

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:

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

Thursday, February 16, 2023 12:30 p.m.

ZOOM INSTRUCTIONS	COMMITTEE MEMBERS	
The public can view the Teleconference	HENRY LEVY, CHAIR	TREASURER
and comment via audio during the		
meeting. To join this Teleconference,	ROSS CLIPPINGER, VICE-CHAIR	ELECTED SAFETY
please click on the link below.		
https://zoom.us/join	KEITH CARSON	APPOINTED
Webinar ID: 828 8311 5442		
Passcode: 765123	TARRELL GAMBLE	APPOINTED
For help joining a Zoom meeting, see:		
https://support.zoom.us/hc/en-	KELLIE SIMON	ELECTED GENERAL
us/articles/201362193		
Call-in Number: 1 669 900 6833		

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.

If you require a reasonable modification or accommodation for a disability, please contact ACERA between 9:00 a.m. and 5:00 p.m. 72 hours prior to the meeting at accommodation@acera.org or at 510-628-3000

AUDIT COMMITTEE/BOARD MEETING

NOTICE and AGENDA, Page 2 of 2 - Thursday, February 16, 2023

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

- 1. Presentation, discussion, and possible motion to approve the external audit scope of work and timeline of services for the Financial Statements ended December 31, 2022, performed by Williams, Adley & Company-CA, LLP
 - Robert Griffin, Partner
 - Kenneth Yu, Sr. Manager
 Williams, Adley & Company-CA, LLP
 - Erica Haywood

Recommendation:

The Audit Committee recommends to the Board of Retirement that the Board approve the external audit scope of work and timeline of services for the Financial Statements ended December 31, 2022, to be performed by Williams, Adley & Company-CA, LLP.

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

External Audit

1. 2023 Audit Committee Work Plan (Proposed) - Lisa Johnson

Internal Audit

1. Review of Annual Risk Assessment - Harsh Jadhav

2. Presentation of the 2023 Internal Audit Plan (Proposed) - Harsh Jadhav

3. Trustee Education (ACFR Review) - Henry Levy, Trustee

Trustee Comment

Future Discussion Items

Establishment of Next Meeting Date

April 20, 2023



MEMORANDUM TO THE AUDIT COMMITTEE

DATE:

February 16, 2023

TO:

Members of the Audit Committee

FROM:

Erica Haywood, Fiscal Services Officer & H

SUBJECT:

Williams, Adley & Co. LLP., 2022 Financial Statement External Audit

The Fiscal Services Department has reviewed the 2022 external audit scope of work and timeline of services to be performed by Williams, Adley, & Co. LLP, ACERA is prepared to commence with its annual financial statement audit for year ended December 31, 2022. The allotted time frame of the audit field work is approximately 60 days, ending approximately the third week in April 2023.

Throughout the audit period, bi-weekly status meetings with the Fiscal Services Department will be conducted. Likewise, status meetings with Senior Managers will also be scheduled on an as needed basis. The Fiscal Services Officer will oversee the audit process and is responsible for ensuring the completeness and accuracy of all financial information provided to Williams, Adley, & Co. LLP.

Recommendation

Staff recommends that the Audit Committee recommend to the Board of Retirement that the Board approve the 2022 Financial Statement External Audit Scope of Work and Timeline of Services to be performed by Williams, Adley & Co. LLP.



ALAMEDA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Audit and Communications Plan for the Year Ended December 31, 2022



Agenda

- Engagement Team
- ► Auditor Responsibilities
- Management Responsibilities
- Audit Committee Responsibilities
- Our Risk-Based Audit Approach
 - Areas of Significant Focus
- ► Other Areas of Audit Emphasis
- Timeline
- ▶ New GASB Reporting Standards

Engagement Team

- Robert Griffin, CPA, Engagement Partner
- for the engagement, including the content of reports and Has overall responsibility for the engagement, including service levels and adherence to timelines. Responsible compliance with firm and professional standards.
- Kenneth Yu, CPA, Project Manager
- Primarily responsible for the achievement of engagement members and have responsibility for achieving the audit performed and the reports issued. He will serve as the objectives and quality control of the audit procedures primary liaison between ACERA staff and WACO team objectives.

