18,886)	(26,320)
Pension Expense	\$500,074	\$2,113,435

Section 2: GASB 68 Information

Pension expense (continued)

ACOE

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Components of Pension Expense		
• Service cost	\$1,051	\$2,218
• Interest on the Total Pension Liability	313,469	324,743
• Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	2	48
• Current-period benefit changes	0	0
• Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	7,574	13,220
• Expensed portion of current-period changes of assumptions or other inputs	0	1,328
• Member contributions	0	0
• Projected earnings on plan investments	(256,078)	(264,390)
• Expensed portion of current-period differences between actual and projected earnings on plan investments	(39,924)	(15,402)
• Administrative expense	6,807	7,226
• Other	0	0
• Recognition of beginning of year deferred outflows of resources as pension expense	358,903	340,637
• Recognition of beginning of year deferred inflows of resources as pension expense	(89,441)	(65,488)
• Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>(18,360)</u>	<u>(17,394)</u>
Pension Expense	\$284,003	\$326,746

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources

Total For All Employers

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$21,621,959	\$22,668,662
• Changes of assumptions or other inputs	239,193,104	387,601,485
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>39,157,510</u>	<u>57,035,893</u>
• Total Deferred Outflows of Resources	\$299,972,573	\$467,306,040
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$21,621,959	\$22,668,662
• Changes of assumptions or other inputs	65,394,554	94,791,810
• Net difference between projected and actual earnings on pension plan investments	643,664,678	391,562,982
• Difference between expected and actual experience in the Total Pension Liability	<u>43,138,269</u>	<u>11,359,831</u>
• Total Deferred Inflows of Resources	\$773,819,460	\$520,383,285
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$(21,109,397)
2023	\$(52,309,659)	58,035,448
2024	(227,937,984)	(117,592,877)
2025	(96,077,857)	14,267,250
2026	(97,022,774)	13,322,331
2027	(498,613)	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Alameda County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$8,697,305	\$11,520,977
• Changes of assumptions or other inputs	180,070,279	293,037,119
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>28,649,387</u>	<u>42,239,675</u>
• Total Deferred Outflows of Resources	\$217,416,971	\$346,797,771
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$814,486	\$2,547,465
• Changes of assumptions or other inputs	50,464,747	73,087,610
• Net difference between projected and actual earnings on pension plan investments	477,916,604	286,812,664
• Difference between expected and actual experience in the Total Pension Liability	<u>32,303,031</u>	<u>7,854,374</u>
• Total Deferred Inflows of Resources	\$561,498,868	\$370,302,113
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$(9,334,580)
2023	\$(36,248,792)	46,128,394
2024	(165,563,745)	(83,156,747)
2025	(69,765,034)	12,617,642
2026	(72,134,356)	10,240,949
2027	(369,970)	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Health System

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$7,298,377	\$3,818,149
• Changes of assumptions or other inputs	46,336,602	72,609,580
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>6,443,361</u>	<u>8,559,363</u>
• Total Deferred Outflows of Resources	\$60,078,340	\$84,987,092
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$12,822,543	\$17,345,961
• Changes of assumptions or other inputs	11,687,604	16,608,548
• Net difference between projected and actual earnings on pension plan investments	129,131,936	80,123,553
• Difference between expected and actual experience in the Total Pension Liability	<u>6,550,616</u>	<u>2,621,704</u>
• Total Deferred Inflows of Resources	\$160,192,699	\$116,699,766
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$(10,878,079)
2023	\$(12,937,140)	6,639,380
2024	(49,325,878)	(29,061,271)
2025	(20,173,647)	(454,844)
2026	(17,677,762)	2,042,140
2027	68	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Superior Court

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$4,307,021	\$5,881,353
• Changes of assumptions or other inputs	9,382,499	16,549,187
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>1,304,688</u>	<u>1,950,851</u>
• Total Deferred Outflows of Resources	\$14,994,208	\$24,381,391
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$7,348,006	\$1,987,380
• Changes of assumptions or other inputs	2,366,572	3,785,423
• Net difference between projected and actual earnings on pension plan investments	26,147,369	18,261,773
• Difference between expected and actual experience in the Total Pension Liability	<u>1,326,406</u>	<u>597,539</u>
• Total Deferred Inflows of Resources	\$37,188,353	\$24,632,115
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$(1,516,698)
2023	\$(2,992,937)	3,109,815
2024	(9,602,984)	(4,238,541)
2025	(4,333,836)	1,616,218
2026	(5,170,028)	778,482
2027	(94,360)	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

First 5

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$930,231	\$923,064
• Changes of assumptions or other inputs	1,153,533	1,777,847
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>160,405</u>	<u>209,576</u>
• Total Deferred Outflows of Resources	\$2,244,169	\$2,910,487
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,261	\$10,197
• Changes of assumptions or other inputs	290,959	406,661
• Net difference between projected and actual earnings on pension plan investments	3,214,694	1,961,827
• Difference between expected and actual experience in the Total Pension Liability	<u>163,075</u>	<u>64,192</u>
• Total Deferred Inflows of Resources	\$3,671,989	\$2,442,877
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$41,081
2023	\$31,930	484,836
2024	(859,347)	(375,179)
2025	(238,709)	220,659
2026	(363,211)	96,213
2027	1,517	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Housing Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$326,368	\$438,903
• Changes of assumptions or other inputs	1,091,345	1,770,295
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>151,758</u>	<u>208,686</u>
• Total Deferred Outflows of Resources	\$1,569,471	\$2,417,884
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$551,220	\$693,125
• Changes of assumptions or other inputs	275,273	404,933
• Net difference between projected and actual earnings on pension plan investments	3,041,386	1,953,493
• Difference between expected and actual experience in the Total Pension Liability	<u>154,283</u>	<u>63,919</u>
• Total Deferred Inflows of Resources	\$4,022,162	\$3,115,470
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$(353,404)
2023	\$(400,246)	130,495
2024	(1,189,554)	(671,191)
2025	(422,980)	105,202
2026	(436,838)	91,312
2027	(3,073)	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

LARPD

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$44,796	\$59,936
• Changes of assumptions or other inputs	1,127,513	1,809,278
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	<u>1,982,931</u>	<u>3,162,181</u>
• Total Deferred Outflows of Resources	\$3,155,240	\$5,031,395
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$69,851	\$45,153
• Changes of assumptions or other inputs	280,089	456,158
• Net difference between projected and actual earnings on pension plan investments	3,954,693	2,342,976
• Difference between expected and actual experience in the Total Pension Liability	<u>2,636,768</u>	<u>156,944</u>
• Total Deferred Inflows of Resources	\$6,941,401	\$3,001,231
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$681,181
2023	\$9,591	1,282,243
2024	(1,431,661)	(157,483)
2025	(1,118,889)	154,785
2026	(1,212,029)	69,438
2027	(33,173)	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

ACOE

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Deferred Outflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$17,861	\$26,280
• Changes of assumptions or other inputs	31,333	48,179
• Net difference between projected and actual earnings on pension plan investments	0	0
• Difference between expected and actual experience in the Total Pension Liability	464,980	705,561
• Total Deferred Outflows of Resources	\$514,174	\$780,020
Deferred Inflows of Resources		
• Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$12,592	\$39,381
• Changes of assumptions or other inputs	29,310	42,477
• Net difference between projected and actual earnings on pension plan investments	257,996	106,696
• Difference between expected and actual experience in the Total Pension Liability	4,090	1,159
• Total Deferred Inflows of Resources	\$303,988	\$189,713
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting Date for Employer under GASB 68 Year Ended June 30:		
2022	N/A	\$251,102
2023	\$227,935	260,285
2024	35,185	67,535
2025	(24,762)	7,588
2026	(28,550)	3,797
2027	378	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68.

Section 2: GASB 68 Information

Deferred outflows of resources and deferred inflows of resources (continued)

There are changes in each employer's proportionate share of the total NPL during the measurement period ended December 31, 2021. The net effect of the change on the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources for the current period (i.e., 2021) is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through ACERA which is 5.05 years determined as of December 31, 2020 (the beginning of the measurement period ended December 31, 2021). This is described in Paragraph 33a. of GASB 68.

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended December 31, 2021 is recognized over the same period.

The net effects of the change on the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources for prior periods 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 service lives of all employees is determined by:

- Calculating each active employees' expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability

Total for All Employers

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	100.000%	\$1,282,020,543	\$853,349,657	150.23%	81.62%
2015	100.000%	1,740,642,540	886,924,862	196.26%	77.26%
2016	100.000%	2,118,448,018	945,858,017	223.97%	73.43%
2017	100.000%	2,243,194,227	947,567,631	236.73%	73.33%
2018	100.000%	2,013,675,939	995,178,209	202.34%	77.93%
2019	100.000%	2,764,001,975	1,046,033,851	264.24%	71.01%
2020	100.000%	2,140,692,960	1,081,586,887	197.92%	78.51%
2021	100.000%	2,194,415,875	1,111,848,569	197.37%	79.37%
2022	100.000%	792,287,080	1,153,918,121	68.66%	92.80%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability (continued)

Alameda County

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	79.664%	\$1,021,302,378	\$597,886,511	170.82%	80.13%
2015	78.293%	1,362,794,384	624,890,234	218.09%	75.95%
2016	77.434%	1,640,381,401	669,324,559	245.08%	72.23%
2017	77.697%	1,742,898,513	670,675,915	259.87%	72.10%
2018	78.526%	1,581,250,705	696,359,743	227.07%	76.50%
2019	76.913%	2,125,856,592	728,698,264	291.73%	69.77%
2020	78.452%	1,679,429,417	757,563,567	221.69%	77.25%
2021	78.572%	1,724,179,473	784,654,614	219.74%	78.25%
2022	60.710%	481,002,724	816,272,092	58.93%	94.15%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability (continued)

Health System

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	15.499%	\$198,700,381	\$197,865,572	100.42%	85.92%
2015	16.779%	292,060,821	205,303,352	142.26%	81.06%
2016	17.436%	369,372,264	217,863,121	169.54%	76.89%
2017	17.285%	387,733,901	216,685,931	178.94%	76.88%
2018	16.959%	341,501,682	239,207,087	142.76%	81.93%
2019	18.147%	501,587,358	255,247,270	196.51%	74.56%
2020	16.608%	355,519,355	257,591,438	138.02%	82.22%
2021	16.248%	356,559,512	257,126,856	138.67%	82.77%
2022	31.833%	252,205,306	270,985,189	93.07%	88.38%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability (continued)

Superior Court

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	3.554%	\$45,564,584	\$45,426,844	100.30%	85.92%
2015	3.695%	64,323,516	44,783,132	143.63%	81.06%
2016	3.880%	82,205,987	45,883,436	179.16%	76.89%
2017	3.806%	85,372,076	46,866,752	182.16%	76.88%
2018	3.413%	68,718,793	46,437,348	147.98%	81.93%
2019	3.507%	96,943,208	48,293,563	200.74%	74.56%
2020	3.522%	75,388,579	52,163,782	144.52%	82.22%
2021	3.703%	81,267,099	55,376,411	146.75%	82.77%
2022	6.446%	51,067,964	52,057,810	98.10%	88.38%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability (continued)

First 5

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.321%	\$4,116,118	\$4,191,989	98.19%	85.92%
2015	0.326%	5,674,306	3,957,401	143.38%	81.06%
2016	0.349%	7,383,341	4,239,645	174.15%	76.89%
2017	0.358%	8,035,666	4,416,769	181.94%	76.88%
2018	0.334%	6,731,962	4,562,701	147.54%	81.93%
2019	0.366%	10,129,093	4,952,333	204.53%	74.56%
2020	0.368%	7,872,042	5,423,220	145.15%	82.22%
2021	0.398%	8,730,366	5,953,576	146.64%	82.77%
2022	0.792%	6,278,562	6,311,029	99.49%	88.38%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability (continued)

Housing Authority

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.423%	\$5,418,947	\$4,112,203	131.78%	85.92%
2015	0.428%	7,455,335	4,002,650	186.26%	81.06%
2016	0.455%	9,644,104	4,272,082	225.75%	76.89%
2017	0.460%	10,314,924	4,354,275	236.89%	76.88%
2018	0.409%	8,244,509	4,299,288	191.76%	81.93%
2019	0.435%	12,014,705	4,512,036	266.28%	74.56%
2020	0.370%	7,919,662	4,347,895	182.15%	82.22%
2021	0.396%	8,693,280	4,675,355	185.94%	82.77%
2022	0.750%	5,940,077	4,748,361	125.10%	88.38%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability (continued)

LARPD

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.532%	\$6,824,150	\$3,796,820	179.73%	78.70%
2015	0.471%	8,203,447	3,919,778	209.28%	76.82%
2016	0.438%	9,288,497	4,203,012	221.00%	75.39%
2017	0.385%	8,644,696	4,487,952	192.62%	77.76%
2018	0.359%	7,228,288	4,312,042	167.63%	82.99%
2019	0.572%	15,804,862	4,330,385	364.98%	72.74%
2020	0.640%	13,701,573	4,496,985	304.68%	77.82%
2021	0.644%	14,126,234	4,061,757	347.79%	78.44%
2022	(0.616)%	(4,882,346)	3,543,640	(137.78)%	107.51%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of proportionate share of the Net Pension Liability (continued)

ACOE

Reporting Date for Employer under GASB 68 as of June 30	Proportion of the Net Pension Liability	Proportionate share of Net Pension Liability	Covered payroll ¹	Proportionate share of the Net Pension Liability as a percentage of its covered payroll	Plan's Fiduciary Net Position as a percentage of the Total Pension Liability
2014	0.007%	\$93,985	\$69,718	134.81%	85.92%
2015	0.008%	130,731	68,314	191.37%	81.06%
2016	0.008%	172,424	72,162	238.94%	76.89%
2017	0.009%	194,451	80,037	242.95%	76.88%
2018	0.000%	0	0	N/A	N/A
2019	0.060%	1,666,157	0	N/A	63.63%
2020	0.040%	862,332	0	N/A	81.56%
2021	0.039%	859,911	0	N/A	81.63%
2022	0.085%	674,793	0	N/A	85.29%

¹ For reporting dates on or after June 30, 2018, covered payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll on which contributions to the pension plan are based. For reporting dates before June 30, 2018, 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.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability

Total for All Employers

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$2,194,415,875	\$2,140,692,960
• Pension Expense	135,216,687	271,828,215
• Employer Contributions	(1,116,575,840)	(309,752,998)
• New Net Deferred Inflows/Outflows	(441,879,039)	63,625,736
• Change in Allocation of Prior Deferred Inflows/Outflows	0	0
• New Net Deferred Flows Due to Change in Proportion ¹	0	0
• Recognition of Prior Deferred Inflows/Outflows	21,109,397	28,021,962
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>0</u>	<u>0</u>
Ending Net Pension Liability	\$792,287,080	\$2,194,415,875

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

Alameda County

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$1,724,179,473	\$1,679,429,417
• Pension Expense	105,943,569	216,283,621
• Employer Contributions	(1,028,542,763)	(238,881,264)
• New Net Deferred Inflows/Outflows	(330,199,242)	47,138,849
• Change in Allocation of Prior Deferred Inflows/Outflows	(55,594)	(860,452)
• New Net Deferred Flows Due to Change in Proportion ¹	328,366	6,682,036
• Recognition of Prior Deferred Inflows/Outflows	10,767,974	14,374,308
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(1,419,059)</u>	<u>12,958</u>
Ending Net Pension Liability	\$481,002,724	\$1,724,179,473

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

Health System

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$356,559,512	\$355,519,355
• Pension Expense	23,404,579	40,615,733
• Employer Contributions	(59,357,100)	(54,283,769)
• New Net Deferred Inflows/Outflows	(85,088,457)	12,748,527
• Change in Allocation of Prior Deferred Inflows/Outflows	(364,163)	1,356,999
• New Net Deferred Flows Due to Change in Proportion ¹	5,995,718	(10,410,020)
• Recognition of Prior Deferred Inflows/Outflows	9,047,289	11,287,820
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>2,007,928</u>	<u>(275,133)</u>
Ending Net Pension Liability	\$252,205,306	\$356,559,512

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

Superior Court

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$81,267,099	\$75,388,579
• Pension Expense	3,763,249	10,234,526
• Employer Contributions	(12,018,963)	(12,372,365)
• New Net Deferred Inflows/Outflows	(17,229,194)	2,905,646
• Change in Allocation of Prior Deferred Inflows/Outflows	388,785	(382,220)
• New Net Deferred Flows Due to Change in Proportion ¹	(6,429,969)	2,756,319
• Recognition of Prior Deferred Inflows/Outflows	1,831,946	2,572,721
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(504,989)</u>	<u>163,893</u>
Ending Net Pension Liability	\$51,067,964	\$81,267,099

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

First 5

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$8,730,366	\$7,872,042
• Pension Expense	921,300	1,329,388
• Employer Contributions	(1,477,674)	(1,329,139)
• New Net Deferred Inflows/Outflows	(2,118,247)	312,148
• Change in Allocation of Prior Deferred Inflows/Outflows	(16,515)	(68,863)
• New Net Deferred Flows Due to Change in Proportion ¹	272,370	502,307
• Recognition of Prior Deferred Inflows/Outflows	225,229	276,383
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>(258,267)</u>	<u>(163,900)</u>
Ending Net Pension Liability	\$6,278,562	\$8,730,366

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

Housing Authority

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$8,693,280	\$7,919,662
• Pension Expense	399,913	924,766
• Employer Contributions	(1,398,011)	(1,323,493)
• New Net Deferred Inflows/Outflows	(2,004,050)	310,822
• Change in Allocation of Prior Deferred Inflows/Outflows	6,488	(58,633)
• New Net Deferred Flows Due to Change in Proportion ¹	(107,771)	426,480
• Recognition of Prior Deferred Inflows/Outflows	213,087	275,208
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>137,141</u>	<u>218,468</u>
Ending Net Pension Liability	\$5,940,077	\$8,693,280

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

LARPD

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$14,126,234	\$13,701,573
• Pension Expense	500,074	2,113,435
• Employer Contributions	(13,692,329)	(1,490,917)
• New Net Deferred Inflows/Outflows	(5,110,827)	209,374
• Change in Allocation of Prior Deferred Inflows/Outflows	41,006	13,106
• New Net Deferred Flows Due to Change in Proportion ¹	(58,724)	42,672
• Recognition of Prior Deferred Inflows/Outflows	(706,666)	(489,329)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>18,886</u>	<u>26,320</u>
Ending Net Pension Liability	\$(4,882,346)	\$14,126,234

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of reconciliation of Net Pension Liability (continued)

ACOE

Reporting Date for Employer under GASB 68 Measurement Date for Employer under GASB 68 Reconciliation of Net Pension Liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net Pension Liability	\$859,911	\$862,332
• Pension Expense	284,003	326,746
• Employer Contributions	(89,000)	(72,051)
• New Net Deferred Inflows/Outflows	(129,022)	370
• Change in Allocation of Prior Deferred Inflows/Outflows	(7)	63
• New Net Deferred Flows Due to Change in Proportion ¹	10	206
• Recognition of Prior Deferred Inflows/Outflows	(269,462)	(275,149)
• Recognition of Prior Deferred Flows Due to Change in Proportion ¹	<u>18,360</u>	<u>17,394</u>
Ending Net Pension Liability	\$674,793	\$859,911

¹ Includes differences between employer contributions and proportionate share of contributions.