Auditor Responsibilities

- Government Auditing Standards is to express opinions about whether the Our responsibility under U.S. Generally Accepted Auditing Standards and fairly presented, in all material respects, in conformity with U.S. GAAP. financial statements prepared by management with your oversight are Provide an in-relation to opinion on the other supplementary
- results of tests of compliance with certain provisions of laws, regulations, Issue report on internal controls and compliance (no opinion) based on contracts and grants
- Perform an audit of the GASB 68 & GASB 75 schedules in accordance with
- Express opinions on whether the GASB 68 & GASB 75 schedules are fairly presented in conformity with U.S. GAAP.
- Communicate significant matters related to the audits.

Management Responsibilities

- Prepare and present financial statements and supplementary information in conformity with U.S GAAP.
- **Establish and maintain effective internal controls.**
- Implement systems designed to achieve compliance with applicable laws, regulations, and contracts.
- Select and apply appropriate accounting principles.
- Comply with applicable laws and regulations and the provisions of contracts.
- Design and implement programs and controls to prevent and detect fraud, and inform us about all known or suspected
- Provide written representations.

Audit Committee Responsibilities

- Meet periodically with the auditors to discuss various controls, significant communications with regulators, topics, including risks, concerns about internal and audit progress.
- Resolve conflicts between auditors and management, if necessary.
- Review auditor's findings and recommendations and evaluate management's response.

Our Risk-Based Audit Approach

- Audit planning is a continuous process. We will use our most experienced team members to perform risk assessment procedures.
- documentation (minutes, policies and procedures, IAD reports, etc.), results of internal control walkthroughs and testing, and institutional knowledge. External and internal risks are identified based on interviews, review of
- We consider the effects of current risk factors on ACERA and emphasis is also placed on those areas requiring subjective judgment by management.
- understanding of key controls annually, and perform testing on a rotational Our approach to the internal control environment is to update our basis over a three year cycle.
- material misstatement, i.e., those accounts or transactions where we believe Our audit procedures emphasize testing areas with the highest risk of there is the greatest risk of material misstatement to the financial statements, whether due to error or fraud.
- financial statements and schedules and the clarity and accuracy of related Our reporting objective focuses on the fairness of presentation of the disclosures.

Areas of Significant Focus

Additions	Management	Investments
(Kevenue)	Override of Controls	
Risks Contributions are misstated. Investment income, including appreciation, is misstated.	Risks Financial statements could be materially misstated. Misappropriation of assets.	Risks Misstatement of account balances. Valuations not reported using proper methodology. Transactions reported in incorrect period. Assets not held in ACERA's name.
Audit Response Confirm with employers the amount of contributions and related receivables. Confirm investment income and perform analytical procedures.	Audit Response Evaluate and update our understanding of controls over the financial reporting process. Select a sample of transactions and test to see if controls are operating effectively.	Audit Response Independent confirmation and reconciliation testing. Review of third party valuations and market quotes.

Other Areas of Audit Emphasis

- materiality of the balance and/or complexity/judgment involved In addition to the significant areas identified previously, we have identified areas below as areas of focus during the audit due to in the accounting.
- Participant data and actuarial information
- Benefit payments
- Reserves
- Cash activity
- Accounting and reporting for actuarial assumptions and calculations
- Financial reporting

Timeline

- Planning and client assistance January / February 2023
- Fieldwork Mid February April 2023
- Presentation of Audit Results to Audit Committee May 2023
- Reporting Deadlines
- State Controller's Report June 30, 2023
- ➤ ACFR to GFOA June 30, 2023
- GASB 68 & 75 reports June 2023

New GASB Reporting Standards

- Statement No. 99 Omnibus 2022
- ► There has been an extension of the period during which the London Interbank Offered Rate (LIBOR) is considered an appropriate benchmark.



MEMORANDUM TO THE AUDIT COMMITTEE

DATE:

February 16, 2023

TO:

Members of the Audit Committee

FROM:

Lisa Johnson, Assistant Chief Executive Officer

SUBJECT:

Proposed 2023 Audit Committee Work Plan

The proposed 2023 Audit Committee Work Plan is attached for your consideration and review. The main action and topical discussion items for 2023 are listed below for quick reference:

- February 16, 2023
 - o Williams, Adley & Co. LLP. will present the external audit scope of work and timeline.,
- April 20, 2023
 - Presentation and discussion of the Government Accounting Standards Board (GASB)
 Statement No. 67 and No. 74 Valuations and addendums as of December 31, 2022
 (Segal); and,
- May 18, 2023
 - External auditor's report and presentation of the December 31, 2022 audited financial statements; and
 - o Recommend adoption of the GASB Statement No. 67 and No. 74 Valuations and addendums as of December 31, 2022; and
- June 15, 2023:
 - Adoption of the audited Schedules of Employer Allocations and Schedules of Pension and OPEB Amounts by Employer; and
 - o Presentation of the GASB Statement No. 68 and No. 75 Valuations and Employer Schedules as of December 31, 2022.
- October 19, 2023:
 - o Progress report on the Internal Audit plan; and
 - o Review completed audits.