Section 2: GASB 68 Information

Schedule of recognition of changes in total Net Pension Liability

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total Pension Liability

Reporting Date for Employer Under GASB 68 Year Ended June 30	Differences between Expected and Actual Experience	Recognition Period (Years)	Reporting Date for Employer under GASB 68 Year Ended June 30:								
			2021	2022	2023	2024	2025	2026	2027	Thereafter	
2016	\$(31,964,793)	5.64	\$(3,627,213)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017	(68,175,766)	5.60	(12,174,244)	(7,304,546)	0	0	0	0	0	0	0
2018	17,516,316	5.47	3,202,252	3,202,252	1,505,056	0	0	0	0	0	0
2019	13,710,084	5.43	2,524,878	2,524,878	2,524,878	1,085,694	0	0	0	0	0
2020	24,548,055	5.37	4,571,332	4,571,332	4,571,332	4,571,332	1,691,395	0	0	0	0
2021	33,007,683	5.26	6,275,224	6,275,224	6,275,224	6,275,224	6,275,224	1,631,563	0	0	0
2022	(50,359,948)	5.05	<u>N/A</u>	<u>(9,972,267)</u>	<u>(9,972,267)</u>	<u>(9,972,267)</u>	<u>(9,972,267)</u>	<u>(9,972,267)</u>	<u>(9,972,267)</u>	<u>(498,613)</u>	<u>0</u>
Net increase (decrease) in pension expense			\$772,229	\$(703,127)	\$4,904,223	\$1,959,983	\$(2,005,648)	\$(8,340,704)	\$(498,613)	\$0	\$0

As described in the Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources, for the current period, the average of the expected remaining service lives of all employees that are provided with pensions through ACERA (active and inactive employees) determined as of December 31, 2020 (the beginning of the measurement period ending December 31, 2021) is 5.05 years.

Amortization amounts prior to June 30, 2021 have been omitted from this schedule. Those amounts can be found in prior years' GASB 68 Reports.

Section 2: GASB 68 Information

Schedule of recognition of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes

Reporting Date for Employer Under GASB 68 Year Ended June 30	Effects of Assumption Changes	Recognition Period (Years)	Reporting Date for Employer under GASB 68 Year Ended June 30:								
			2021	2022	2023	2024	2025	2026	2027	Thereafter	
2016	\$0	5.64	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017	150,676,929	5.60	26,906,594	16,143,959	0	0	0	0	0	0	0
2018	316,727,508	5.47	57,902,653	57,902,653	27,214,243	0	0	0	0	0	0
2019	0	5.43	0	0	0	0	0	0	0	0	0
2020	0	5.37	0	0	0	0	0	0	0	0	0
2021	236,513,333	5.26	44,964,513	44,964,513	44,964,513	44,964,513	44,964,513	11,690,768	0	0	
2022	0	5.05	<u>N/A</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			\$129,773,760	\$119,011,125	\$72,178,756	\$44,964,513	\$44,964,513	\$11,690,768	\$0	\$0	

As described in the Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources, for the current period, the average of the expected remaining service lives of all employees that are provided with pensions through ACERA (active and inactive employees) determined as of December 31, 2020 (the beginning of the measurement period ending December 31, 2021) is 5.05 years.

Amortization amounts prior to June 30, 2021 have been omitted from this schedule. Those amounts can be found in prior years' GASB 68 Reports.

Section 2: GASB 68 Information

Schedule of recognition of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of
Differences between Projected and Actual Earnings on Pension Plan Investments

Reporting Date for Employer Under GASB 68 Year Ended June 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	Reporting Date for Employer under GASB 68 Year Ended June 30:								
			2021	2022	2023	2024	2025	2026	2027	Thereafter	
2016	\$396,219,729	5.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017	16,987,820	5.00	3,397,564	0	0	0	0	0	0	0	0
2018	(601,849,317)	5.00	(120,369,864)	(120,369,861)	0	0	0	0	0	0	0
2019	727,349,183	5.00	145,469,836	145,469,836	145,469,839	0	0	0	0	0	0
2020	(679,128,753)	5.00	(135,825,750)	(135,825,750)	(135,825,750)	(135,825,753)	0	0	0	0	0
2021	(193,319,430)	5.00	(38,663,887)	(38,663,887)	(38,663,887)	(38,663,887)	(38,663,882)	0	0	0	0
2022	(501,864,198)	5.00	<u>N/A</u>	<u>(100,372,840)</u>	<u>(100,372,840)</u>	<u>(100,372,840)</u>	<u>(100,372,840)</u>	<u>(100,372,838)</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			\$(145,992,101)	\$(249,762,502)	\$(129,392,638)	\$(274,862,480)	\$(139,036,722)	\$(100,372,838)	\$0	\$0	\$0

The differences between projected and actual earnings on pension plan investments are recognized over a five-year period per Paragraph 33b. of GASB 68.

Amortization amounts prior to June 30, 2021 have been omitted from this schedule. Those amounts can be found in prior years' GASB 68 Reports.

Section 2: GASB 68 Information

Schedule of recognition of changes in total Net Pension Liability (continued)

Total Increase (Decrease) in Pension Expense

Reporting Date for Employer Under GASB 68 Year Ended June 30	Total Differences and Changes	Reporting Date for Employer under GASB 68 Year Ended June 30:							
		2021	2022	2023	2024	2025	2026	2027	Thereafter
2016	\$364,254,936	\$(3,627,213)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2017	99,488,983	18,129,914	8,839,413	0	0	0	0	0	0
2018	(267,605,493)	(59,264,959)	(59,264,956)	28,719,299	0	0	0	0	0
2019	741,059,267	147,994,714	147,994,714	147,994,717	1,085,694	0	0	0	0
2020	(654,580,698)	(131,254,418)	(131,254,418)	(131,254,418)	(131,254,421)	1,691,395	0	0	0
2021	76,201,586	12,575,850	12,575,850	12,575,850	12,575,850	12,575,855	13,322,331	0	0
2022	(552,224,146)	<u>N/A</u>	<u>(110,345,107)</u>	<u>(110,345,107)</u>	<u>(110,345,107)</u>	<u>(110,345,107)</u>	<u>(110,345,105)</u>	<u>(498,613)</u>	<u>0</u>
Net increase (decrease) in pension expense		\$(15,446,112)	\$(131,454,504)	\$(52,309,659)	\$(227,937,984)	\$(96,077,857)	\$(97,022,774)	\$(498,613)	\$0

Amortization amounts prior to June 30, 2021 have been omitted from this schedule. Those amounts can be found in prior years' GASB 68 Reports.

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability

In addition to the amounts shown in the Schedule of Recognition of Changes in Total Net Pension Liability, there are changes in each employer's proportionate share of the total Net Pension Liability (NPL) during the measurement period ending on December 31, 2021. The net effect of the change in the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources is also recognized over the average of the expected remaining service lives of all employees shown above. The difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ending on December 31, 2021 is recognized over the same periods. These amounts are shown on the following table, with the corresponding amounts for the measurement periods ending on December 31 beginning in 2016 shown on the following pages. While these amounts are different for each employer, they sum to zero over the entire ACERA.

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2021

	Total Change to be Recognized	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	Thereafter
Alameda County	\$409,443	5.05	\$81,077	\$81,077	\$81,077	\$81,077	\$81,077	\$4,058	\$0
Health System	7,476,142	5.05	1,480,424	1,480,424	1,480,424	1,480,424	1,480,424	74,022	0
Superior Court	(8,017,615)	5.05	(1,587,646)	(1,587,646)	(1,587,646)	(1,587,646)	(1,587,646)	(79,385)	0
First 5	339,623	5.05	67,253	67,253	67,253	67,253	67,253	3,358	0
Housing Authority	(134,381)	5.05	(26,610)	(26,610)	(26,610)	(26,610)	(26,610)	(1,331)	0
LARPD	(73,224)	5.05	(14,500)	(14,500)	(14,500)	(14,500)	(14,500)	(724)	0
ACOE	<u>12</u>	5.05	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2020

	Total Change to be Recognized	Recognition Period (Years)	2021	2022	2023	2024	2025	2026	Thereafter
Alameda County	\$8,250,590	5.26	\$1,568,554	\$1,568,554	\$1,568,554	\$1,568,554	\$1,568,554	\$407,820	\$0
Health System	(12,853,687)	5.26	(2,443,667)	(2,443,667)	(2,443,667)	(2,443,667)	(2,443,667)	(635,352)	0
Superior Court	3,403,342	5.26	647,023	647,023	647,023	647,023	647,023	168,227	0
First 5	620,220	5.26	117,913	117,913	117,913	117,913	117,913	30,655	0
Housing Authority	526,592	5.26	100,112	100,112	100,112	100,112	100,112	26,032	0
LARPD	52,689	5.26	10,017	10,017	10,017	10,017	10,017	2,604	0
ACOE	<u>254</u>	5.26	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>48</u>	<u>14</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2019

	Total Change to be Recognized	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	Thereafter
Alameda County	\$6,339,140	5.37	\$1,180,474	\$1,180,474	\$1,180,474	\$1,180,474	\$1,180,474	\$436,770	\$0
Health System	(11,003,271)	5.37	(2,049,027)	(2,049,027)	(2,049,027)	(2,049,027)	(2,049,027)	(758,136)	0
Superior Court	4,979,652	5.37	927,309	927,309	927,309	927,309	927,309	343,107	0
First 5	515,062	5.37	95,915	95,915	95,915	95,915	95,915	35,487	0
Housing Authority	(898,184)	5.37	(167,260)	(167,260)	(167,260)	(167,260)	(167,260)	(61,884)	0
LARPD	27,510	5.37	5,123	5,123	5,123	5,123	5,123	1,895	0
ACOE	<u>40,091</u>	5.37	<u>7,466</u>	<u>7,466</u>	<u>7,466</u>	<u>7,466</u>	<u>7,466</u>	<u>2,761</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2018

	Total Change to be Recognized	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	Thereafter
Alameda County	\$1,738,127	5.43	\$320,097	\$320,097	\$320,097	\$320,097	\$320,097	\$137,642	\$0
Health System	680,885	5.43	125,393	125,393	125,393	125,393	125,393	53,920	0
Superior Court	(2,537,099)	5.43	(467,238)	(467,238)	(467,238)	(467,238)	(467,238)	(200,909)	0
First 5	175,250	5.43	32,275	32,275	32,275	32,275	32,275	13,875	0
Housing Authority	(46,967)	5.43	(8,649)	(8,649)	(8,649)	(8,649)	(8,649)	(3,722)	0
LARPD	(10,196)	5.43	(1,878)	(1,878)	(1,878)	(1,878)	(1,878)	(806)	0
ACOE	<u>0</u>	5.43	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2017

	Total Change to be Recognized	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	Thereafter
Alameda County	\$(9,479,381)	5.47	\$(1,732,979)	\$(1,732,979)	\$(1,732,979)	\$(1,732,979)	\$(1,732,979)	\$(814,486)	\$0
Health System	13,073,831	5.47	2,390,097	2,390,097	2,390,097	2,390,097	2,390,097	1,123,346	0
Superior Court	(2,908,250)	5.47	(531,672)	(531,672)	(531,672)	(531,672)	(531,672)	(249,890)	0
First 5	(37,941)	5.47	(6,936)	(6,936)	(6,936)	(6,936)	(6,936)	(3,261)	0
Housing Authority	(403,509)	5.47	(73,767)	(73,767)	(73,767)	(73,767)	(73,767)	(34,674)	0
LARPD	(98,213)	5.47	(17,954)	(17,954)	(17,954)	(17,954)	(17,954)	(8,443)	0
ACOE	<u>(146,537)</u>	5.47	<u>(26,789)</u>	<u>(26,789)</u>	<u>(26,789)</u>	<u>(26,789)</u>	<u>(26,789)</u>	<u>(12,592)</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 68 Information

Allocation of changes in total Net Pension Liability (continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2016

	Total Change to be Recognized	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	Thereafter
Alameda County	\$773,839	5.60	\$138,186	\$138,185	\$138,185	\$138,185	\$138,185	\$82,913	\$0
Health System	(286,750)	5.60	(51,206)	(51,205)	(51,205)	(51,205)	(51,205)	(30,724)	0
Superior Court	(657,369)	5.60	(117,388)	(117,387)	(117,387)	(117,387)	(117,387)	(70,433)	0
First 5	178,251	5.60	31,831	31,830	31,830	31,830	31,830	19,100	0
Housing Authority	115,948	5.60	20,705	20,705	20,705	20,705	20,705	12,423	0
LARPD	(132,463)	5.60	(23,653)	(23,654)	(23,654)	(23,654)	(23,654)	(14,194)	0
ACOE	<u>8,544</u>	5.60	<u>1,525</u>	<u>1,526</u>	<u>1,526</u>	<u>1,526</u>	<u>1,526</u>	<u>915</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 3: Actuarial Assumptions and Methods and Appendices

Actuarial assumptions and methods

For December 31, 2021 Measurement Date and Employer Reporting as of June 30, 2022

Rationale for Assumptions:	The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the December 1, 2016 through November 30, 2019 Actuarial Experience Study report dated September 9, 2020. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all tiers. These assumptions were adopted by the Board.
<u>Economic Assumptions</u>	
Net Investment Return:	7.00%, net of investment expenses.
Employee Contribution Crediting Rate:	7.00%, compounded semi-annually.
Consumer Price Index:	Increase of 2.75% per year. Retiree COLA increases due to CPI are subject to a 2.75% maximum change per year for General Tier 1, General Tier 3, and Safety Tier 1, and 2% maximum change per year for General Tier 2, General Tier 4, Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4. (For General Tier 1, General Tier 3, and Safety Tier 1 members with a sufficient COLA bank, withdrawals from the bank can be made to increase the retiree COLA up to 3% per year.) The actual COLA granted by ACERA on April 1, 2021 has been reflected in the December 31, 2020 valuation.
Payroll Growth:	Inflation of 2.75% per year plus real “across the board” salary increases of 0.50% per year, used to amortize the Unfunded Actuarial Accrued Liability as a level percentage of payroll.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.75% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 2.75% per year from the valuation date.

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Salary Increases:

The annual rate of compensation increase includes:

- Inflation at 2.75%, plus
- “Across the board” salary increases of 0.50% per year, plus
- The following merit and promotion increases:

Years of Service	Rate (%)	
	General	Safety
0-1	5.10	8.00
1-2	5.10	8.00
2-3	4.50	8.00
3-4	2.90	4.90
4-5	2.10	3.70
5-6	1.60	2.10
6-7	1.50	1.30
7-8	1.50	1.20
8-9	1.00	0.90
9-10	0.90	0.90
10-11	0.70	0.80
11 & Over	0.40	0.80

Additional Cashout Assumptions:

Additional pay elements are expected to be received during a member’s final average earnings period. The percentages, added to the final average salary, used in this valuation are:

	Service Retirement	Disability Retirement
General Tier 1	7.5%	6.5%
General Tier 2	3.0%	1.4%
General Tier 3	7.5%	6.5%
General Tier 4	N/A	N/A
Safety Tier 1	7.5%	6.4%
Safety Tier 2	2.5%	1.9%
Safety Tier 2C	2.5%	1.9%
Safety Tier 2D	2.5%	1.9%
Safety Tier 4	N/A	N/A

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Demographic Assumptions:

Post-Retirement Mortality Rates:

Healthy

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

Disabled

- **General Members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Tables (separate tables for males and females) with rates decreased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2019.
- **Safety Members:** Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2019.

Beneficiaries

- **All Beneficiaries:** Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2019.

The Pub-2010 mortality tables and adjustments as shown above reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

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Pre-Retirement Mortality Rates:

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

Age	Rate (%)			
	General ¹		Safety ¹	
	Male	Female	Male	Female
20	0.04	0.01	0.04	0.02
25	0.02	0.01	0.03	0.02
30	0.04	0.01	0.04	0.02
35	0.04	0.02	0.04	0.03
40	0.06	0.03	0.05	0.04
45	0.09	0.05	0.07	0.06
50	0.13	0.08	0.10	0.08
55	0.19	0.11	0.15	0.11
60	0.28	0.17	0.23	0.15
65	0.41	0.27	0.35	0.20

All pre-retirement deaths are assumed to be non-service connected.

¹ Generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Mortality Rates for Member Contributions:

- **General Members:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females), projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 30% male and 70% female.
- **Safety Members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females), projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 75% male and 25% female.

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Optional Forms of Benefit:

Service Retirement and All Beneficiaries

- **General Members:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females), projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 30% male and 70% female.
- **General Beneficiaries:** Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 70% male and 30% female.
- **Safety Members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Tables (separate tables for males and females), projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 75% male and 25% female.
- **Safety Beneficiaries:** Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 25% male and 75% female.

Disability Retirement

- **General Members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Tables (separate tables for males and females) with rates decreased by 10% for females, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 30% male and 70% female.
- **Safety Members:** Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2019, weighted 75% male and 25% female.

Disability Incidence:

Age	Rate (%)	
	General	Safety
20	0.00	0.00
25	0.01	0.03
30	0.03	0.26
35	0.07	0.64
40	0.09	1.22
45	0.16	1.50
50	0.26	2.10
55	0.33	2.65
60	0.38	3.80

65% of General disabilities are assumed to be service connected disabilities. The other 35% are assumed to be non-service connected disabilities.

100% of Safety disabilities are assumed to be service connected disabilities.

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Termination:

Years of Service	Rate (%)	
	General	Safety
0-1	12.00	4.00
1-2	9.00	4.00
2-3	8.00	4.00
3-4	6.00	3.50
4-5	6.00	3.00
5-6	6.00	2.00
6-7	5.25	1.80
7-8	4.25	1.70
8-9	3.75	1.60
9-16	3.50	1.50
16-17	3.40	1.40
17-18	3.30	1.30
18-19	3.20	1.20
19-20	3.10	1.10
20 or more	3.00	1.00

For members with less than five years of service, 55% of all terminated members are assumed to choose a refund of contributions and the other 45% are assumed to choose a deferred vested benefit. For members with five or more years of service, 30% of all terminated members are assumed to choose a refund of contributions and the other 70% are assumed to choose a deferred vested benefit.

No termination is assumed after a member is eligible for retirement.

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Retirement Rates:

Age	Rate (%) ¹									
	General					Safety				
	Tier 1	Tier 2 ²		Tier 3	Tier 4	Tier 1 ³	Tier 2, 2D ²		Tier 2C ³	Tier 4
< 30		30+	< 30				30+			
49	0.0	0.0	0.0	0.0	0.0	0.0	12.0	18.0	0.0	0.0
50	2.0	2.0	4.0	10.0	0.0	35.0	12.0	18.0	4.0	4.0
51	4.0	2.0	4.0	10.0	0.0	30.0	10.0	24.0	2.0	2.0
52	4.0	2.0	4.0	10.0	4.0	25.0	10.0	24.0	2.0	2.0
53	5.0	2.0	4.0	10.0	2.0	35.0	10.0	25.0	3.0	3.0
54	5.0	2.0	4.0	10.0	2.0	45.0	12.0	27.0	6.0	6.0
55	6.0	2.0	4.0	12.0	5.0	45.0	12.0	29.0	10.0	10.0
56	10.0	2.5	4.5	14.0	2.5	45.0	14.0	32.0	12.0	12.0
57	12.0	4.0	5.0	16.0	3.5	45.0	16.0	32.0	20.0	20.0
58	12.0	4.0	5.0	18.0	3.5	45.0	18.0	30.0	10.0	10.0
59	14.0	4.5	8.0	20.0	4.5	45.0	18.0	30.0	15.0	15.0
60	20.0	8.0	8.5	20.0	5.0	45.0	25.0	30.0	60.0	60.0
61	20.0	9.0	13.5	20.0	5.0	45.0	25.0	30.0	60.0	60.0
62	35.0	15.0	22.5	30.0	18.0	45.0	25.0	30.0	60.0	60.0
63	30.0	15.0	22.5	25.0	15.0	45.0	25.0	30.0	60.0	60.0
64	30.0	18.0	27.0	25.0	17.0	45.0	30.0	30.0	60.0	60.0
65	30.0	25.0	27.5	50.0	25.0	100.0	100.0	100.0	100.0	100.0
66	30.0	30.0	33.0	50.0	30.0	100.0	100.0	100.0	100.0	100.0
67	30.0	30.0	33.0	50.0	30.0	100.0	100.0	100.0	100.0	100.0
68	30.0	30.0	33.0	50.0	30.0	100.0	100.0	100.0	100.0	100.0
69	35.0	35.0	38.5	50.0	35.0	100.0	100.0	100.0	100.0	100.0
70	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
71	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
72	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
73	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
74	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
75 & Over	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ The retirement rates only apply to members that are eligible to retire at the age shown.

² Different retirement rates are assumed for General Tier 2 and Safety Tier 2 & 2D members who have accrued less than 30 years of service and those who have accrued at least 30 years of service.

³ Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

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Retirement Age and Benefit for Deferred Vested Members:	<p>General Retirement Age: 61 Safety Retirement Age: 55</p> <p>Future deferred vested members who terminate with less than five years of service and are not vested are assumed to retire at age 70 for both General and Safety if they decide to leave their contributions on deposit. 25% of future General and 50% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 3.65% and 4.05% compensation increases are assumed per annum for General and Safety, respectively.</p>
Future Benefit Accruals:	1.0 year of service per year of employment, plus 0.003 years of additional service for General members and 0.007 years of additional service for Safety members, to anticipate conversion of unused sick leave for each year of employment.
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Inclusion of Deferred Vested Members:	All deferred vested members are included in the valuation.
Data Adjustment:	Data as of November 30 has been adjusted to December 31 by adding one month of age and, for active members, one month of service.
Form of Payment:	All active and inactive vested members are assumed to elect the unmodified option at retirement.
Percent Married:	70% of male members; 50% of female members.
Age and Gender of Spouse:	For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.
<u>Actuarial Funding Policy</u>	
Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation.
Expected Remaining Service Lives:	<p>The average of the expected service lives of all employees is determined by:</p> <ul style="list-style-type: none"> 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. <p>Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.</p>
Changed Actuarial Assumptions:	There were no changes in actuarial assumptions since the prior valuation.

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Appendix A: Projection of Pension Plan's Fiduciary Net Position (\$ in millions) for use in the Calculation of Discount Rate as of December 31, 2021

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)
2021	8,445	1,228	556	15	996	10,097
2022	10,097 *	355	662	18	692	10,464
2023	10,464	346	692	19	716	10,815
2024	10,815	334	724	19	739	11,145
2025	11,145	326	755	20	761	11,457
2026	11,457	318	785	21	781	11,749
2027	11,749	320	816	21	800	12,033
2028	12,033	324	847	22	819	12,307
2029	12,307	329	878	22	837	12,573
2045	12,511	236	1,226	23	834	12,333
2046	12,333	253	1,234	22	822	12,152
2047	12,152	251	1,240	22	809	11,950
2048	11,950	248	1,244	22	794	11,726
2090	480	40	119	1	30	430
2091	430	36	101	1	27	391
2092	391	33	85	1	25	363
2093	363	29	71	1	24	344
2094	344	26	59	1	23	333
2095	333	24	49	1	22	329
2096	329	21	40	1	22	332
2097	332	19	32	1	23	340
2098	340	17	26	1	23	354
2099	354	15	21	1	24	371
2100	371	13	17	1	26	392
2101	392	12	14	1	27	416
2111	751	7	7	1	53	803
2112	803	7	6	1	56	858
2113	858	8	7	2	60	918
2114	918	8	7	2	64	982
2115	982	8	7	2	69	1,051
2135	3,801	32	25	7	266	4,067
2136	4,067	34	26 **	7	285	4,352
2136	Discounted Value: 2 *					

* Excludes \$120.2 million in the Contingency Reserve as of December 31, 2021. See Note 2.

** Projected benefit payments for the closed group of active, inactive vested, retired members and beneficiaries as of November 30, 2020 is \$0. This amount represents the 0.65% of the beginning-of -year market value to reflect the approximated outflow of future allocations to the SRBR. See Note 6.

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Notes

1. Amounts may not total exactly due to rounding.
2. Amounts shown in the year beginning January 1, 2021 row are actual amounts, based on the financial statements provided by ACERA. The Plan Fiduciary Net Position as of December 31, 2021 differs from the amount used for other GASB 67 purposes in that it excludes the \$120.2 million Contingency Reserve. These assets are not used in developing the projected total contributions in column (b).
3. Years 2030-2044, 2049-2089, 2102-2110, and 2116-2134 have been omitted from this table.
4. Column (a): Except for the "discounted value" shown for 2136, 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, 2020); 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, 2020. 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 \$1.10 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 \$0.06 billion as well as the remaining present value of the OPEB SRBR benefits of \$0.00 billion.
7. Column (d): Projected administrative expenses are calculated as approximately 0.18% of the beginning plan fiduciary net position amount. The 0.18% portion was based on the actual fiscal year 2021 administrative expenses as a percentage of the beginning plan fiduciary net position amount as of January 1, 2021. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.
9. As illustrated in this 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, 2021 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.
10. This projection is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

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Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 68. The terms may have different meanings in other contexts.

Active Employees	Individuals employed at the end of the reporting or measurement period, as applicable.
Actual Contributions	Cash contributions recognized as additions to a Pension Plan's Fiduciary Net Position.
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).
Closed Period	A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.
Collective Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions	Deferred outflows of resources and deferred inflows of resources related to pensions arising from certain changes in the collective Net Pension Liability.
Collective Net Pension Liability	The Net Pension Liability for benefits provided through (1) a cost-sharing pension plan or (2) a single-employer or agent pension plan in circumstances in which there is a special funding situation.

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Collective Pension Expense	Pension expense arising from certain changes in the collective Net Pension Liability.
Contributions	Additions to a Pension Plan's Fiduciary Net Position for amounts from employers, nonemployer contributing entities (for example, state government contributions to a local government pension plan), or employees. Contributions can result from cash receipts by the pension plan or from recognition by the pension plan of a receivable from one of these sources.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Employer	An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.
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 68.)
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	<p>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:</p> <ol style="list-style-type: none"> 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.

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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 <i>normal cost</i> . 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 <i>actuarial accrued liability</i> .
Inactive Employees	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Measurement Period	The period between the prior and the current measurement dates.
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.
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.

Section 3: Actuarial Assumptions and Methods and Appendices

Service Costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
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 68.

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Alameda County Employees' Retirement Association

Governmental Accounting Standards Board (GASB) Statement 75 Actuarial Valuation of the Benefits Provided by the Supplemental Retiree Benefits Reserve Other Postemployment Benefits (OPEB)

Actuarial Valuation Based on December 31, 2021 Measurement
Date for Employer Reporting as of
June 30, 2022



This report has been prepared at the request of the Board of Retirement to assist the sponsors of the Fund in preparing their financial report for their liabilities associated with the ACERA SRBR OPEB plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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June 8, 2022

Board of Trustees
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 75 (GASB) Actuarial Valuation of Other Postemployment Benefits (OPEB) based on a December 31, 2021 measurement date for employer reporting as of June 30, 2022. It contains various information that will need to be disclosed in order for ACERA employers to comply with GASB 75.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the sponsors of the Fund in preparing their financial report for their liabilities associated with the ACERA SRBR OPEB plan. 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; changes in health care trend, economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Mary Kirby, FSA, FCA, MAAA and Andy Yeung ASA, MAAA, FCA, Enrolled Actuary. The per capita costs assumptions were reviewed by Thomas Bergman, ASA, MAAA, Enrolled Actuary. 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.

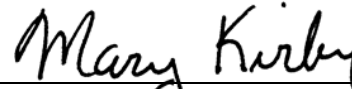
We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal



Andy Yeung, ASA, MAAA, FCA, EA
Vice President and Actuary



Mary Kirby, FSA, FCA, MAAA
Senior Vice President and Consulting 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 for “Other Postemployment Benefits (OPEB)” plans by Governmental Accounting Standards Board Statement 75 (GASB 75) for employer reporting as of June 30, 2022. The results used in preparing this GASB 75 report are comparable to those used in preparing the Governmental Accounting Standard Board Statement 74 report for the plan based on a measurement date and a reporting date as of December 31, 2021. 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, 2020, provided by ACERA;
- The assets of the Plan as of December 31, 2021, provided by ACERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the December 31, 2021 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, and health care trends etc. adopted by the Board for the December 31, 2021 valuation.

General observations on GASB 75 actuarial valuation

1. It is important to note that 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 develop and adopt funding policies, if applicable, under current practices.
2. When measuring OPEB 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.¹ This means that the Total OPEB Liability (TOL) measure for financial reporting shown in this report is determined on generally the same basis as ACERA’s Actuarial Accrued Liability (AAL) measure for funding.

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.

Section 1: Actuarial Valuation Summary

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.

Highlights of the valuation

1. For this report, the reporting dates for the employers are June 30, 2022 and June 30, 2021. The NOLs measured as of December 31, 2021 and 2020 have been determined by rolling forward the TOL as of December 31, 2020 and 2019, respectively. The Plan's Fiduciary Net Positions were valued as of the measurement dates. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected. Consistent with the provisions of GASB 75, the assets and liabilities measured as of December 31, 2021 and 2020 are not adjusted or rolled forward to the June 30, 2022 and June 30, 2021 reporting dates, respectively.
2. The NOL decreased from \$6.7 million (a liability) as of December 31, 2020 to (\$420.6) million (a surplus) as of December 31, 2021 primarily as a result of favorable investment return during calendar year 2021 of about \$404.9 million (for an actual market return of 41.9%¹ versus 7.00% assumed in the valuation). Changes in these values during the last two fiscal years ending December 31, 2021 and 2020 can be found in *Section 2, Schedule of changes in Net OPEB Liability* on page 19.
3. The OPEB expense decreased from (negative or an income) (\$15.3) million as of December 31, 2020 to (negative or an income) (\$111.4) million as of December 31, 2021 primarily due to the favorable return on the market value of assets for the year ended December 31, 2021 which lowered the OPEB expense by \$81.0 million. Components of the OPEB expense during the last two plan years ending December 31, 2021 and 2020 can be found in *Section 2, OPEB expense*.
4. As we disclosed in our December 31, 2021 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

¹ Note that the 41.9% market value investment return mentioned above for the SRBR is higher than the 15.95% investment return included in the December 31, 2021 Pension Funding Valuation for the 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, 2021.

Section 1: Actuarial Valuation Summary

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 3, Projection of Pension Plan’s Fiduciary Net Position* of our GASB 67 report as of December 31, 2021), 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 3, Appendix A* of this report, we have only included the projected benefits to the extent that on a present value basis they are less than or equal to the OPEB assets currently available in the SRBR as any remaining OPEB SRBR benefits would be paid from future excess earnings. Due to the favorable investment experience, the present value of all projected OPEB benefits for current and future retirees of \$1.4 billion, based on membership data as of November 30, 2020, rolled forward to the measurement date as of December 31, 2021, is less than the OPEB assets of \$1.6 billion, so that all projected benefits are expected to be covered by OPEB assets currently in the SRBR.

5. The NOLs for the employers in ACERA as of December 31, 2020 and December 31, 2021 are allocated based on the actual employer contributions made during 2020 and 2021, respectively¹. The steps we used for the allocation are as follows:
 - First calculate the ratio of the employer’s contributions to the total contributions.
 - Then multiply this ratio by the NOL to determine the employer’s proportionate share of the NOL. The NOL allocation can be found in *Section 2, Determination of proportionate share*.
6. The Alameda County Office of Education (ACOE) made a lump sum contribution to the Pension Plan 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 non-OPEB SRBR NOL by using ACOE’s required contributions determined as if they had not made the additional lump sum contribution in 2019. We have continued to use that method in determining ACOE’s proportionate share of the OPEB SRBR NOL in this valuation.

The County made voluntary County Safety contributions of \$800 million on around June 29, 2021 to reduce their Safety UAAL for the pension plan and associated contribution rates. The Livermore Area Recreation and Park District (LARPD) also made voluntary LARPD General contributions of \$12.611 million on around June 29, 2011 to reduce their General UAAL for the

¹ The December 31, 2020 and December 31, 2021 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 2020 and 2021, respectively, based on discussions and approval provided by the Board.

Section 1: Actuarial Valuation Summary

pension plan and associated contribution rates. We have amortized the voluntary County Safety UAAL contributions over 13 years effective FY 21-22 to provide a UAAL contribution rate credit for County Safety and the voluntary LARPD General UAAL contributions over 16 years effective FY 21-22 to provide a UAAL contribution rate credit for LARPD General. Similar to the approach approved by ACERA as described in the previous paragraph for determining ACOE's proportionate share of the OPEB SRBR NOL, we have determined the County Safety and LARPD's proportionate share of the OPEB SRBR NOL by using the County Safety and LARPD's required contribution, respectively, as if they had not made the voluntary UAAL contributions in 2021.

7. The TOL as of December 31, 2021 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, 2020. 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, 2021 (reference: our trend letter dated May 13, 2022) 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.
8. We have also continued the practice of adjusting the Plan's Fiduciary Net Position as of December 31, 2021 to include the \$1.083 billion set aside by the Retirement Board in the SRBR reserve to pay OPEB benefits as of December 31, 2021. This includes \$1.073 billion in the OPEB-related SRBR reserve (after reducing the reserve by the \$5.7 million SRBR implicit subsidy transfer), and \$9.2 million in the 401(h) reserve. It should be noted that as of December 31, 2021, the deferred investment gain for the entire Plan was \$1.133 billion. Consequently, 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 \$540.9 million (which will cause the future interest crediting rate to the SRBR reserve to be raised above 7.00% per year).
9. The Coronavirus (COVID-19) pandemic has had a significant impact on the US economy, 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:
 - Changes in the market value of plan assets since December 31, 2021
 - Change in interest rates since December 31, 2021
 - 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, 2021 valuation. Given the high level of uncertainty and fluidity of the current events, the Board may wish to consider updated estimates to monitor the plan's financial status. We will keep the Board updated on emerging developments.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

Reporting Date for Employer under GASB 75 ¹		June 30, 2022	June 30, 2021
Measurement Date for Employer under GASB 75		December 31, 2021	December 31, 2020
Disclosure elements for fiscal year ending December 31:	• Service cost ²	\$33,439,903	\$31,510,436
	• Total OPEB Liability	1,203,078,101	1,191,570,896
	• Plan's Fiduciary Net Position ³	1,623,641,492	1,184,882,854
	• Net OPEB Liability	(420,563,391)	6,688,042
	• OPEB expense	(111,416,496)	(15,301,333)
Schedule of contributions for fiscal year ending December 31:	• Actuarially determined contributions	N/A	N/A
	• Actual contributions ⁴	N/A	N/A
	• Contribution deficiency / (excess)	0	0
Demographic data for plan year ending December 31:⁵	• Number of retired members receiving medical benefits ⁶	6,763	6,664
	• Number of retired members receiving dental and vision benefits	8,058	7,906
	• Number of vested terminated members	478	451
	• Number of active members	11,326	11,322
Key assumptions as of December 31:	• Discount rate	7.00%	7.00%
	• Health care premium trend rates		
	Non-Medicare medical plan	Graded from 7.50% to ultimate 4.50% over 12 years	Graded from 6.75% to ultimate 4.50% over 9 years
	Medicare medical plan	Graded from 6.50% to ultimate 4.50% over 8 years	Graded from 6.25% to ultimate 4.50% over 7 years
	Dental/Vision	4.00% ⁷	4.00% ⁷
	Medicare Part B	4.50%	4.50%

¹ The reporting date and measurement date for the plan are December 31, 2021 and December 31, 2020, respectively.