Throughout the year, ACERA's Chief Internal Auditor will review the progress of the internal audit plan, present new internal audit initiatives, and review completed audits. As the need arises, agenda items may be changed or added to the work plan during the year.



2023 Audit Committee Work Plan (Proposed)

	Action Items	Information Items	Staff Items
Feb 16 – 12:30 PM (3 rd Thurs, same day as Board Meeting)	 External Audit Presentation, discussion, and possible motion to approve the external audit scope of work and timeline of services for the Financial Statements ended December 31, 2022, performed by the external audit firm Internal Audit None 	 External Audit Audit Committee Work Plan (Proposed) Internal Audit Review of Annual Risk Assessment Presentation of the 2023 Internal Audit Plan 	
Apr 20 – 12:30 PM (3 rd Thurs, same day as Board Meeting)	External Audit None Internal Audit None	 External Audit Presentation and discussion of the GASB Statement No. 67 Valuation and addendum as of December 31, 2022 (Segal) Presentation and discussion of the GASB Statement No. 74 Valuation and addendum as of December 31, 2022 (Segal) Internal Audit Progress report on the Internal Audit Plan Review complete audits 	The GASB Statements No. 67 and No. 74 Valuations and addendums are presented at the April committee meeting and brought back in May for concurrent approval with the audited financial statement. • Participating Employers meeting with Segal and Williams Adley to present: • Actuarial Valuation as of December 31, 2022 • GASB Statement No. 67 and No. 74 Valuations and addendums as of December 31, 2022

Note: This work plan is subject to change without prior notice. Periodic rearrangements of agenda items will be made to the work plan to provide a reasonable length of time for each meeting. Updated 2/9/2023



2023 Audit Committee Work Plan (Proposed)

Action Items	Information Items	Staff Items
May 18 – 12:30 PM (3 rd Thurs, same day as Board Meeting) Meeting) External Audit Discussion and possible motion to recommend that the Board of Retirer accept and file the December 31, 202 Audited Financial Statements and Independent Auditor's Report Discussion and possible motion to recommend that the Board of Retirer adopt of the Government Accounting Standards Board (GASB) Statement N Actuarial Valuation and addendum as December 31, 2022 Discussion and possible motion to recommend that the Board of Retirer adopt the Government Accounting St Board (GASB) Statement No. 74 Actuation and addendum as of December 2022 Internal Audit None	Audit Plan Review completed audits ment Solo. 67 Sof ment tandards arial	



2023 Audit Committee Work Plan (Proposed)

C+ - ff 1+ - --- -

	Action Items	Information Items	Staff Items
Jun 15 – 12:30 PM (3 rd Thurs, same day as Board Meeting)	 External Audit 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, 2022 Internal Audit None 	 External Audit Presentation and discussion of GASB Statement No. 68 and GASB Statement No. 75 Valuations and Employer Schedules as of December 31, 2022 Internal Audit Progress Report on the Internal Audit Plan Review completed audits 	
Oct 19 - 12:30 PM (3 rd Thurs, same day as Board Meeting)	External Audit None Internal Audit None	 Internal Audit Progress Report on the Internal Audit Plan Review completed audits 	



MEMORANDUM TO THE AUDIT COMMITTEE

DATE: February 16, 2023

TO: Members of the Audit Committee

FROM: Harsh Jadhav, Chief of Internal Audit

SUBJECT: The Proposed 2023 Internal Audit Program

Executive Summary

The Audit Committee meeting in February 2023 will feature the proposed 2023 Internal Audit Program, a discussion on the risk assessment process, a cybersecurity update, and the second in a series of trustee financial education segments provided by Trustee Levy. The second segment will be provide more information about how the actuarial valuation information ties in the ACFR, where to find information about investment manager fees and the different asset classes ACERA invested in, and a brief review of GASB 72.

The annual risk assessment is complete. The Internal Audit Department has reassessed the internal controls and risks identified by management to determine how changes in business processes, laws, pension practices, and the organizational structure have affected the risk ranking for 2023. Based on the risk assessment results, the Internal Audit Department plans to conduct four internal audits, three special projects, and provide staff with fraud training.