² The Service Cost is based on the previous year's valuation, meaning the December 31, 2021 and December 31, 2020 measurement date values are based on the valuations as of December 31, 2020 and December 31, 2019, respectively. The December 31, 2021 service cost has been calculated using the assumptions shown in the December 31, 2020 column, and the December 31, 2020 service cost has been calculated using the following assumptions:

Key assumptions as of December 31, 2019:

Investment rate of return	7.25%
Health care premium trend rates	
Non-Medicare medical plan	Graded from 6.75% to ultimate 4.50% over 9 years
Medicare medical plan	Graded from 6.25% to ultimate 4.50% over 7 years
Dental/Vision	4.00%
Medicare Part B	4.50%

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%.

Section 1: Actuarial Valuation Summary

- ³ For 2021, the Plan's Fiduciary Net Position shown (\$1,623,641,492) includes the OPEB-related SRBR reserve of \$1,073,475,020 (after reducing the reserve by the SRBR implicit subsidy transfer of \$5,652,613) and 401(h) reserve (\$9,229,285), 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 (\$540,937,187). 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). Note that amounts may not total exactly due to rounding.
- ⁴ 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.
- ⁵ The December 31, 2020 data is used in the measurement of the TOL as of December 31, 2021. The following data as of December 31, 2019 was used in the measurement of the TOL as of December 31, 2020:
- | | |
|--|--------|
| Number of retired members receiving medical benefits | 6,575 |
| Number of retired members receiving dental and vision benefits | 7,741 |
| Number of vested terminated members | 430 |
| Number of active members | 11,336 |
- The demographic data as of December 31, 2021 will be used in the sufficiency study for the SRBR as of December 31, 2021 as well as in the next year's GASB 74 valuation when we roll forward the liability from December 31, 2021 to December 31, 2022.
- ⁶ The retiree count excludes beneficiaries under 65 receiving an implicit subsidy.
- ⁷ 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).

Section 1: Actuarial Valuation Summary

Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to defining future projected obligations of a postretirement health plan. As such, it will never forecast the precise future stream of benefit payments. 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, not by the actuarial valuation.

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

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may provide health benefits to post-65 retirees that coordinates with Medicare. If so, changes in the Medicare law or administration may change the plan's costs without any change in the terms of the plan itself. 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 not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a "perfect" result. Notwithstanding the above, 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. To determine the future costs of benefits, Segal collects premiums and enrollment data in order to establish a baseline cost for the valuation measurement, and then develops short- and long-term health care cost trend rates to project increases in costs in future years. This forecast also requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan's benefits for each of those events. The forecasted benefits are then discounted to a present value, based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model necessarily uses approximations and estimates that may lead to significant changes in our results but will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

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.

Our per capita costs assumptions are based on proprietary modeling software as well as models that were developed by others. These models generate per capita claims cost calculations that are used in our valuation software. Our Health Technical Services Unit, comprised of actuaries and programmers, is responsible for the initial development and maintenance of our health models. They are also responsible for testing models that we purchase from other vendors for reasonableness. The client team inputs the premiums, enrollments, and assumptions into these models and reviews the results for reasonableness, 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 the plan sponsors of the Fund in preparing items related to the OPEB SRBR plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.

An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

If ACERA is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.

Sections of this report include actuarial results that are not rounded, but that does not imply precision.

Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in plan enrollment, emerging claims experience, health care trend, and investment losses, not just the current valuation results.

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.

While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

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 75 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, 2021, OPEB plan membership consisted of the following:

Retired members currently receiving medical benefits	6,763
Retired members currently receiving dental and vision benefits	8,058
Vested terminated members entitled to, but not yet receiving benefits	478
Active members	11,326

Note: Data as of December 31, 2021 is not used in the measurement of the TOL as of December 31, 2021. It will be used for the sufficiency study for the SRBR as of December 31, 2021 as well as in next year's GASB 74 and 75 valuations.

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

Section 2: GASB 75 Information

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

Eligibility:									
<i>Service Retirees:</i>	Retired with at least 10 years of service (including deferred vested members who terminate employment and receive a retirement benefit from ACERA)								
<i>Disabled Retirees:</i>	A minimum of 10 ¹ years of service is required for non-duty disability. There is no minimum service requirement for duty disability.								
Other Postemployment Benefits (OPEB):									
<i>Monthly Medical Allowance</i>									
<i>Service Retirees:</i>	<p>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, 2021. For the period January 1, 2022 through December 31, 2022, the maximum allowance will increase to \$596.73 per month.</p> <p>For those purchasing individual insurance through the Individual Medicare Insurance Exchange, the Maximum Monthly Medical Allowance is \$443.28 per month for 2021 and will increase to \$457.13 per month in 2022.</p> <p>These Allowances are subject to the following subsidy schedule:</p> <table border="1"> <thead> <tr> <th>Completed Years of Service</th> <th>Percentage Subsidized</th> </tr> </thead> <tbody> <tr> <td>10-14</td> <td>50%</td> </tr> <tr> <td>15-19</td> <td>75%</td> </tr> <tr> <td>20+</td> <td>100%</td> </tr> </tbody> </table>	Completed Years of Service	Percentage Subsidized	10-14	50%	15-19	75%	20+	100%
Completed Years of Service	Percentage Subsidized								
10-14	50%								
15-19	75%								
20+	100%								
<i>Disabled Retirees:</i>	<p>Non-duty disabled retirees receive the same Monthly Medical Allowance as service retirees.</p> <p>Duty disabled retirees receive the same Monthly Medical Allowance as those service retirees with 20 or more years of service.</p>								
<i>Medicare Benefit Reimbursement Plan:</i>	<p>The SRBR reimburses the full Medicare Part B premium to qualified retired members.</p> <p>To qualify for reimbursement, a retiree must:</p> <ul style="list-style-type: none"> • Have at least 10 years of ACERA service, • Be eligible for Monthly Medical Allowance, • Provide proof of enrollment in Medicare Part B. 								

¹ 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.

Section 2: GASB 75 Information

<i>Dental and Vision Plans:</i>	The SRBR provides dental and vision benefits for retirees only. The maximum combined monthly dental and vision premium is \$48.12 in 2021 and 2022. 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.
<i>Note about Monthly Medical Allowance:</i>	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.

Section 2: GASB 75 Information

Net OPEB Liability

Reporting Date for Employer under GASB 75	June 30, 2022	June 30, 2021
Measurement Date for Employer under GASB 75	December 31, 2021	December 31, 2020
Components of the Net OPEB Liability		
Total OPEB Liability	\$1,203,078,101	\$1,191,570,896
Plan's Fiduciary Net Position	<u>(1,623,641,492)</u>	<u>(1,184,882,854)</u>
Net OPEB Liability	(\$420,563,391)	\$6,688,042
Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability	134.96%	99.44%

The Net OPEB Liability (NOL) was measured as of December 31, 2021 and 2020. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date, while the Total OPEB Liability (TOL) as of December 31, 2021 and 2020 was determined by rolling forward the TOL as of December 31, 2020 and 2019, respectively.

Plan provisions. The plan provisions used in the measurement of the NOL as of December 31, 2021 and 2020 are the same as those used in ACERA's SRBR sufficiency valuation as of December 31, 2020 and 2019, respectively.

Section 2: GASB 75 Information

Actuarial assumptions. The actuarial assumptions used for the December 31, 2021 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, 2021 (reference: our letter dated May 13, 2022). The assumptions used in the December 31, 2021 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 2022):	
Non-Medicare medical plan	Graded from 7.50% in 2022 to ultimate 4.50% over 12 years
Medicare medical plan	Graded from 6.50% in 2022 to ultimate 4.50% over 8 years
Dental	0.00% for the first year 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 three 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 ¹	4.50%
Other assumptions:	Same as those proposed in the experience study for the period December 1, 2016 through November 30, 2019.

¹ The actual calendar year 2021 trend of 14.55% reflecting the standard 2022 calendar year premium of \$170.10 per month, consistent with Segal's Medicare Part B memo dated November 19, 2021 was reflected in the current year GASB 74 valuation with December 31, 2021 measurement date.

Section 2: GASB 75 Information

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 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 ¹	4.50%
Other assumptions:	Same as those proposed in the experience study for the period December 1, 2016 through November 30, 2019.

¹ 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 GAS 74 valuation with December 31, 2020 measurement date.

Section 2: GASB 75 Information

Determination of discount rate and investment rates of return

The long-term expected rate of return on OPEB plan investments¹ 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, 2021 actuarial valuation. This information will be subject to change every three years based on the results of an actuarial experience study.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
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%

¹ 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.)

Section 2: GASB 75 Information

Discount rate. The discount rate used to measure the Total OPEB Liability was 7.00% as of December 31, 2021 and December 31, 2020. 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.¹ 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, 2021 and December 31, 2020.

¹ 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.

Section 2: GASB 75 Information

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, 2021, 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%)
Alameda County	(\$200,038,254)	(\$324,547,291)	(\$427,368,584)
Health System	(46,328,734)	(75,164,948)	(98,978,295)
Superior Court	(9,380,905)	(15,219,826)	(20,041,688)
First 5	(1,153,337)	(1,871,205)	(2,464,030)
Housing Authority	(1,091,160)	(1,770,326)	(2,331,191)
LARPD	(1,110,250)	(1,801,299)	(2,371,977)
ACOE	<u>(116,182)</u>	<u>(188,496)</u>	<u>(248,215)</u>
Total for all Employers	(\$259,218,822)	(\$420,563,391)	(\$553,803,980)

Section 2: GASB 75 Information

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, 2021, 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
Alameda County	(\$438,266,578)	(\$324,547,291)	(\$183,742,770)
Health System	(101,502,263)	(75,164,948)	(42,554,710)
Superior Court	(20,552,755)	(15,219,826)	(8,616,719)
First 5	(2,526,863)	(1,871,205)	(1,059,384)
Housing Authority	(2,390,637)	(1,770,326)	(1,002,272)
LARPD	(2,432,463)	(1,801,299)	(1,019,807)
ACOE	(254,544)	(188,496)	(106,717)
Total for all Employers	(\$567,926,103)	(\$420,563,391)	(\$238,102,379)

* *Current trend rates: 7.50% graded down to 4.50% over 12 years for Non-Medicare medical plan costs; 6.50% graded down to 4.50% over 8 years for Medicare medical plan costs, 4.00% for all years after the first year and three years for Dental and Vision costs, respectively; and 4.50% for all years for Medicare Part B costs. The first year of trend for dental was 0.00% to reflect three-year rate guarantee (premiums fixed at 2021 levels for 2022 and 2023). The first three 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).*

Section 2: GASB 75 Information

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

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Total OPEB Liability		
• Service cost ¹	\$33,439,903	\$31,510,436
• Interest	84,143,669	79,142,070
• Change of benefit terms	0	0
• Differences between expected and actual experience	(24,112,098)	(13,871,821)
• Changes of assumptions	(36,047,500)	57,696,237
• Benefit payments	<u>(45,916,769)</u>	<u>(46,020,705)</u>
Net change in Total OPEB Liability	\$11,507,205	\$108,456,217
Total OPEB Liability – beginning	<u>1,191,570,896</u>	<u>1,083,114,679</u>
Total OPEB Liability – ending	<u>\$1,203,078,101</u>	<u>\$1,191,570,896</u>
Plan’s Fiduciary Net Position		
• Contributions – employer ²	N/A	N/A
• Contributions – member	N/A	N/A
• Net investment income	\$486,212,907	\$262,139,154
• Benefit payments	(45,916,769)	(46,020,705)
• Administrative expense	(1,537,500)	(1,416,000)
• Other	<u>0</u>	<u>0</u>
Net change in Plan’s Fiduciary Net Position	\$438,758,638	\$214,702,449
Plan’s Fiduciary Net Position³ – beginning	<u>1,184,882,854</u>	<u>970,180,405</u>
Plan’s Fiduciary Net Position³ – ending	<u>\$1,623,641,492</u>	<u>\$1,184,882,854</u>
Net OPEB Liability – ending	<u>(\$420,563,391)</u>	<u>\$6,688,042</u>
Plan’s Fiduciary Net Position as a percentage of the Total OPEB Liability	134.96%	99.44%
Covered employee payroll⁴	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, 2021 and December 31, 2020 measurement date values are based on the valuations as of December 31, 2020 and December 31, 2019, 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 (3) on page 6 for a discussion on the development of the 2021 “Plan’s Fiduciary Net Position – beginning” amount of \$1,184,882,854 and the 2021 “Plan’s Fiduciary Net Position – ending” amount of \$1,623,641,492.
- 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.

Section 2: GASB 75 Information

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
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
2021	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 2: GASB 75 Information

Determination of proportionate share

Schedule of Employer Allocations as of December 31, 2020

Employer	Actual Employer Contributions by Employer January 1, 2020 to December 31, 2020	
	Contributions	Percentage ¹
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 ²	138,832	0.045%
Total for all Employers	\$309,819,779	100.000%

¹ The unrounded percentages are used in the allocation of the NOL amongst employers.

² 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.

Section 2: GASB 75 Information

Schedule of Employer Allocations as of December 31, 2020

Employer	Allocation of December 31, 2020 Net OPEB Liability	
	NOL	Percentage ³
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	<u>2,997</u>	<u>0.045%</u>
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 footnote 2 on prior page), 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.

³ The unrounded percentages are used in the allocation of the NOL amongst employers.

Section 2: GASB 75 Information

Schedule of Employer Allocations as of December 31, 2021

Employer	Actual Employer Contributions by Employer January 1, 2021 to December 31, 2021	
	Contributions	Percentage ¹
Alameda County ²	\$256,292,148	77.170%
Health System	59,357,100	17.872%
Superior Court	12,018,963	3.619%
First 5	1,477,674	0.445%
Housing Authority	1,398,011	0.421%
LARPD ³	1,422,470	0.428%
ACOE ⁴	148,854	0.045%
Total for all Employers	\$332,115,220	100.000%

¹ The unrounded percentages are used in the allocation of the NOL amongst employers.

² This includes \$139,147,479 of County General actual employer contributions and \$117,144,669 of County Safety adjusted employer contributions used for purposes of determining the proportionate share of the OPEB SRBR NOL for the County. The County made voluntary County Safety contributions of \$800,000,000 on around June 29, 2021 to reduce their Safety UAAL for the pension plan and associated contribution rates. We have amortized the voluntary County Safety UAAL contributions to provide a UAAL contribution rate credit for County Safety over 13 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the OPEB SRBR NOL, we determined County Safety's proportionate share of the OPEB SRBR NOL by using the County Safety's actual contributions (but excluding \$800 million of voluntary UAAL contributions) made in 2021 in the amount of \$89,395,284 plus the contribution credit applied in 2021 in the amount of \$27,749,385 for a total adjusted County Safety contribution of \$117,144,669.

³ LARPD made voluntary LARPD General contributions of \$12,611,250 on around June 29, 2021 to reduce their General UAAL for the pension plan and associated contribution rates. We have amortized the voluntary LARPD General UAAL contributions to provide a UAAL contribution rate credit for LARPD General over 16 years effective FY 21-22. Similar to the approach approved by ACERA for ACOE to determine ACOE's proportionate share of the OPEB SRBR NOL, we determined LARPD's proportionate share of the OPEB SRBR NOL by using LARPD's actual contributions (but excluding \$12,611,250 of voluntary UAAL contributions) made in 2021 in the amount of \$1,081,079 plus the contribution credit applied in 2021 in the amount of \$341,391 for a total adjusted LARPD contribution of \$1,422,470.

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, 2019 valuation in the amount of \$89,000 based on an April 1, 2021 payment date plus the amortization of the remaining balance of the original \$750,000 lump sum amount (an amount of \$59,854 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).

Section 2: GASB 75 Information

Schedule of Employer Allocations as of December 31, 2021

Employer	Allocation of December 31, 2021 Net OPEB Liability	
	NOL	Percentage ¹
Alameda County	(\$324,547,291)	77.170%
Health System	(75,164,948)	17.872%
Superior Court	(15,219,826)	3.619%
First 5	(1,871,205)	0.445%
Housing Authority	(1,770,326)	0.421%
LARPD	(1,801,299)	0.428%
ACOE	(188,496)	0.045%
Total for all Employers	(\$420,563,391)	100.000%

Notes:

1. Allocated based on the January 1, 2021 through December 31, 2021 employer contributions in total as provided by ACERA, with an adjustment to reflect the total annual UAAL contribution ACOE would have been required to make of \$148,854 in 2021 had they not made the additional contribution in 2019 to partially pay off their UAAL for the pension plan. This approach is outlined in our March 2, 2020 letter and is approved by ACERA. Following this approach, there is an adjustment to reflect the total annual contribution County Safety would have been required to make of \$117,144,669 in 2021 had they not made the voluntary County Safety UAAL contribution in 2021 to the pension plan. There is also an adjustment to reflect the total annual contribution LARPD would have been required to make of \$1,422,470 in 2021 had they not made the voluntary LARPD General UAAL contribution in 2021 to the pension plan.
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.

¹ The unrounded percentages are used in the allocation of the NOL amongst employers.