The Internal Audit Department will also continue to work closely with PRISM to provide input in the Cybersecurity and Data Security Self-Assessment and PAS Project. PRISM regularly performs a self-assessment of the incident response procedures, security management process, IT infrastructure, and cybersecurity training allows the agency to uncover gaps, potential weaknesses, and threats that could undermine the security of sensitive information. Furthermore, it is a vital readiness step to ensure the infrastructure and IT environment supports the upgraded pension system.

Internal Audit staff continues to promote fraud awareness through annual fraud training for staff and serve as resources for strengthening organization-wide internal controls. This year, we are excited to be joined by members of our staff, who will provide organization-wide fraud training specific to protecting member information and fund assets.

2023 Audit Schedule

Internal Audit Plan (2023)	Service Line	Assigned	Status	Q1	Q2	Q3	Q4
Death Benefit Audit	Internal Audit	Lyndon	Not Started				
Member Identity Theft Audit	Internal Audit	Caxton	Not Started				
Workforce Resilience Audit	Internal Audit	Harsh/Lyndon/ Marlon/Dana	In Progress				
Third-Party Service Provider Audit	Internal Audit	Harsh	Not Started				
Commercial Bank Internal Controls Project	Special Project	Caxton	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				
2023 Annual Risk Assessment	Administration	Harsh	Completed				
2024 Annual Risk Assessment	Administration	Harsh	Not Started				
Fraud Hotline Management	Administration	Lyndon	Continuous				
Fraud Training	Administration	Lyndon/Caxton	Not Started				

2023 Audit Program

Internal Audits

Death Benefit Audit

The objective of this audit is to review the process used for paying death benefits to beneficiaries of deceased retired members. The audit process will include both an examination of the existing procedures and a verification check to ensure members selected as part of the sample are alive and well.

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.

Workforce Resilience Audit

The purpose of this review is 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 ensure essential staff are identified, critical processes are fully documented and updated regularly, and backup personnel has been trained and assessed periodically.

Third-Party Service Provider Audit

This audit 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

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.

Summary

We are focused on meeting the 2023 Audit Program objectives. I want to acknowledge my staff for their strong effort and dedication to delivering quality work. The Internal Audit Staff will continue to do an excellent job partnering with management, servicing the Board of Retirement, and protecting our members.

Internal Audit Department 2023 Internal Audit Plan

February 16, 2023

Agenda



Review the Risk Assessment Process



Trustee Education



Proposed Internal Audit Plan



Annual Internal Audit Risk Assessment Process Reviewed the strategic objectives of each department and current and potential risks the departments were concerned about. Risks covered benefits, fiscal operations, investments, legal, IT, actuarial and human resources. Annual Internal Audit Risk Assessment Process Discussed potential control weaknesses, new business processes introduced in the current year, staffing changes, and new legislative mandates which may impact the current business.

Annual Internal Audit Risk Assessment Process

- Reviewed potential cybersecurity risks related to privacy and data security.
- Considered risks for fraud and compliance issues.
- We summarized the key risks from each department to help prioritize our audit effort and develop the Internal Audit Plan for 2023.

Identified Risks

- Maintaining Institutional Knowledge
- Transition to New Financial Bank
- Retaining Key Personnel

Project Risk – PAS,
 ONBASE

Cybersecurity

Business Continuity Planning

Operations

Technology

Benefits

Investments

- Theft of Member Identity
- Overpayments
- Retirements Processing

- Board Governance
- Economy
- Staffing

Proposed 2023 Internal Audit Plan

Internal Audit Plan (2023)	Service Line	Assigned	Status	Q1	Q2	Q3	Q4
Death Benefit Audit	Internal Audit	Lyndon	Not Started				
Member Identity Theft Audit	Internal Audit	Caxton	Not Started				
Workforce Resilience Audit	Internal Audit	Harsh/Lyndon/ Marlon/Dana	In Progress				
Third-Party Service Provider Audit	Internal Audit	Harsh	Not Started				
Commercial Bank Internal Controls Project	Special Project	Caxton	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				
2023 Annual Risk Assessment	Administration	Harsh	Completed				
2024 Annual Risk Assessment	Administration	Harsh	Not Started				
Fraud Hotline Management	Administration	Lyndon	Continuous				
Fraud Training	Administration	Lyndon/Caxton	Not Started				

Trustee Education

Overview of the (2021) Annual Comprehensive Financial Report





- 2. Select

 Comprehensive

 Annual Financial

 Report under

 Financial Reports
- Comprehensive Annual Financial Report

Dissolution and Legal Separation Memo

- Popular Annual Financial Report
- Actuarial Valuation

Financial Reports

- GASB Actuarial Valuations
- Other Actuarial Reports
- Supplemental Retiree Benefit Reserve Valuation
- Administrative Budget
- All Financial Reports

1. You can access the financial reports by selecting "Publications" under Forms & Publications from the Menu on the ACERA website (www.ACERA.org)

3. Select
Comprehensive
Annual Financial
Report For The
Year Ended 2021
under
Comprehensive
Annual Financial
Reports and then
click "Download" to
retrieve the report



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Actuarial Values and Funded Ratio

Dollars in millions

Actuarial Valuation as of December 31	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio
Plain English:	(How much we have now)	(How much we owe in benefits, now and in the future)	(How much more we'll need to pay all the benefits we owe)	(% of how much we owe that we have now. The ultimate goal is 100%.)
2021	\$9,453.1	\$10,929.9	\$1,476.8	86.5%
2020	\$7,984.3	\$10,484.2	\$2,499.9	76.2%*
2019	\$7,600.0	\$9,795.0	\$2,195.0	77.6%
2018	\$7,239.3	\$9,376.4	\$2,137.1	77.2%
2017	\$6,830.4	\$8,987.1	\$2,156.7	76.0% [†]
2016	\$6,436.1	\$8,237.7	\$1,801.6	78.1%

If a member asks you about ACERA's funding status, this chart on the ACERA website displays our funded ratio for each year.

Source: ACERA Website (https://www.acera.org/actuarial-valuations

Section 3: Supplemental Information

Exhibit E: Summary Statement of Plan Assets

	December 31, 2021			
Cash		\$1,754,098		
Securities lending collateral		127,313,079		
Accounts receivable:				
Contributions	\$22,026,840			
 Investment receivables 	19,624,427			
 Investments sold 	7,652,879			
Futures contracts	161,229			
Foreign exchange contracts	83			
Others	<u>350,348</u>			
Total accounts receivable		\$49,815,806		
Prepaid expenses		802,521		
Investments:				
Short-term investments	\$263,949,698			
Equities	6,361,014,500			
Fixed income investments	1,882,269,248			
Real estate	713,786,818			
Capital assets	6,184,907			
Leased assets	0			
Private equity and alternative investments	2,611,468,651			
Total investments at market value		\$11,030,073,022		
Total assets		\$12,018,359,326		
Accounts payable:				
 Securities lending & investments purchased 	\$(153,059,322)			
Investment-related payables	(13,515,964)			
Futures contracts & equity swaps	(589,217)			
Foreign exchange contracts	(912,711)			
Accrued administration expense	(2,624,040)			
Members benefits & refunds, and retirement payroll	(6,692,726)			
deductions payable				
Lease liability	(102,449)			
Total accounts payable		\$(177,496,429)		
Net assets at market value		\$11,840,862,896		
Net assets at actuarial value		\$10,707,045,790		
Net assets at valuation value		\$9,453,107,051		

Comparison of Actuarial Valuation Report to the ACFR

Table 1: Fiduciary Net Position (Condensed)
As of December 31, 2021 and 2020 (Dollars in Millions)

\$3,236,571

117,170,544

\$141,620,606

December 31, 2020

\$21,756,333 17,178,702

> 96,399,659 236,299 5,852,639 196,974

\$182,037,100 5,478,883,008 1,442,832,576 601,145,266

	2021	2020	Increase (Decrease) Amount	Percent Change
ASSETS				
Current Assets	\$ 179.7	\$ 262.8	\$ (83.1)	-32%
Investments at Fair Value	11,832.5	9,601.8	2,230.7	23%
Capital Assets, net	6.2	4.3	1.9	44%
Total Assets	12,018.4	9,868.9	2,149.5	22%
LIABILITIES				
Current Liabilities	177.4	239.0	(61.6)	-26%
Long-term Lease Liabilities	0.1	0.1	-	0%
Total Liabilities	177.5	239.1	(61.6)	-26%
NET POSITION				
Restricted - Held in Trust for Benefits	\$11,840.9	\$ 9,629.8	\$ 2,211.1	23%

We can reconcile the plan assets on the actuarial report with those on the Annual Comprehensive Financial Report (ACFR).