Section 2: GASB 75 Information

Notes regarding determination of proportionate share as of December 31, 2021 measurement date

The reporting date for the employer under GASB 75 is June 30, 2022. The reporting date and measurement date for the plan under GASB 74 are December 31, 2021. Consistent with the provisions of GASB 75, the assets and liabilities measured as of December 31, 2021 are not adjusted or rolled forward to the June 30, 2022 reporting date. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

The following items are allocated based on the corresponding proportionate share:

- a. Net OPEB Liability
- b. Service Cost
- c. Interest on the Total OPEB Liability
- d. Current-period benefit changes
- e. Expensed portion of current-period difference between actual and expected experience in the Total OPEB Liability
- f. Expensed portion of current-period changes of assumptions or other inputs
- g. Member contributions
- h. Projected earnings on plan investments
- i. Expensed portion of current-period differences between actual and projected earnings on plan investments
- j. Administrative expense
- k. Recognition of beginning of year deferred outflows of resources as OPEB expense
- l. Recognition of beginning of year deferred inflows of resources as OPEB expense

Section 2: GASB 75 Information

OPEB expense

Total for All Employers

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$33,439,903	\$31,510,436
Interest on the Total OPEB Liability	84,143,669	79,142,070
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(3,815,205)	(2,124,322)
Expensed portion of current-period changes of assumptions or other inputs	(5,703,718)	8,835,565
Member contributions	0	0
Projected earnings on plan investments	(81,280,900)	(68,618,499)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(80,986,403)	(38,704,131)
Administrative expense	1,537,500	1,416,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	61,447,165	52,611,600
Recognition of beginning of year deferred inflows of resources as OPEB expense	(120,198,507)	(79,370,052)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
OPEB Expense	(\$111,416,496)	(\$15,301,333)

Section 2: GASB 75 Information

OPEB expense (continued)

Alameda County

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$25,805,456	\$24,295,588
Interest on the Total OPEB Liability	64,933,373	61,021,145
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	19,502	142,466
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(2,944,180)	(1,637,922)
Expensed portion of current-period changes of assumptions or other inputs	(4,401,540)	6,812,512
Member contributions	0	0
Projected earnings on plan investments	(62,724,184)	(52,907,125)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(62,496,923)	(29,842,161)
Administrative expense	1,186,483	1,091,782
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	47,418,560)	40,565,278
Recognition of beginning of year deferred inflows of resources as OPEB expense	(92,756,766)	(61,196,927)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>135,447</u>	<u>(7,019)</u>
OPEB Expense	(\$85,824,772)	(\$11,662,383)

Section 2: GASB 75 Information

OPEB expense (continued)

Health System

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$5,976,527	\$5,520,969
Interest on the Total OPEB Liability	15,038,528	13,866,545
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	103,278	(211,116)
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(681,870)	(372,204)
Expensed portion of current-period changes of assumptions or other inputs	(1,019,394)	1,548,086
Member contributions	0	0
Projected earnings on plan investments	(14,526,882)	(12,022,702)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(14,474,248)	(6,781,381)
Administrative expense	274,789	248,098
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	10,982,109	9,218,120
Recognition of beginning of year deferred inflows of resources as OPEB expense	(21,482,408)	(13,906,490)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(194,808)	16,308
OPEB Expense	(\$20,004,379)	(\$2,875,767)

Section 2: GASB 75 Information

OPEB expense (continued)

Superior Court

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$1,210,161	\$1,258,340
Interest on the Total OPEB Liability	3,045,087	3,160,465
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(110,077)	40,841
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(138,069)	(84,833)
Expensed portion of current-period changes of assumptions or other inputs	(206,413)	352,840
Member contributions	0	0
Projected earnings on plan investments	(2,941,486)	(2,740,216)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(2,930,828)	(1,545,614)
Administrative expense	55,641	56,547
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	2,223,720	2,100,995
Recognition of beginning of year deferred inflows of resources as OPEB expense	(4,349,880)	(3,169,569)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>39,192</u>	<u>(1,649)</u>
OPEB Expense	(\$4,102,952)	(\$571,853)

Section 2: GASB 75 Information

OPEB expense (continued)

First 5

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$148,784	\$135,181
Interest on the Total OPEB Liability	374,379	339,523
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	4,681	7,964
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(16,975)	(9,113)
Expensed portion of current-period changes of assumptions or other inputs	(25,377)	37,905
Member contributions	0	0
Projected earnings on plan investments	(361,642)	(294,376)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(360,331)	(166,042)
Administrative expense	6,841	6,075
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	273,396	225,706
Recognition of beginning of year deferred inflows of resources as OPEB expense	(534,797)	(340,501)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>16,289</u>	<u>8,325</u>
OPEB Expense	(\$474,752)	(\$49,353)

Section 2: GASB 75 Information

OPEB expense (continued)

Housing Authority

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$140,762	\$134,607
Interest on the Total OPEB Liability	354,196	338,080
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(1,834)	6,652
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(16,060)	(9,075)
Expensed portion of current-period changes of assumptions or other inputs	(24,009)	37,744
Member contributions	0	0
Projected earnings on plan investments	(342,145)	(293,126)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(340,905)	(165,337)
Administrative expense	6,472	6,049
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	258,657	224,747
Recognition of beginning of year deferred inflows of resources as OPEB expense	(505,965)	(339,054)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	(11,061)	(17,713)
OPEB Expense	(\$481,892)	(\$76,426)

Section 2: GASB 75 Information

OPEB expense (continued)

LARPD

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$143,225	\$151,632
Interest on the Total OPEB Liability	360,393	380,848
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(15,553)	13,130
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(16,341)	(10,223)
Expensed portion of current-period changes of assumptions or other inputs	(24,429)	42,519
Member contributions	0	0
Projected earnings on plan investments	(348,131)	(330,206)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(346,870)	(186,252)
Administrative expense	6,585	6,814
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	263,182	253,178
Recognition of beginning of year deferred inflows of resources as OPEB expense	(514,818)	(381,945)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	4,357	(8,773)
OPEB Expense	(\$488,400)	(\$69,278)

Section 2: GASB 75 Information

OPEB expense (continued)

ACOE

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Components of OPEB Expense	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Service cost	\$14,988	\$14,119
Interest on the Total OPEB Liability	37,713	35,464
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	3	63
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	(1,710)	(952)
Expensed portion of current-period changes of assumptions or other inputs	(2,556)	3,959
Member contributions	0	0
Projected earnings on plan investments	(36,430)	(30,748)
Expensed portion of current-period differences between actual and projected earnings on plan investments	(36,298)	(17,344)
Administrative expense	689	635
Other	0	0
Recognition of beginning of year deferred outflows of resources as OPEB expense	27,541	23,576
Recognition of beginning of year deferred inflows of resources as OPEB expense	(53,873)	(35,566)
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>10,584</u>	<u>10,521</u>
OPEB Expense	(\$39,349)	\$3,727

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources

Total For All Employers

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$2,606,650	\$2,502,135
Changes of assumptions or other inputs	61,696,859	81,255,541
Net difference between projected and actual earnings on OPEB plan investments	0	0
Difference between expected and actual experience in the Total OPEB Liability	0	0
Total Deferred Outflows of Resources	\$64,303,509	\$83,757,676
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$2,606,650	\$2,502,135
Changes of assumptions or other inputs	34,919,177	6,289,027
Net difference between projected and actual earnings on OPEB plan investments	452,461,683	189,286,095
Difference between expected and actual experience in the Total OPEB Liability	69,230,218	64,759,701
Total Deferred Inflows of Resources	\$559,217,728	\$262,836,958
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:		
Reporting Date for Employer under GASB 75 Year Ended June 30:		
	2022	N/A
	2023	(\$112,448,382)
	2024	(156,125,873)
	2025	(130,844,843)
	2026	(86,487,096)
	2027	(5,961,965)
	2028	(3,046,060)
	Thereafter	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Alameda County

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020	
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,074,053	\$1,206,194	
Changes of assumptions or other inputs	47,611,249	62,650,700	
Net difference between projected and actual earnings on OPEB plan investments	0	0	
Difference between expected and actual experience in the Total OPEB Liability	0	0	
Total Deferred Outflows of Resources	\$48,685,302	\$63,856,894	
Deferred Inflows of Resources			
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$168,756	\$269,207	
Changes of assumptions or other inputs	26,947,006	4,849,048	
Net difference between projected and actual earnings on OPEB plan investments	349,163,091	145,945,820	
Difference between expected and actual experience in the Total OPEB Liability	53,424,715	49,931,864	
Total Deferred Inflows of Resources	\$429,703,568	\$200,995,939	
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:			
Reporting Date for Employer under GASB 75 Year Ended June 30:			
	2022	N/A	(\$45,163,774)
	2023	(\$86,621,072)	(16,783,372)
	2024	(120,294,691)	(50,428,013)
	2025	(100,721,440)	(30,871,538)
	2026	(66,530,854)	3,289,618
	2027	(4,505,821)	2,818,034
	2028	(2,344,388)	0
	Thereafter	0	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Health System

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$861,301	\$487,409
Changes of assumptions or other inputs	11,026,735	14,236,848
Net difference between projected and actual earnings on OPEB plan investments	0	0
Difference between expected and actual experience in the Total OPEB Liability	0	0
Total Deferred Outflows of Resources	\$11,888,036	\$14,724,257
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,531,205	\$1,901,560
Changes of assumptions or other inputs	6,240,910	1,101,905
Net difference between projected and actual earnings on OPEB plan investments	80,865,952	33,164,967
Difference between expected and actual experience in the Total OPEB Liability	12,373,131	11,346,599
Total Deferred Inflows of Resources	\$101,011,198	\$47,515,031
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:		
Reporting Date for Employer under GASB 75 Year Ended June 30:		
2022	N/A	(\$10,488,677)
2023	(\$20,188,803)	(4,039,469)
2024	(28,045,734)	(11,742,934)
2025	(23,640,780)	(7,426,808)
2026	(15,662,327)	395,788
2027	(1,074,162)	511,326
2028	(511,356)	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Superior Court

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020	
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$415,395	\$520,054	
Changes of assumptions or other inputs	2,232,756	3,244,865	
Net difference between projected and actual earnings on OPEB plan investments	0	0	
Difference between expected and actual experience in the Total OPEB Liability	0	0	
Total Deferred Outflows of Resources	\$2,648,151	\$3,764,919	
Deferred Inflows of Resources			
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$723,880	\$203,737	
Changes of assumptions or other inputs	1,263,695	251,146	
Net difference between projected and actual earnings on OPEB plan investments	16,374,198	7,558,964	
Difference between expected and actual experience in the Total OPEB Liability	2,505,382	2,586,118	
Total Deferred Inflows of Resources	\$20,867,155	\$10,599,965	
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:			
Reporting Date for Employer under GASB 75 Year Ended June 30:			
	2022	N/A	(\$2,306,988)
	2023	(\$4,140,296)	(837,084)
	2024	(5,709,141)	(2,569,499)
	2025	(4,759,721)	(1,525,403)
	2026	(3,160,200)	240,234
	2027	(304,187)	163,694
	2028	(145,459)	0
	Thereafter	0	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

First 5

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020	
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$90,869	\$82,806	
Changes of assumptions or other inputs	274,507	348,589	
Net difference between projected and actual earnings on OPEB plan investments	0	0	
Difference between expected and actual experience in the Total OPEB Liability	0	0	
Total Deferred Outflows of Resources	\$365,376	\$431,395	
Deferred Inflows of Resources			
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$922	\$1,470	
Changes of assumptions or other inputs	155,365	26,980	
Net difference between projected and actual earnings on OPEB plan investments	2,013,129	812,045	
Difference between expected and actual experience in the Total OPEB Liability	308,025	277,822	
Total Deferred Inflows of Resources	\$2,477,441	\$1,118,317	
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:			
Reporting Date for Employer under GASB 75 Year Ended June 30:			
	2022	N/A	(\$235,757)
	2023	(\$479,344)	(77,848)
	2024	(673,504)	(265,052)
	2025	(561,401)	(156,974)
	2026	(368,133)	29,229
	2027	(17,625)	19,480
	2028	(12,058)	0
	Thereafter	0	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

Housing Authority

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020	
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$30,133	\$36,785	
Changes of assumptions or other inputs	259,708	347,109	
Net difference between projected and actual earnings on OPEB plan investments	0	0	
Difference between expected and actual experience in the Total OPEB Liability	0	0	
Total Deferred Outflows of Resources	\$289,841	\$383,894	
Deferred Inflows of Resources			
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$63,518	\$71,474	
Changes of assumptions or other inputs	146,989	26,866	
Net difference between projected and actual earnings on OPEB plan investments	1,904,599	808,595	
Difference between expected and actual experience in the Total OPEB Liability	291,419	276,642	
Total Deferred Inflows of Resources	\$2,406,525	\$1,183,577	
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:			
Reporting Date for Employer under GASB 75 Year Ended June 30:			
	2022	N/A	(\$262,036)
	2023	(\$486,237)	(104,798)
	2024	(668,458)	(289,744)
	2025	(558,454)	(178,163)
	2026	(366,721)	16,338
	2027	(23,405)	18,720
	2028	(13,409)	0
	Thereafter	0	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

LARPD

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$90,047	\$111,646
Changes of assumptions or other inputs	264,251	391,019
Net difference between projected and actual earnings on OPEB plan investments	0	0
Difference between expected and actual experience in the Total OPEB Liability	0	0
Total Deferred Outflows of Resources	\$354,298	\$502,665
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$115,314	\$49,812
Changes of assumptions or other inputs	149,561	30,264
Net difference between projected and actual earnings on OPEB plan investments	1,937,921	910,884
Difference between expected and actual experience in the Total OPEB Liability	296,517	311,637
Total Deferred Inflows of Resources	\$2,499,313	\$1,302,597
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:		
Reporting Date for Employer under GASB 75 Year Ended June 30:		
2022	N/A	(\$278,367)
2023	(\$492,819)	(101,238)
2024	(675,541)	(307,071)
2025	(556,809)	(174,961)
2026	(367,690)	37,630
2027	(34,131)	24,075
2028	(18,025)	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

ACOE

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Deferred Outflows of Resources	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020	
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$44,852	\$57,241	
Changes of assumptions or other inputs	27,653	36,411	
Net difference between projected and actual earnings on OPEB plan investments	0	0	
Difference between expected and actual experience in the Total OPEB Liability	0	0	
Total Deferred Outflows of Resources	\$72,505	\$93,652	
Deferred Inflows of Resources			
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,055	\$4,875	
Changes of assumptions or other inputs	15,651	2,818	
Net difference between projected and actual earnings on OPEB plan investments	202,793	84,820	
Difference between expected and actual experience in the Total OPEB Liability	31,029	29,019	
Total Deferred Inflows of Resources	\$252,528	\$121,532	
Deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as follows:			
Reporting Date for Employer under GASB 75 Year Ended June 30:			
	2022	N/A	(\$15,743)
	2023	(\$39,811)	751
	2024	(58,804)	(18,236)
	2025	(46,238)	(5,672)
	2026	(31,171)	9,391
	2027	(2,634)	1,629
	2028	(1,365)	0
	Thereafter	0	0

¹ Calculated in accordance with Paragraphs 64 and 65 of GASB 75

Section 2: GASB 75 Information

Deferred outflows of resources and deferred inflows of resources (continued)

There are changes in each employer's proportionate share of the total Net OPEB Liability (NOL) during the measurement period ended December 31, 2021. The net effect of the change on the employer's proportionate share of the collective NOL and collective deferred outflows of resources and deferred inflows of resources is recognized over the average of the expected remaining service lives of all employees that are provided with OPEB benefits through ACERA which is 6.32¹ years determined as of December 31, 2020 (the beginning of the measurement period ended December 31, 2021). This is described in Paragraph 64 of GASB 75.

The average of the expected service lives of all employees is determined by:

- Calculating each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

¹ The remaining service lives of all employees of 6.32 years used here for GASB 75 is different from the 5.05 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.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability

Total for All Employers

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	100.000%	\$135,247,221	\$947,567,631	14.27%	85.50%
2018	100.000%	27,478,286	995,178,209	2.76%	97.33%
2019	100.000%	232,896,579	1,046,033,851	22.26%	77.91%
2020	100.000%	112,934,274	1,081,586,887	10.44%	89.57%
2021	100.000%	6,688,042	1,111,848,569	0.60%	99.44%
2022	100.000%	(420,563,391)	1,153,918,121	(36.45)%	134.96%

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability (continued)

Alameda County

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	76.785%	\$103,849,869	\$670,675,915	15.48%	85.50%
2018	76.289%	20,962,931	696,359,743	3.01%	97.33%
2019	76.351%	177,817,632	728,698,264	24.40%	77.91%
2020	76.639%	86,553,526	757,563,567	11.43%	89.57%
2021	77.104%	5,156,701	784,654,614	0.66%	99.44%
2022	77.170%	(324,547,291)	816,272,092	(39.76)%	134.96%

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability (continued)

Health System

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	17.920%	\$24,236,173	\$216,685,931	11.18%	85.50%
2018	18.702%	5,139,101	239,207,087	2.15%	97.33%
2019	18.782%	43,743,260	255,247,270	17.14%	77.91%
2020	18.207%	20,561,615	257,591,438	7.98%	89.57%
2021	17.521%	1,171,817	257,126,856	0.46%	99.44%
2022	17.872%	(75,164,948)	270,985,189	(27.74)%	134.96%

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability (continued)

Superior Court

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	3.946%	\$5,336,372	\$46,866,752	11.39%	85.50%
2018	3.763%	1,034,117	46,437,348	2.23%	97.33%
2019	3.630%	8,454,384	48,293,563	17.51%	77.91%
2020	3.861%	4,360,131	52,163,782	8.36%	89.57%
2021	3.993%	267,081	55,376,411	0.48%	99.44%
2022	3.619%	(15,219,826)	52,057,810	(29.24)%	134.96%

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability (continued)

First 5

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	0.371%	\$502,287	\$4,416,769	11.37%	85.50%
2018	0.369%	101,306	4,562,701	2.22%	97.33%
2019	0.379%	883,354	4,952,333	17.84%	77.91%
2020	0.403%	455,283	5,423,220	8.40%	89.57%
2021	0.429%	28,692	5,953,576	0.48%	99.44%
2022	0.445%	(1,871,205)	6,311,029	(29.65)%	134.96%

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability (continued)

Housing Authority

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	0.477%	\$644,757	\$4,354,275	14.81%	85.50%
2018	0.452%	124,068	4,299,288	2.89%	97.33%
2019	0.450%	1,047,799	4,512,036	23.22%	77.91%
2020	0.406%	458,037	4,347,895	10.53%	89.57%
2021	0.427%	28,570	4,675,355	0.61%	99.44%
2022	0.421%	(1,770,326)	4,748,361	(37.28)%	134.96%

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability (continued)

LARPD

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	0.492%	\$665,608	\$4,487,952	14.83%	85.50%
2018	0.425%	116,763	4,312,042	2.71%	97.33%
2019	0.408%	950,150	4,330,385	21.94%	77.91%
2020	0.439%	495,308	4,496,985	11.01%	89.57%
2021	0.481%	32,184	4,061,757	0.79%	99.44%
2022	0.428%	(1,801,299)	3,543,640	(50.83)%	134.96%

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of proportionate share of the Net OPEB Liability (continued)

ACOE

Reporting Date for Employer under GASB 75 as of June 30	Proportion of the Net OPEB Liability	Proportionate share of Net OPEB Liability	Covered employee payroll ¹	Proportionate share of the Net OPEB Liability as a percentage of its covered employee payroll	Plan's Fiduciary Net Position as a percentage of the Total OPEB Liability
2017	0.009%	\$12,155	\$80,037	15.19%	85.50%
2018	0.000%	0	0	N/A	N/A
2019	0.000%	0	0	N/A	N/A
2020	0.045%	50,374	0	N/A	N/A
2021	0.045%	2,997	0	N/A	N/A
2022	0.045%	(188,496)	0	N/A	N/A

¹ Covered-employee payroll shown represents Compensation Earnable and Pensionable Compensation and is defined as the payroll of employees that are provided with OPEB through the OPEB plan.