Alameda County Employees' Retirement Association - Actuarial Valuation and Review as of December 31, 2021

The plan assets can be found on the Statement of Fiduciary Net Position, which is like the balance sheet of a corporation.

Section 3: Supplemental Information

Exhibit G: Development of the Fund through December 31, 2021

Year Ended December 31	Employer Contributions	Member Contributions	Net Investment Return¹	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2012	\$179,648,812	\$78,608,004	\$698,682,556	\$363,133,358	\$5,668,204,196	\$5,543,303,209	97.8%
2013	191,180,146	76,230,024	1,095,188,216	390,507,104	6,640,295,478	5,953,454,661	89.7%
2014	213,254,775	79,714,187	266,028,241	411,279,675	6,788,013,006	6,545,159,225	96.4%
2015	224,607,104	82,948,934	(19,960,005)	434,984,266	6,640,624,773	6,987,026,015	105.2%
2016	241,728,451	85,736,229	454,641,033	457,150,304	6,965,580,182	7,309,485,170	104.9%
2017	247,063,550	89,325,824	1,293,322,206	483,192,206	8,112,099,556	7,803,026,229	96.2%
2018	269,684,809	94,735,673	(371,111,618)	512,821,851	7,592,586,569	8,161,706,068	107.5%
2019	298,526,950	103,117,022	1,342,794,800	547,746,289	8,789,279,051	8,528,590,602	97.0%
2020	309,752,998	106,104,226	1,001,415,117	576,784,042	9,629,767,350	8,986,481,645	93.3%
2021	1,116,575,840	111,091,264	1,585,614,282	602,185,840	11,840,862,896	10,707,915,790	90.4%

Difference of \$1,132,947,106

The assets used by the actuary to perform their funding analysis could differ from the assets reported on the ACFR. This is due to the actuaries making long-term assumptions about interest rates, inflation, demographics, and other factors which are necessary for their statistical modeling.

Investment Snapshot Report

Alameda County Employees' Retirement Association December 2022 Monthly Performance Report

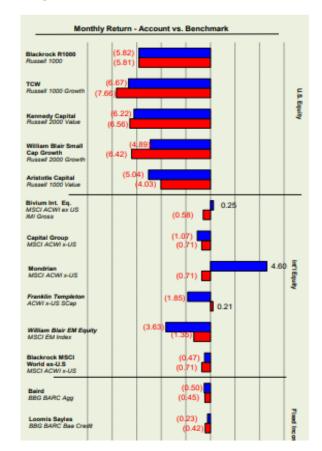
Periods Ending December 31, 2022

Portfolio Summary						
Portfolio Value						
Beginning Market Value	\$	10,475,835,263				
Ending Market Value	\$	10,281,844,887				
Monthly Unrealized Gain / (Loss)		(193,990,377)				

Ending Market Value			10,281,844,887			
Monthly Unrealized Gain / (Loss)			(193,990,377)			
		% of	December	YTD	3 yr	10 yr
Manager	Market Value \$	Fund	Return	Return	Return	Retur
J.S. EQUITY						
BLACKROCK R1000 INDEX FUND	1,997,412,301	19.43	(5.82)	(19.04)	7.43	N/A
Trust Co. of the West	110,730,445	1.08	(6.67)	(35.53)	4.15	11.90
Kennedy Capital	143,098,828	1.39	(6.22)	(17.20)	7.04	10.49
William Blair Small Cap Growth	124,798,692	1.21	(4.89)	(20.14)	8.79	N/A
Aristotle Capital	146,854,896	1.43	(5.04)	(14.30)	N/A	N/A
Total U.S. Equity	2,522,902,395	24.54	(5.79)	(19.61)	7.00	12.10
Benchmark: Russell 3000	-,,,		(5.86)	(19.21)	7.07	12.13
Relative Performance			0.07	(0.41)	(0.07)	(0.03
NT'L EQUITY			****	(4.11)	(e.e. y	(0.00
Bivium International Equity	130,177,255	1.27	0.25	(18.28)	0.95	N/A
Capital Group	557,533,975		(1.07)	(25.57)	(0.89)	6.00
Mondrian	649,592,300		4.60	(12.32)	(1.72)	3.64
Franklin Templeton Inv.	243.335.031		(1.85)	(22.26)	(1.38)	5.18
William Blair EM Equity*	260,942,301		(3.63)	N/A	N/A	N/A
	685.280.373		(0.47)		1.72	N/A
Blackrock MSCI World ex- U.S			0.47)	(13.84)		5.38
Total Int'l Equity Benchmark: MSCI ACWI ex US IMI Gross	2,528,231,101	24.59		(18.67)	0.60	5.38 4.46
Relative Performance			(0.58) 0.79	(2.52)	(0.05)	0.92
FIXED INCOME			0.79	(2.52)	(0.00)	0.92
Baird Advisors	1.123.335.013	10.03	(0.50)	(13.06)	(2.12)	1.99
	261.160.164		(0.23)	(12.57)	0.63	3.95
Loomis Sayles						
Brandywine Global FI	178,675,440		3.30	(17.81)	(4.09)	0.69
Total Fixed Income	1,563,170,616	15.20	(0.03)	(13.53)	(1.46)	2.32
Benchmark: 75 BC AG/15 SSBI WGBxUS/1	0 BC HI YLD		(0.36)	(14.20)	(3.19)	0.88
Relative Performance			0.33	0.67	1.73	1.43
REAL ESTATE						
Total Real Estate	836,238,353	8.13	(1.10)	13.53	10.97	10.34
Benchmark: NCREIF CUSTOM INDEX Relative Performance			(1.10)	(8.56)	(1.40)	10.92
PRIVATE EQUITY			(1.10)	(8.56)	(1.40)	(0.56
Total Private Equity	992 945 955	0.00	1.03	(0.05)	20.17	17.05
	,,	9.66		(0.95)		
Benchmark: Cambridge Global Private Equ Relative Performance	iity 1 Q Lag "		N/A N/A	N/A N/A	N/A N/A	N/A N/A
ABSOLUTE RETURN			N/A	N/A	N/A	N/A
Total Absolute Return	851,555,858	8 28	(0.46)	6.66	6.53	4.17
Benchmark: HFRI Fund of Funds Composi	,	3.20	0.33	(5.25)	3.71	3.51
Relative Performance	te moex		(0.79)	11.90	2.82	0.66
REAL ASSETS			(0.75)	11.50	2.02	0.00
Total Real Assets	620,259,380	6.03	(1.53)	8.56	8.47	(1.39
Benchmark: TOTAL REAL ASSETS CUSTO	,	3.03	(2.74)	6.12	7.41	N/A
	M BENCHMARK					
Relative Performance			1.22	2.44	1.06	N/A
Private Credit	200 700 070	2.54	4.20	2.00	F 40	8114
Total Private Credit Benchmark:S&P LSTA US Leveraged Loar	260,763,979	2.54	1.29 0.54	(0.60)	5.12 1.91	N/A 3.24
Benchmark:S&P LSTA US Leveraged Loar	i ivo index		0.54	(0.60)	1.91	3.24

Monthly Summary ERA's Total Fund returned -1.55% in outperfor

ACERA's Total Fund returned -1.55% in outperforming the policy index by 92 bps. The Total IntT Equity asset class outperformed its benchmark by 79 bps and the U.S. Equity asset class outperformed its benchmark by 7 bps. The Fixed Income asset class outperformed its benchmark by 33 bps. Mondrian outperformed its benchmark by 531 bps and Franklin Templeton Inv. underperformed its benchmark by 206 bps. The ending market value of the Total Fund was \$10,281,844,887.



Basic Financial Statements

Statement of Fiduciary Net Position

As of December 31, 2021, with Comparative Totals as of December 31, 2020 (Dollars in Thousands)