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability

Total for All Employers

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$6,688,042	\$112,934,274
OPEB Expense	(111,416,496)	(15,301,333)
Employer contributions	0	0
New net deferred inflows/outflows	(374,586,279)	(117,703,351)
Change in allocation of prior deferred inflows/outflows	0	0
New net deferred inflows/outflows due to change in proportion	0	0
Recognition of prior deferred inflows/outflows	58,751,342	26,758,452
Recognition of prior deferred inflows/outflows due to change in proportion	<u>0</u>	<u>0</u>
Ending Net OPEB Liability	(\$420,563,391)	\$6,688,042

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability (continued)

Alameda County

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$5,156,701	\$86,553,526
OPEB Expense	(85,824,772)	(11,662,383)
Employer contributions	0	0
New net deferred inflows/outflows	(286,066,915)	(90,753,167)
Change in allocation of prior deferred inflows/outflows	(118,821)	(407,779)
New net deferred inflows/outflows due to change in proportion	103,757	787,836
Recognition of prior deferred inflows/outflows	45,338,206	20,631,649
Recognition of prior deferred inflows/outflows due to change in proportion	<u>(135,447)</u>	<u>7,019</u>
Ending Net OPEB Liability	(\$324,547,291)	\$5,156,701

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability (continued)

Health System

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$1,171,817	\$20,561,615
OPEB Expense	(20,004,379)	(2,875,767)
Employer contributions	0	0
New net deferred inflows/outflows	(66,947,714)	(20,622,898)
Change in allocation of prior deferred inflows/outflows	(629,218)	604,276
New net deferred inflows/outflows due to change in proportion	549,439	(1,167,471)
Recognition of prior deferred inflows/outflows	10,500,299	4,688,370
Recognition of prior deferred inflows/outflows due to change in proportion	<u>194,808</u>	<u>(16,308)</u>
Ending Net OPEB Liability	(\$75,164,948)	\$1,171,817

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability (continued)

Superior Court

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$267,081	\$4,360,131
OPEB Expense	(4,102,952)	(571,853)
Employer contributions	0	0
New net deferred inflows/outflows	(13,555,953)	(4,700,373)
Change in allocation of prior deferred inflows/outflows	670,640	(116,900)
New net deferred inflows/outflows due to change in proportion	(585,610)	225,853
Recognition of prior deferred inflows/outflows	2,126,160	1,068,574
Recognition of prior deferred inflows/outflows due to change in proportion	<u>(39,192)</u>	<u>1,649</u>
Ending Net OPEB Liability	(\$15,219,826)	\$267,081

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability (continued)

First 5

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$28,692	\$455,283
OPEB Expense	(474,752)	(49,353)
Employer contributions	0	0
New net deferred inflows/outflows	(1,666,641)	(504,953)
Change in allocation of prior deferred inflows/outflows	(28,516)	(22,795)
New net deferred inflows/outflows due to change in proportion	24,900	44,040
Recognition of prior deferred inflows/outflows	261,401	114,795
Recognition of prior deferred inflows/outflows due to change in proportion	<u>(16,289)</u>	<u>(8,325)</u>
Ending Net OPEB Liability	(\$1,871,205)	\$28,692

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability (continued)

Housing Authority

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$28,570	\$458,037
OPEB Expense	(481,892)	(76,426)
Employer contributions	0	0
New net deferred inflows/outflows	(1,576,790)	(502,806)
Change in allocation of prior deferred inflows/outflows	(11,174)	(19,040)
New net deferred inflows/outflows due to change in proportion	(9,757)	36,785
Recognition of prior deferred inflows/outflows	247,308	114,307
Recognition of prior deferred inflows/outflows due to change in proportion	<u>11,061</u>	<u>17,713</u>
Ending Net OPEB Liability	(\$1,770,326)	\$28,570

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability (continued)

LARPD

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$32,184	\$495,308
OPEB Expense	(488,400)	(69,278)
Employer contributions	0	0
New net deferred inflows/outflows	(1,604,376)	(566,412)
Change in allocation of prior deferred inflows/outflows	94,758	(37,581)
New net deferred inflows/outflows due to change in proportion	(82,744)	72,607
Recognition of prior deferred inflows/outflows	251,636	128,767
Recognition of prior deferred inflows/outflows due to change in proportion	<u>(4,357)</u>	<u>8,773</u>
Ending Net OPEB Liability	(\$1,801,299)	\$32,184

Section 2: GASB 75 Information

Schedule of reconciliation of Net OPEB Liability (continued)

ACOE

Reporting Date for Employer under GASB 75 Measurement Date for Employer under GASB 75 Reconciliation of Net OPEB liability	June 30, 2022 December 31, 2021	June 30, 2021 December 31, 2020
Beginning Net OPEB Liability	\$2,997	\$50,374
OPEB Expense	(39,349)	3,727
Employer contributions	0	0
New net deferred inflows/outflows	(167,890)	(52,742)
Change in allocation of prior deferred inflows/outflows	(17)	(181)
New net deferred inflows/outflows due to change in proportion	15	350
Recognition of prior deferred inflows/outflows	26,332	11,990
Recognition of prior deferred inflows/outflows due to change in proportion	<u>(10,584)</u>	<u>(10,521)</u>
Ending Net OPEB Liability	(\$188,496)	\$2,997

Section 2: GASB 75 Information

Schedule of recognition of change in total Net OPEB Liability

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total OPEB Liability

Reporting Date for Employer Under GASB 75 Year Ended June 30	Differences between Expected and Actual Experience	Recognition Period (Years)	Reporting Date for Employer under GASB 75 Year Ended June 30:							
			2018	2019	2020	2021	2022	2023	2024	2025
2018	(\$21,627,766)	6.68	(\$3,237,690)	(\$3,237,690)	(\$3,237,690)	(\$3,237,690)	(\$3,237,690)	(\$3,237,690)	(\$2,201,626)	\$0
2019	(27,712,610)	6.67	N/A	(4,154,814)	(4,154,814)	(4,154,814)	(4,154,814)	(4,154,814)	(4,154,814)	(2,783,726)
2020	(41,706,128)	6.61	N/A	N/A	(6,309,550)	(6,309,550)	(6,309,550)	(6,309,550)	(6,309,550)	(6,309,550)
2021	(13,871,821)	6.53	N/A	N/A	N/A	(2,124,322)	(2,124,322)	(2,124,322)	(2,124,322)	(2,124,322)
2022	(24,112,098)	6.32	N/A	N/A	N/A	N/A	(3,815,205)	(3,815,205)	(3,815,205)	(3,815,205)
Net increase (decrease) in OPEB expense			(\$3,237,690)	(\$7,392,504)	(\$13,702,054)	(\$15,826,376)	(\$19,641,581)	(\$19,641,581)	(\$18,605,517)	(\$15,032,803)

Reporting Date for Employer Under GASB 75 Year Ended June 30	Differences between Expected and Actual Experience	Recognition Period (Years)	Reporting Date for Employer under GASB 75 Year Ended June 30:							
			2026	2027	2028	2029	2030	2031	2032	2033
2018	(\$21,627,766)	6.68	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	(27,712,610)	6.67	0	0	0	0	0	0	0	0
2020	(41,706,128)	6.61	(3,848,828)	0	0	0	0	0	0	0
2021	(13,871,821)	6.53	(2,124,322)	(1,125,889)	0	0	0	0	0	0
2022	(24,112,098)	6.32	(3,815,205)	(3,815,205)	(1,220,868)	0	0	0	0	0
Net increase (decrease) in OPEB expense			(\$9,788,355)	(\$4,941,094)	(\$1,220,868)	\$0	\$0	\$0	\$0	\$0

As described in the Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources, for the current period, the average of the expected remaining service lives of all employees that are provided with OPEB through ACERA (active and inactive employees) determined as of December 31, 2020 (the beginning of the measurement period ending December 31, 2021) is 6.32 years.

Section 2: GASB 75 Information

Schedule of recognition of changes in total Net OPEB Liability (continued)

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Assumption Changes

Reporting Date for Employer Under GASB 75 Year Ended June 30	Effects of Assumption Changes	Recognition Period (Years)	Reporting Date for Employer under GASB 75 Year Ended June 30:							
			2018	2019	2020	2021	2022	2023	2024	2025
2018	\$58,973,316	6.68	\$8,828,341	\$8,828,341	\$8,828,341	\$8,828,341	\$8,828,341	\$8,828,341	\$6,003,270	\$0
2019	(11,429,923)	6.67	N/A	(1,713,632)	(1,713,632)	(1,713,632)	(1,713,632)	(1,713,632)	(1,713,632)	(1,148,131)
2020	12,524,469	6.61	N/A	N/A	1,894,776	1,894,776	1,894,776	1,894,776	1,894,776	1,894,776
2021	57,696,237	6.53	N/A	N/A	N/A	8,835,565	8,835,565	8,835,565	8,835,565	8,835,565
2022	(36,047,500)	6.32	N/A	N/A	N/A	N/A	(5,703,718)	(5,703,718)	(5,703,718)	(5,703,718)
Net increase (decrease) in OPEB expense			\$8,828,341	\$7,114,709	\$9,009,485	\$17,845,050	\$12,141,332	\$12,141,332	\$9,316,261	\$3,878,492

Reporting Date for Employer Under GASB 75 Year Ended June 30	Effects of Assumption Changes	Recognition Period (Years)	Reporting Date for Employer under GASB 75 Year Ended June 30:							
			2026	2027	2028	2029	2030	2031	2032	2033
2018	\$58,973,316	6.68	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	(11,429,923)	6.67	0	\$0	0	0	0	0	0	0
2020	12,524,469	6.61	1,155,813	\$0	0	0	0	0	0	0
2021	57,696,237	6.53	8,835,565	\$4,682,847	0	0	0	0	0	0
2022	(36,047,500)	6.32	(5,703,718)	(5,703,718)	(1,825,192)	0	0	0	0	0
Net increase (decrease) in OPEB expense			\$4,287,660	(\$1,020,871)	(\$1,825,192)	\$0	\$0	\$0	\$0	\$0

As described in the Schedule of Deferred Outflows of Resources and Deferred Inflows of Resources, for the current period, the average of the expected remaining service lives of all employees that are provided with OPEB through ACERA (active and inactive employees) determined as of December 31, 2020 (the beginning of the measurement period ending December 31, 2021) is 6.32 years.

Section 2: GASB 75 Information

Schedule of recognition of changes in total Net OPEB Liability (continued)

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences between Projected and Actual Earnings on OPEB Plan Investments

Reporting Date for Employer Under GASB 75 Year Ended June 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	Reporting Date for Employer under GASB 75 Year Ended June 30:							
			2018	2019	2020	2021	2022	2023	2024	2025
2018	(\$184,041,417)	5.00	(\$36,808,283)	(\$36,808,283)	(\$36,808,283)	(\$36,808,283)	(\$36,808,285)	\$0	\$0	\$0
2019	209,442,414	5.00	N/A	41,888,483	41,888,483	41,888,483	41,888,483	41,888,482	0	0
2020	(135,730,417)	5.00	N/A	N/A	(27,146,083)	(27,146,083)	(27,146,083)	(27,146,083)	(27,146,085)	0
2021	(193,520,655)	5.00	N/A	N/A	N/A	(38,704,131)	(38,704,131)	(38,704,131)	(38,704,131)	(38,704,131)
2022	(404,932,007)	5.00	N/A	N/A	N/A	N/A	(80,986,403)	(80,986,401)	(80,986,401)	(80,986,401)
Net increase (decrease) in OPEB expense			(\$36,808,283)	\$5,080,200	(\$22,065,883)	(\$60,770,014)	(\$141,756,419)	(\$104,948,133)	(\$146,836,617)	(\$119,690,532)

Reporting Date for Employer Under GASB 75 Year Ended June 30	Difference between Projected and Actual Earnings	Recognition Period (Years)	Reporting Date for Employer under GASB 75 Year Ended June 30:							
			2026	2027	2028	2029	2030	2031	2032	2033
2018	(\$184,041,417)	5.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	209,442,414	5.00	0	0	0	0	0	0	0	0
2020	(135,730,417)	5.00	0	0	0	0	0	0	0	0
2021	(193,520,655)	5.00	0	0	0	0	0	0	0	0
2022	(404,932,007)	5.00	(80,986,401)	0	0	0	0	0	0	0
Net increase (decrease) in OPEB expense			(\$80,986,401)	\$0	\$0	\$0	\$0	\$0	\$0	\$0

The differences between projected and actual earnings on OPEB plan investments are recognized over a five-year period per Paragraph 43b. of GASB 75.

Section 2: GASB 75 Information

Schedule of recognition of changes in total Net OPEB Liability (continued)

Total Increase (Decrease) in OPEB Expense

Reporting Date for Employer Under GASB 75 Year Ended June 30	Total Differences and Changes	Reporting Date for Employer under GASB 75 Year Ended June 30:							
		2018	2019	2020	2021	2022	2023	2024	2025
2018	(\$146,695,867)	(\$31,217,632)	(\$31,217,632)	(\$31,217,632)	(\$31,217,632)	(\$31,217,634)	\$5,590,651	\$3,801,644	\$0
2019	170,299,881	N/A	36,020,037	36,020,037	36,020,037	36,020,037	36,020,036	(5,868,446)	(3,931,857)
2020	(164,912,076)	N/A	N/A	(31,560,857)	(31,560,857)	(31,560,857)	(31,560,857)	(31,560,859)	(4,414,774)
2021	(149,696,239)	N/A	N/A	N/A	(31,992,888)	(31,992,888)	(31,992,888)	(31,992,888)	(31,992,888)
2022	(465,091,605)	N/A	N/A	N/A	N/A	(90,505,326)	(90,505,324)	(90,505,324)	(90,505,324)
Net increase (decrease) in OPEB expense		(\$31,217,632)	\$4,802,405	(\$26,758,452)	(\$58,751,340)	(\$149,256,668)	(\$112,448,382)	(\$156,125,873)	(\$130,844,843)

Reporting Date for Employer Under GASB 75 Year Ended June 30	Total Differences and Changes	Reporting Date for Employer under GASB 75 Year Ended June 30:							
		2026	2027	2028	2029	2030	2031	2032	2033
2018	(\$146,695,867)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	170,299,881	0	0	0	0	0	0	0	0
2020	(164,912,076)	(2,693,015)	0	0	0	0	0	0	0
2021	(149,696,239)	6,711,243	3,556,958	0	0	0	0	0	0
2022	(465,091,605)	(90,505,324)	(9,518,923)	(3,046,060)	0	0	0	0	0
Net increase (decrease) in OPEB expense		(\$86,487,096)	(\$5,961,965)	(\$3,046,060)	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 75 Information

Allocation of changes in total Net OPEB Liability

In addition to the amounts shown in the Schedule of Recognition of Changes in Total Net OPEB Liability, there are changes in each employer's proportionate share of the total Net OPEB Liability (NOL) during the measurement period ending on December 31, 2021. The net effect of the change on the employer's proportionate share of the collective NOL and collective deferred outflows of resources and deferred inflows of resources is also recognized over the average of the expected remaining service lives of all employees shown previously. These amounts are shown in the following table, with the corresponding amounts for the measurement periods ending on December 31 beginning in 2017 shown on the following pages. While these amounts are different for each employer, they sum to zero for ACERA.

Section 2: GASB 75 Information

Allocation of changes of total Net OPEB Liability (continued)

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2021

	Total Change to be Recognized	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	2028	Thereafter
Alameda County	\$123,259	6.32	\$19,502	\$19,502	\$19,502	\$19,502	\$19,502	\$19,502	\$6,247	\$0
Health System	652,717	6.32	103,278	103,278	103,278	103,278	103,278	103,278	33,049	0
Superior Court	(695,687)	6.32	(110,077)	(110,077)	(110,077)	(110,077)	(110,077)	(110,077)	(35,225)	0
First 5	29,581	6.32	4,681	4,681	4,681	4,681	4,681	4,681	1,495	0
Housing Authority	(11,591)	6.32	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(1,834)	(587)	0
LARPD	(98,297)	6.32	(15,553)	(15,553)	(15,553)	(15,553)	(15,553)	(15,553)	(4,979)	0
ACOE	<u>18</u>	6.32	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>0</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 75 Information

Allocation of changes of total Net OPEB Liability (continued)

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2020

	Total Change to be Recognized	Recognition Period (Years)	2021	2022	2023	2024	2025	2026	2027	Thereafter
Alameda County	\$930,302	6.53	\$142,466	\$142,466	\$142,466	\$142,466	\$142,466	\$142,466	\$75,506	\$0
Health System	(1,378,587)	6.53	(211,116)	(211,116)	(211,116)	(211,116)	(211,116)	(211,116)	(111,891)	0
Superior Court	266,694	6.53	40,841	40,841	40,841	40,841	40,841	40,841	21,648	0
First 5	52,004	6.53	7,964	7,964	7,964	7,964	7,964	7,964	4,220	0
Housing Authority	43,437	6.53	6,652	6,652	6,652	6,652	6,652	6,652	3,525	0
LARPD	85,737	6.53	13,130	13,130	13,130	13,130	13,130	13,130	6,957	0
ACOE	413	6.53	63	63	63	63	63	63	35	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 75 Information

Allocation of changes of total Net OPEB Liability (continued)

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2019

	Total Change to be Recognized	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	Thereafter
Alameda County	\$530,616	6.61	\$80,275	\$80,275	\$80,275	\$80,275	\$80,275	\$80,275	\$48,966	\$0
Health System	(1,052,567)	6.61	(159,239)	(159,239)	(159,239)	(159,239)	(159,239)	(159,239)	(97,133)	0
Superior Court	421,837	6.61	63,818	63,818	63,818	63,818	63,818	63,818	38,929	0
First 5	43,615	6.61	6,598	6,598	6,598	6,598	6,598	6,598	4,027	0
Housing Authority	(81,051)	6.61	(12,262)	(12,262)	(12,262)	(12,262)	(12,262)	(12,262)	(7,479)	0
LARPD	55,977	6.61	8,469	8,469	8,469	8,469	8,469	8,469	5,163	0
ACOE	81,573	6.61	<u>12,341</u>	<u>12,341</u>	<u>12,341</u>	<u>12,341</u>	<u>12,341</u>	<u>12,341</u>	<u>7,527</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 75 Information

Allocation of changes of total Net OPEB Liability (continued)

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2018

	Total Change to be Recognized	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	Thereafter
Alameda County	\$87,763	6.67	\$13,157	\$13,157	\$13,157	\$13,157	\$13,157	\$13,157	\$8,821	\$0
Health System	114,168	6.67	17,117	17,117	17,117	17,117	17,117	17,117	11,466	0
Superior Court	(190,555)	6.67	(28,569)	(28,569)	(28,569)	(28,569)	(28,569)	(28,569)	(19,141)	0
First 5	15,172	6.67	2,275	2,275	2,275	2,275	2,275	2,275	1,522	0
Housing Authority	(2,306)	6.67	(346)	(346)	(346)	(346)	(346)	(346)	(230)	0
LARPD	(24,242)	6.67	(3,634)	(3,634)	(3,634)	(3,634)	(3,634)	(3,634)	(2,438)	0
ACOE	<u>0</u>	6.67	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 2: GASB 75 Information

Allocation of changes of total Net OPEB Liability (continued)

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Year Ended December 31, 2017

	Total Change to be Recognized	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	Thereafter
Alameda County	(\$671,011)	6.68	(\$100,451)	(\$100,451)	(\$100,451)	(\$100,451)	(\$100,451)	(\$100,451)	(\$68,305)	\$0
Health System	1,058,312	6.68	158,430	158,430	158,430	158,430	158,430	158,430	107,732	0
Superior Court	(246,481)	6.68	(36,898)	(36,898)	(36,898)	(36,898)	(36,898)	(36,898)	(25,093)	0
First 5	(3,662)	6.68	(548)	(548)	(548)	(548)	(548)	(548)	(374)	0
Housing Authority	(34,099)	6.68	(5,105)	(5,105)	(5,105)	(5,105)	(5,105)	(5,105)	(3,469)	0
LARPD	(90,904)	6.68	(13,608)	(13,608)	(13,608)	(13,608)	(13,608)	(13,608)	(9,256)	0
ACOE	(12,155)	6.68	(1,820)	(1,820)	(1,820)	(1,820)	(1,820)	(1,820)	(1,235)	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Section 3: Actuarial Assumptions and Methods and Appendices

Actuarial assumptions and methods

For December 31, 2021 Measurement Date and Employer Reporting as of June 30, 2022

Demographic Assumptions

Rationale for Assumptions:

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the December 1, 2016 through November 30, 2019 Actuarial Experience Study report dated September 9, 2020 and in our letter dated May 13, 2022 regarding the health trend assumptions for the December 31, 2021 SRBR retiree health actuarial valuation, and in our letter dated April 15, 2021 regarding recommended parameters to reflect the demographic driven changes for the December 31, 2020 SRBR retiree health actuarial valuation. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all tiers. These assumptions were adopted by the Board.

Post-Retirement Mortality Rates – Healthy:

Healthy

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

Disabled

- **General Members:** Pub-2010 Non-Safety Disabled Retiree Headcount-Weighted Mortality Tables (separate tables for males and females) with rates decreased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2019.
- **Safety Members:** Pub-2010 Safety Disabled Retiree Headcount-Weighted Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2019.

Beneficiaries

- **All Beneficiaries:** Pub-2010 General Contingent Survivor Headcount-Weighted Above-Median Mortality Tables (separate tables for males and females) with rates increased by 5% for males, projected generationally with the two-dimensional mortality improvement scale MP-2019.

The Pub-2010 mortality tables and adjustments as shown above reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Section 3: Actuarial Assumptions and Methods and Appendices

Pre-Retirement Mortality Rates:

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

Age	Rate (%)			
	General ¹		Safety ¹	
	Male	Female	Male	Female
20	0.04	0.01	0.04	0.02
25	0.03	0.01	0.03	0.02
30	0.04	0.02	0.04	0.02
35	0.05	0.02	0.04	0.03
40	0.06	0.04	0.05	0.04
45	0.09	0.05	0.07	0.06
50	0.14	0.08	0.11	0.08
55	0.20	0.12	0.15	0.11
60	0.29	0.18	0.24	0.16
65	0.42	0.28	0.38	0.22

All pre-retirement deaths are assumed to be non-service connected.

¹ Generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Disability Incidence:

Age	Rate (%)	
	General	Safety
20	0.00	0.00
25	0.01	0.03
30	0.03	0.26
35	0.07	0.64
40	0.09	1.22
45	0.16	1.50
50	0.26	2.10
55	0.33	2.65
60	0.38	3.80

65% of General disabilities are assumed to be service connected disabilities. The other 35% are assumed to be non-service connected disabilities.

100% of Safety disabilities are assumed to be service connected disabilities.

Section 3: Actuarial Assumptions and Methods and Appendices

Termination:

Years of Service	Rate (%)	
	General	Safety
0-1	12.00	4.00
1-2	9.00	4.00
2-3	8.00	4.00
3-4	6.00	3.50
4-5	6.00	3.00
5-6	6.00	2.00
6-7	5.25	1.80
7-8	4.25	1.70
8-9	3.75	1.60
9-16	3.50	1.50
16-17	3.40	1.40
17-18	3.30	1.30
18-19	3.20	1.20
19-20	3.10	1.10
20 or more	3.00	1.00

For members with less than five years of service, 55% of all terminated members are assumed to choose a refund of contributions and the other 45% are assumed to choose a deferred vested benefit. For members with five or more years of service, 30% of all terminated members are assumed to choose a refund of contributions and the other 70% are assumed to choose a deferred vested benefit.

No termination is assumed after a member is eligible for retirement.

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Rates:

Age	Rate (%) ¹									
	General					Safety				
	Tier 1	Tier 2 ²		Tier 3	Tier 4	Tier 1 ³	Tier 2, 2D ²		Tier 2C ³	Tier 4
< 30		30+	< 30				30+			
49	0.0	0.0	0.0	0.0	0.0	0.0	12.0	18.0	0.0	0.0
50	2.0	2.0	4.0	10.0	0.0	35.0	12.0	18.0	4.0	4.0
51	4.0	2.0	4.0	10.0	0.0	30.0	10.0	24.0	2.0	2.0
52	4.0	2.0	4.0	10.0	4.0	25.0	10.0	24.0	2.0	2.0
53	5.0	2.0	4.0	10.0	2.0	35.0	10.0	25.0	3.0	3.0
54	5.0	2.0	4.0	10.0	2.0	45.0	12.0	27.0	6.0	6.0
55	6.0	2.0	4.0	12.0	5.0	45.0	12.0	29.0	10.0	10.0
56	10.0	2.5	4.5	14.0	2.5	45.0	14.0	32.0	12.0	12.0
57	12.0	4.0	5.0	16.0	3.5	45.0	16.0	32.0	20.0	20.0
58	12.0	4.0	5.0	18.0	3.5	45.0	18.0	30.0	10.0	10.0
59	14.0	4.5	8.0	20.0	4.5	45.0	18.0	30.0	15.0	15.0
60	20.0	8.0	8.5	20.0	5.0	45.0	25.0	30.0	60.0	60.0
61	20.0	9.0	13.5	20.0	5.0	45.0	25.0	30.0	60.0	60.0
62	35.0	15.0	22.5	30.0	18.0	45.0	25.0	30.0	60.0	60.0
63	30.0	15.0	22.5	25.0	15.0	45.0	25.0	30.0	60.0	60.0
64	30.0	18.0	27.0	25.0	17.0	45.0	30.0	30.0	60.0	60.0
65	30.0	25.0	27.5	50.0	25.0	100.0	100.0	100.0	100.0	100.0
66	30.0	30.0	33.0	50.0	30.0	100.0	100.0	100.0	100.0	100.0
67	30.0	30.0	33.0	50.0	30.0	100.0	100.0	100.0	100.0	100.0
68	30.0	30.0	33.0	50.0	30.0	100.0	100.0	100.0	100.0	100.0
69	35.0	35.0	38.5	50.0	35.0	100.0	100.0	100.0	100.0	100.0
70	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
71	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
72	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
73	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
74	40.0	40.0	40.0	65.0	25.0	100.0	100.0	100.0	100.0	100.0
75 & Over	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ The retirement rates only apply to members that are eligible to retire at the age shown.

² Different retirement rates are assumed for General Tier 2 and Safety Tier 2 & 2D members who have accrued less than 30 years of service and those who have accrued at least 30 years of service.

³ Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

Section 3: Actuarial Assumptions and Methods and Appendices

Retirement Age and Benefit for Deferred Vested Members:	<p>General Retirement Age: 61 Safety Retirement Age: 55</p> <p>Future deferred vested members who terminate with less than five years of service and are not vested are assumed to retire at age 70 for both General and Safety if they decide to leave their contributions on deposit. 25% of future General and 50% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 3.65% and 4.05% compensation increases are assumed per annum for General and Safety, respectively.</p>
Future Benefit Accruals:	1.0 year of service per year of employment, plus 0.003 years of additional service for General members and 0.007 years of additional service for Safety members, to anticipate conversion of unused sick leave for each year of employment.
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Inclusion of Deferred Vested Members:	All deferred vested members are included in the valuation.
Data Adjustments:	Data as of November 30 has been adjusted to December 31 by adding one month of age and, for active members, one month of service.
<u>Economic Assumptions</u>	
Net Investment Return:	7.00%
Consumer Price Index:	Increase of 2.75% per year.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.75% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 2.75% per year from the valuation date.

Section 3: Actuarial Assumptions and Methods and Appendices

Salary Increases:

The annual rate of compensation increase includes:

- Inflation at 2.75%, plus
- “Across the board” salary increases of 0.50% per year, plus
- The following merit and promotion increases:

Years of Service	Rate (%)	
	General	Safety
0-1	5.10	8.00
1-2	5.10	8.00
2-3	4.50	8.00
3-4	2.90	4.90
4-5	2.10	3.70
5-6	1.60	2.10
6-7	1.50	1.30
7-8	1.50	1.20
8-9	1.00	0.90
9-10	0.90	0.90
10-11	0.70	0.80
11 & Over	0.40	0.80

Additional Cashout Assumptions:

Additional pay elements are expected to be received during a member’s final average earnings period. The percentages, added to the final year salary, used in this valuation are:

	Service Retirement	Disability Retirement
General Tier 1	7.5%	6.5%
General Tier 2	3.0%	1.4%
General Tier 3	7.5%	6.5%
General Tier 4	N/A	N/A
Safety Tier 1	7.5%	6.4%
Safety Tier 2	2.5%	1.9%
Safety Tier 2C	2.5%	1.9%
Safety Tier 2D	2.5%	1.9%
Safety Tier 4	N/A	N/A

Section 3: Actuarial Assumptions and Methods and Appendices

Retiree Health Assumptions

Per Capita Health Costs:

The combined monthly per capita dental and vision claims cost for plan year 2021 was assumed to be \$48.12. The monthly Medicare Part B premium reimbursement for 2021 is \$148.50. For calendar year 2021, medical costs for a retiree were assumed to be as follows:

Medical Plan ⁽¹⁾	Election Assumption	Monthly Premium	Maximum Monthly Medical Allowance ⁽²⁾
Under Age 65⁽³⁾			
Kaiser HMO	80%	\$810.72	\$578.65
United Healthcare HMO Current Network	10%	\$1,150.60	\$578.65
Via Benefits Individual Insurance Exchange ⁽⁴⁾	10%	N/A ⁽⁴⁾	\$578.65
United Healthcare HMO SVA Network	0%	\$759.16	\$578.65
Age 65 and Older			
Kaiser Senior Advantage	75%	\$382.21	\$578.65
Via Benefits Individual Insurance Exchange	25%	\$309.27 ⁽⁵⁾	\$443.28

(1) There are other plans available to retirees under age 65, and age 65 and older, that have a range of premiums. We have assumed the same costs as Kaiser HMO and Kaiser Senior Advantage for current non-Medicare and Medicare retirees, respectively.

(2) The Maximum Monthly Medical Allowance of \$578.65 (\$443.28 for retirees purchasing individual insurance from the Medicare exchange) is subject to the following subsidy schedule:

Completed Years of Service	Percentage Subsidized
10-14	50%
15-19	75%
20+	100%

(3) Current retirees under age 65 are assumed to elect medical plans in the same proportion as future retirees upon age 65.

(4) Via Benefits individual insurance coverage is available to retirees under age 65 residing outside of ACERA medical plans' coverage area. We have assumed that these current retirees under age 65 will draw the Maximum Monthly Subsidy (\$578.65).

(5) The derivation of amount expected to be paid in 2021 from the Health Reimbursement Account for members with 20 plus years of service is shown in the table on the following page. We have also derived the amount expected to be paid for members with 10-14 and 15-19 years of service.

Section 3: Actuarial Assumptions and Methods and Appendices

Per Capita Health Costs (continued):

(Years of Service Category)	Derivation of Via Benefits Monthly Per Capita Costs		
	10-14	15-19	20+
1. Maximum MMA for 2020	\$221.64	\$332.46	\$443.28
2. Total of Maximum MMA (From Jan. 2020 to Dec. 2020)	\$506,447	\$805,741	\$5,138,819
3. Total of Actual Reimbursement (From Jan. 2020 to Dec. 2020)	\$377,103	\$577,016	\$3,093,872
4. Ratio of Actual Reimbursement to Maximum 2020 MMA [(3) / (2)]	74.46%	71.61%	60.21%
5. Average Monthly Per Capita Cost for 2020 [(1) x (4)]	\$165.03	\$238.07	\$266.90
6. Maximum MMA for 2021	\$221.64	\$332.46	\$443.28
7. Increase in Average Monthly Per Capita Cost due to the Change in Maximum MMA from 2020 to 2021 [(6) / (1)] x (5)	\$165.03	\$238.07	\$266.90
8. Increase for Expected Medical Trend (5.35% ⁽¹⁾) from 2020 to 2021 [(7) x 1.0535]	\$173.86	\$250.81	\$281.18
9. Increase for Additional 10% Margin for 2020 Expenses Incurred in 2020 but Reimbursed after December 2020 [(8) x 1.10]	\$191.25	\$275.89	\$309.30

⁽¹⁾ 6.25% medical trend for Medicare Plans (lowest medical trend) minus 0.90% to reflect the repeal of the Health Insurance Tax (HIT).

Section 3: Actuarial Assumptions and Methods and Appendices

Per Capita Health Costs (continued):

Implicit Subsidy

We have estimated the average per capita premium for retirees under age 65 to be \$9,828 per year. Because premiums for retirees under age 65 include active participants for purposes of underwriting, the retirees receive an implicit subsidy from the actives. Had the retirees under age 65 been underwritten as a separate group, their age-based premiums would be higher for most individuals. The excess of the age-based premium over the per capita premium charged makes up the subsidy. Below is a sample of the age-based costs for the retirees under age 65.

Age	Average Medical ⁽¹⁾			
	Retiree		Spouse	
	Male	Female	Male	Female
50	\$10,981	\$12,508	\$7,670	\$10,043
55	13,042	13,465	10,264	11,625
60	15,488	14,513	13,741	13,483
64	17,769	15,396	17,346	15,175

⁽¹⁾ Not all ACERA employers are receiving an implicit subsidy reimbursement from the Association. For SRBR sufficiency purposes, we have applied an adjustment of 0.81 (19% reduction of the costs shown above) for our projected implicit subsidy payments to account for this fact, based on data provided by the County of Alameda's health consultant. For calculating the Actuarial Present Value of Projected Benefits and Total OPEB Liability, we have not applied the adjustment.

Adjustment of Capita Medical Costs for Age and Gender for Retirees Age 65 and Over

The following factors were applied to age 65 and over per capita costs on page 75 for 2021:

Age	Retiree		Spouse	
	Male	Female	Male	Female
65	0.9478	0.8056	N/A ⁽²⁾	N/A ⁽²⁾
70	1.0985	0.8682	N/A ⁽²⁾	N/A ⁽²⁾
75	1.1838	0.9345	N/A ⁽²⁾	N/A ⁽²⁾
80+	1.2748	1.0075	N/A ⁽²⁾	N/A ⁽²⁾

⁽²⁾ We do not value any implicit subsidy for spouses over age 65.