	Pension Plan & Non-OPEB	Postemployment Medical Benefits	Total 2021	Total 2020
ASSETS				
Cash	\$ 1,754	\$ -	\$ 1,754	\$ 3,236
Securities Lending Cash Collateral	127,313		127,313	117,171
Receivables				
Contributions	22,027		22,027	21,756
Investment Receivables	19,624		19,624	17,179
Unsettled Trades - Investments Sold	7,653		7,653	96,400
Futures Contracts	161		161	236
Foreign Exchange Contracts	0		0	5,853
Other Receivables	350		350	197
Total Receivables	49,815		49,815	141,621
Prepaid Expenses	803		803	755
Total Current Assets	179,685		179,685	262,783
Investments at Fair Value				
Short-Term Investments	263,950		263,950	182,037
Domestic Equity	679,810		679,810	562,387
Domestic Equity Commingled Funds	2,645,585		2,645,585	2,159,591
International Equity	1,417,146		1,417,146	1,296,336
International Equity Commingled Funds	1,618,474		1,618,474	1,460,569
Domestic Fixed Income	1,714,638		1,714,638	1,093,183
International Fixed Income	82,608		82,608	190,474
International Fixed Income Commingled Funds	85,023		85,023	159,176
Real Estate - Separate Properties	72,113		72,113	72,474
Real Estate - Commingled Funds	641,674		641,674	528,671
Real Assets	749,497		749,497	467,886
Absolute Return	764,772		764,772	645,134
Private Equity	938,688		938,688	726,180
Private Credit	158,511		158,511	57,747
Total Investments	11,832,489		11,832,489	9,601,845
Non-OPEB Assets	51,921		51,921	41,677
Due from Pension Plan	(1,140,278)	1.088.357	(51,921)	(41,677
Capital Assets at Cost (Net of Accumulated	(1,140,270)	1,000,007	(01,021)	(41,077
Depreciation and Amortization)	6.185		6.185	4.319
Total Assets	10,930,002	1,088,357	12,018,359	9,868,947
LIABILITIES	20,000,002	2,000,007	12,010,000	0,000,011
Securities Lending Liability	127,313		127,313	117.171
Unsettled Trades - Investments Purchased	25,746		25,746	100,393
Futures Contracts	589		589	100,550
Foreign Exchange Contracts	913		913	(
Investment-Related Payables	13.516		13.516	12.191
Accrued Administration Expenses	2,624		2.624	2,858
Members Benefits & Refunds Payable	6,379		6,379	6,155
Retirement Payroll Deductions Payable	314	•	314	267
Current Lease Liability	48	•	48	42
Long-term Lease Liability	46 54		40 54	103
Total Liabilities	177,496		177,496	239,180
NET POSITION - Held in Trust for Benefits	\$ 10,752,506	\$ 1,088,357	\$ 11,840,863	\$ 9,629,767

The accompanying Notes to the Basic Financial Statements are an integral part of these Basic Financial Statements.

Understanding ACERA's Investment Portfolio

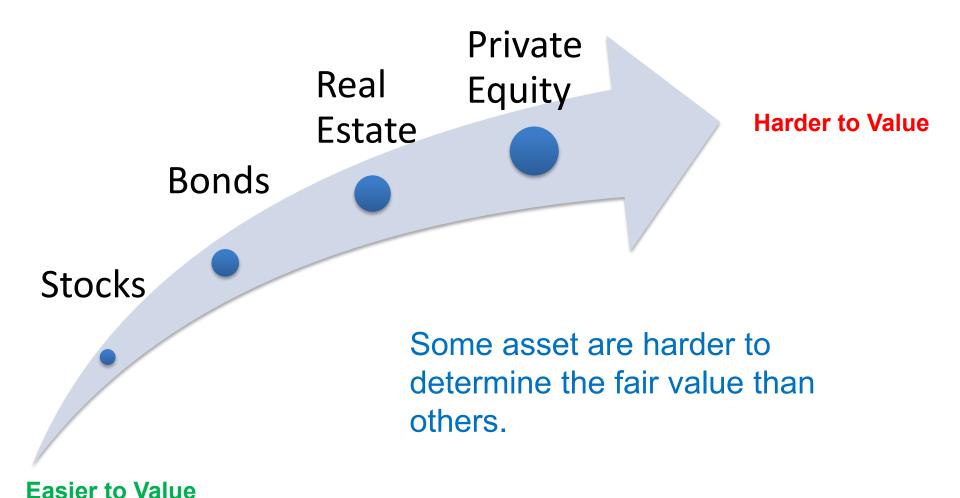
This detailed section of assets and liabilities on the Statement of Fiduciary Net Position provides a breakdown of the investment portfolio by asset class.

Fair Value Measurement and Application (GASB 72)

Objective: To provide a methodology to report the **fair value** of investment assets on the financial statement.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Determining Fair Value



Directly vs. Indirectly Observable

Investment Type	Level 1 - Directly Observable Inputs	Level 2 – Both Directly and Indirectly Observable Inputs	Level 3 - Indirectly Observable Inputs
Stocks	Similar stocks actively trade on a stock exchange where pricing is available on a daily basis.		
Bonds and Real Estate		Quoted prices for similar investments in active markets but there are also other market inputs.	
**Maximize use direindirectly observab	ectly observable ove ole information.	r	** Use internally generated data or other industry information with adjustments for risk



Cybersecurity Update: Detection

- Anomalies and Events
- Potential Impact
- Intrusion Detection
- Intrusion Prevention
- Continuous Monitoring
- Verify Effectiveness

Questions