Section 3: Actuarial Assumptions and Methods and Appendices

Participation and Coverage Election – Retired Members & Beneficiaries:

MMA

MMA on Record	Under Age 65	Upon Attaining Age 65
Current Retirees Under 65 on Valuation Date	100%	100% and assumed to choose carrier in same proportion as future retirees
Current Retirees 65 & Over on Valuation Date	N/A	100%
No MMA on Record	Under Age 65	Upon Attaining Age 65
Less than 10 Years of Service	0%	0%
10+ Years of Service		
Current Retirees Under 65 on Valuation Date	0%	50%
Current Retirees 65 & Over on Valuation Date	N/A	0%

Medicare Part B Premium Subsidy

MMA on Record	Under Age 65	Upon Attaining Age 65
Current Retirees Under 65 on Valuation Date	N/A	100%
Current Retirees 65 & Over on Valuation Date	N/A	100% if Part B reimbursement on record or purchasing individual insurance from the Medicare exchange
No MMA on Record	Under Age 65	Upon Attaining Age 65
Less than 10 Years of Service	N/A	0%
10+ Years of Service		
Current Retirees Under 65 on Valuation Date	N/A	50%
Current Retirees 65 & Over on Valuation Date	N/A	0%

Section 3: Actuarial Assumptions and Methods and Appendices

<i>Implicit Subsidy</i>	Current retirees, married dependents and surviving beneficiaries under age 65 and enrolled in an ACERA non-Medicare plan are assumed to have an implicit subsidy liability.	
<i>Dental and Vision Subsidy</i>	Current retirees not self-paying ("Voluntary" or "Under 10 YOS" dental or vision code).	
Participation and Coverage Election – Active & Inactive Vested Members:		
<i>Medical Plan Subsidy (i.e., MMA)</i>	Under Age 65	Upon Attaining Age 65
	80% of eligible members	90% of eligible members
<i>Part B Subsidy</i>	Under Age 65	Upon Attaining Age 65
	80% of eligible members (disabled only)	90% of eligible members
<i>Implicit Subsidy</i>	80% of eligible members under age 65 are assumed to have an implicit subsidy liability.	
<i>Dental and Vision Subsidy</i>	100% of eligible members.	

Section 3: Actuarial Assumptions and Methods and Appendices

Health Care Cost Trend Rates:

Health care trend measures the anticipated overall rate at which health plan costs are expected to increase in future years. The rates shown below are “net” and are applied to the net per capita costs shown above. The trend shown for a particular plan year is the rate that is to be applied to the premium for the shown calendar year to calculate the next calendar year’s projected premium. For example, the projected 2022 calendar year premium for Kaiser (under age 65) is \$843.16 per month (\$810.72 increased by 4.00%).

Calendar Year	United Healthcare					Medicare Part B
	HMO & Kaiser HMO Early Retiree ⁽²⁾	Kaiser Senior Advantage ⁽³⁾	Via Benefits ⁽³⁾	Dental ⁽⁴⁾	Vision ⁽⁵⁾	
2021	(1)	(1)	(1)	(1)	(1)	(1)
2022	7.50	6.50	6.50	0.00	0.00	4.50
2023	7.25	6.25	6.25	4.00	0.00	4.50
2024	7.00	6.00	6.00	4.00	0.00	4.50
2025	6.75	5.75	5.75	4.00	4.00	4.50
2026	6.50	5.50	5.50	4.00	4.00	4.50
2027	6.25	5.25	5.25	4.00	4.00	4.50
2028	6.00	5.00	5.00	4.00	4.00	4.50
2029	5.75	4.75	4.75	4.00	4.00	4.50
2030	5.50	4.50	4.50	4.00	4.00	4.50
2031	5.25	4.50	4.50	4.00	4.00	4.50
2032	5.00	4.50	4.50	4.00	4.00	4.50
2033	4.75	4.50	4.50	4.00	4.00	4.50
2034 & Later	4.50	4.50	4.50	4.00	4.00	4.50

(1) For calendar year 2021, assumed trends were replaced with actual trends as shown below based on actual premium renewals for 2022, as reported by ACERA. These trends were used in preparing our December 31, 2020 SRBR valuation report dated September 20, 2021.

Kaiser HMO Early Retiree	United Healthcare HMO Early Retiree	Kaiser Senior Advantage	Via Benefits (assumed trend)	Dental and Vision	Medicare Part B
4.00%	2.93%	(9.42)%	6.25%	0.00%	14.55%

The actual calendar year 2021 trend of 14.55% above for Medicare Part B reflects the standard 2022 calendar year premium of \$170.10 per month, and is based on an analysis performed by Segal’s health consultants as outlined in their memo dated November 19, 2021.

(2) Non-Medicare plans.

(3) Medicare plans.

(4) First two years reflects three-year rate guarantee, premiums fixed at 2021 level.

(5) First four years reflect five-year rate guarantee, premiums fixed at 2021 level.

Section 3: Actuarial Assumptions and Methods and Appendices

Assumed Increase in Annual Maximum Benefits:	<p>For the “substantive plan design” shown in this report, we have assumed:</p> <ol style="list-style-type: none"> 1. Maximum medical allowance for 2022 will increase to \$596.73 per month, then increase with 50% of trend for medical plans, or 3.25%, graded down to the ultimate rate of 2.25% over 8 years. 2. Dental and vision premium reimbursement will increase with full trend. 3. Medicare B premium reimbursement will increase with full trend.
Dependents:	<p>Demographic data was available for spouses of current retirees. For future retirees, male members were assumed to be three years older than their wives, and female members were assumed to be two years younger than their husbands. Of the future retirees who elect to continue their medical coverage at retirement, 40% males and 20% females were assumed to have an eligible spouse who also opts for health coverage at that time. These assumptions are based on historical and current demographic data, adjusted to reflect the plan design, estimated future experience and professional judgment.</p> <p>Please note that these assumptions are only used to determine the cost of the implicit subsidy.</p>
Administrative Expenses:	<p>An administrative expense load was not added to projected incurred claim costs in developing per capita health costs.</p>
Missing Participant Data:	<p>Any missing census items for a given participant was set to equal to the average value of that item over all other participants of the same membership status for whom the item is known.</p>
<u>Actuarial Funding Policy</u>	
Actuarial Cost Method:	<p>Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation.</p>
Expected Remaining Service Lives:	<p>The average of the expected service lives of all employees is determined by:</p> <ul style="list-style-type: none"> • 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. <p>Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.</p>

Section 3: Actuarial Assumptions and Methods and 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, 2021

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)
2021	\$1,185	\$0	\$46	\$2	\$486	\$1,624
2022	1,624	0	56	2	112	1,677
2023	1,677	0	60	2	115	1,731
2024	1,731	0	64	2	119	1,784
2025	1,784	0	68	2	122	1,835
2047	2,620	0	148	3	178	2,646
2048	2,646	0	150	3	180	2,673
2049	2,673	0	151	3	182	2,700
2050	2,700	0	151	4	184	2,729
2051	2,729	0	152	4	186	2,760
2052	2,760	0	152	4	188	2,792
2053	2,792	0	151	4	190	2,827
2054	2,827	0	150	4	193	2,866
2055	2,866	0	149	4	195	2,908
2056	2,908	0	147	4	198	2,956
2057	2,956	0	145	4	202	3,009
2058	3,009	0	142	4	206	3,069
2059	3,069	0	139	4	210	3,136
2060	3,136	0	137	4	215	3,210
2061	3,210	0	133	4	220	3,292
2062	3,292	0	130	4	226	3,383
2063	3,383	0	127	4	232	3,484
2064	3,484	0	124	5	239	3,595
2065	3,595	0	120	5	247	3,718
2066	3,718	0	116	5	256	3,853
2067	3,853	0	113	5	266	4,001
2068	4,001	0	109	5	276	4,163
2069	4,163	0	105	5	288	4,340
2135	267,849	0	0	348	18,737	286,239
2136	286,239	0	0	371	20,024	305,891
2136	Discounted \$128					

* Less than \$1 million, when rounded

Section 3: Actuarial Assumptions and Methods and Appendices

Notes

1. Amounts may not total exactly due to rounding.
2. Amounts shown in the year beginning January 1, 2021 row are actual amounts, based on the financial statements provided by ACERA.
3. Years 2026 - 2046 and 2070-2134 have been omitted from this table.
4. Column (a): Except for the "discounted value" shown for 2136, 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, 2020. 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, 2021 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 0.13% of the beginning OPEB SRBR Plan's Fiduciary Net Position amount. The 0.13% portion was based on the actual fiscal year 2021 administrative expenses as a percentage of the beginning OPEB SRBR Plan's Fiduciary Net Position amount as of January 1, 2021. Administrative expenses are assumed to occur halfway through the year, on average.
8. Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.
9. As illustrated in this 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, 2021 shown earlier in this report, pursuant to paragraph 48 of GASB Statement No. 74.

* See discussion on page 2-3 regarding source of funding for payment of OPEB SRBR benefits not covered by current OPEB Plan's Fiduciary Net Position in the SRBR.

Section 3: Actuarial Assumptions and Methods and Appendices

Appendix B: Definition of Terms

Definitions of certain terms as they are used in Statement 75. 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: <ol style="list-style-type: none">Investment return — the rate of investment yield that the Plan will earn over the long-term future;Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;Retirement rates — the rate or probability of retirement at a given age;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: <ol style="list-style-type: none">the actuarial present value of projected benefit payments projected to be funded by plan assets using a long term rate of return, andthe 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.

Section 3: Actuarial Assumptions and Methods and Appendices

Total OPEB Liability:	Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.
Valuation Date:	The date at which the actuarial valuation is performed

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MEMORANDUM TO THE AUDIT COMMITTEE

DATE: June 16, 2022

TO: Members of the Audit Committee

FROM: Harsh Jadhav, Chief of Internal Audit

SUBJECT: Progress on the 2022 Internal Audit Program

Executive Summary

The Audit Committee meeting in June 2022 will feature a progress update on the 2022 Internal Audit Program, a presentation on the Business Impact Analysis, and a cybersecurity update. The Internal Audit Department's objective remains to perform four internal audits, one policy audit, and four special projects. Staff completed the Felony Forfeiture Policy Audit and is now working with the participating employers to advise on the proper course of action to remediate any findings. The audit result will be reported in October 2022. In addition, the staff is currently engaged in performing the Business Resilience Audit and the Prevent Member Identity Theft Audit and resuming the Workers Compensation Contributions and Service Credit Project.

2022 Audit Schedule

Internal Audit Plan (2022)	Service Line	Assigned	Status	Q1	Q2	Q3	Q4
Felony Forfeiture Policy Audit	Policy Audit	Caxton	Completed				
Prevent Member Identity Theft Audit	Internal Audit	Lyndon	In Progress				
System-Wide Benefits Calculations Audit	Internal Audit	Lyndon/Caxton	Not Started				
Workforce Resilience Audit	Internal Audit	Harsh/Lyndon	In Progress				
Third-Party Service Provider Audit	Internal Audit	Harsh	Not Started				
Workers Compensation Contributions and Service Credit Project	Special Project	Caxton	In Progress				
Commercial Bank Internal Controls Project	Special Project	Lyndon	Not Started				
Pension Administration System Internal Controls Project	Special Project	Lyndon/Caxton	In Progress				
Cybersecurity and Data Security Self-Assessment	Special Project	Vijay/Harsh	In Progress				
2022 Annual Risk Assessment	Administration	Harsh	Completed				
2023 Annual Risk Assessment	Administration	Harsh	Not Started				
Fraud Hotline Management	Administration	Lyndon	Continuous				
Fraud Training	Administration	Lyndon/Caxton	Completed				

2022 Audit Program

Policy Audits

Felony Forfeiture Policy Audit

The purpose of the audit is to review the participating employer's compliance with ACERA's 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 public employees convicted of felonies on or after January 1, 2013.

Internal Audits

Prevent Member Identity Theft Audit

This audit aims 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.

System-Wide Benefit Calculations Audit

The purpose of the audit is to sample active, deferred, and retired members to ensure internal controls preventing overpayments are in place and operating effectively. Our approach will be to perform several small sample-size audits to review several types of benefit calculations for accuracy and completeness. With smaller data sets, we can quickly uncover potential systemic issues and recommend a remediation strategy. In addition, we will continue to examine if the final pensionable salary calculation for retired members is accurate.

Workforce Resilience Audit

This review aims to determine if ACERA has trained staff, backup personnel, and documented procedures for their critical processes. As the pandemic continues, part of prudent business continuity planning requires organizations to identify essential staff, ensure that critical processes are documented and updated regularly and that backup personnel have been trained and assessed periodically.

Third-Party Service Provider Audit

This review determines if the critical third-party service providers that manage ACERA's confidential and sensitive information (i.e., member data) have internal controls to prevent breaches, processes to manage adverse events, and adequate incident response procedures.

Special Projects

Workers Compensation Contributions and Service Credit Project

Staff requested a review of ACERA's process for collecting member and employer contributions on Worker's Compensation Pay.

Commercial Bank Internal Controls Project

The Fiscal Services Department has asked Internal Audit to provide advisory services and test internal controls for segregation of duties as ACERA transitions to a new commercial bank to manage a suite of services, including retirement payroll, expense administration, and vendor payments.

Pension Administration System Internal Controls Project

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.

Cybersecurity and Data Security Self-Assessment Project

The objective of this special project will be to work with the PRISM Department to determine if adequate firewalls, 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 is protected and secure.

Internal Audit Department 2022 Internal Audit Plan

June 16, 2022



Agenda



Progress Update
on the Internal
Audit Plan



Business
Impact
Analysis




Cybersecurity
Update

Internal Audit Plan


Internal Audit Plan (2022)	Service Line	Assigned	Status	Q1	Q2	Q3	Q4
Felony Forfeiture Policy Audit	Policy Audit	Caxton	Completed				
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Fraud Hotline Management	Administration	Lyndon	Continuous				
Fraud Training	Administration	Lyndon/Caxton	Completed				

Critical Functions Audit

Business Impact Analysis Element




The Business Impact Analysis (BIA) is a method for analyzing how disruptions may impact ACERA operations. The analysis considers timescales of disruption, as well as intensity, and looks at the resulting impacts on important business function activities.








A BIA assessment maps the following:

- **Identifies the most important business functions**
 - **Examines the impact of business interruptions**
 - **Details acceptable levels of downtime and losses**
 - **Identifies resources needed for each business process and activities**
 - **Identifies internal and external dependencies**
- 



The BIA is used in the continuous development of the ACERA Business Continuity Plan to ensure:

- **Primary and Alternate staff are identified and trained to perform critical business functions and processes**
 - **Information technology and tools and resources are secured and readily available to quickly recover from disruptions**
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Cybersecurity Update

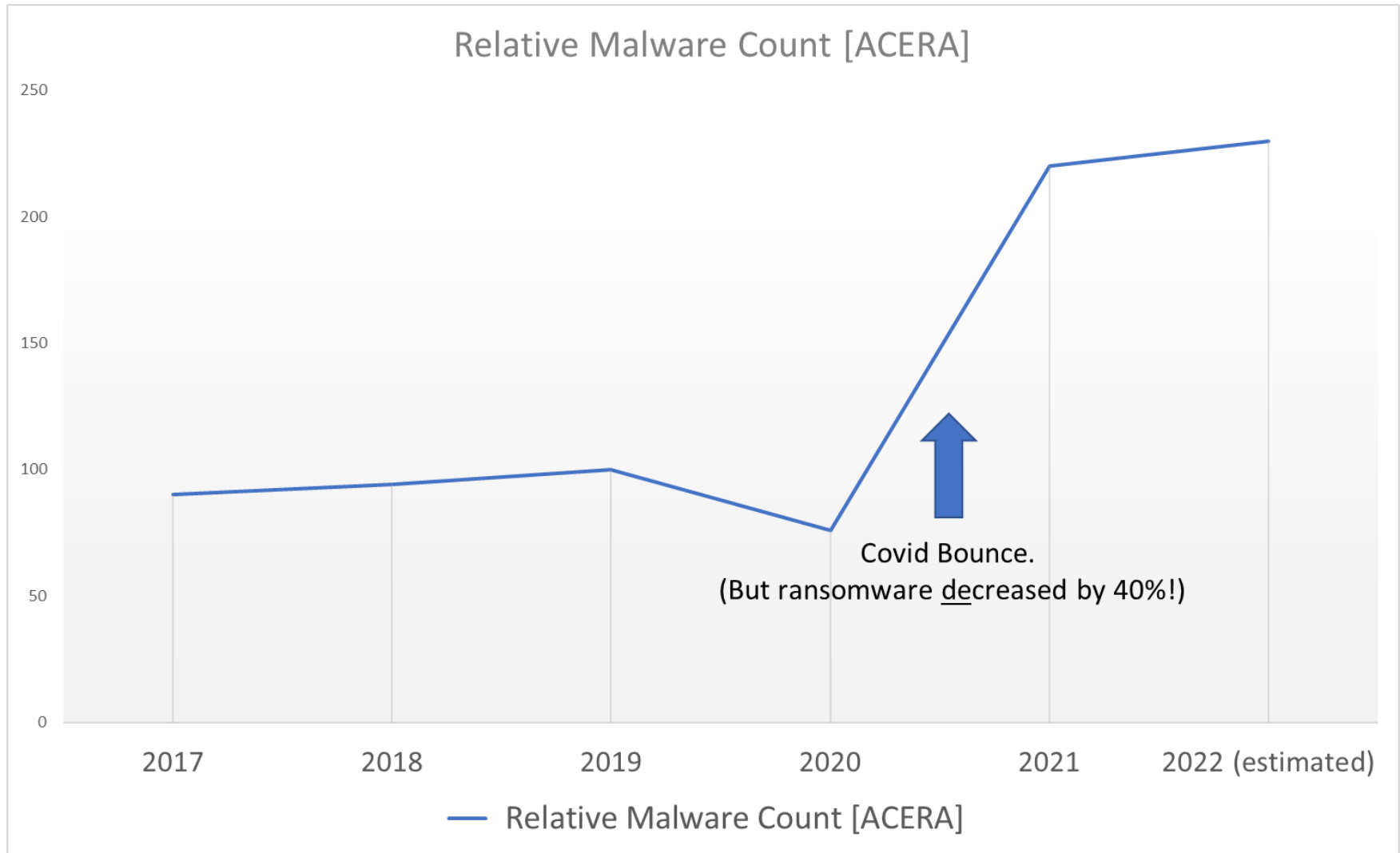
June 16, 2022
Vijay Jagar



Malware's "Covid Bounce"

- Malware decreased creased as lockdowns increased
- Malware increased as Covid restrictions eased
- Technical debt & its costs
- We cannot patch our way to security





Malware Trends

1. Increasingly determined, opportunistic adversaries
2. Increasing complexity
3. Increased social engineering and ransomware



Questions