

Merced County Employees' Retirement Association

A Component Unit of the County of Merced and a Pension Trust Fund of the County of Merced and Participating Employers.

Merced, California

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Annual Comprehensive Financial Report For the fiscal years ended June 30, 2022 and 2021 Inside Front Cover — Page Intentionally Left Blank



Annual Comprehensive Financial Report

For the Fiscal Years Ended June 30, 2022 and 2021

Issued by:

Kristen Santos

Plan Administrator

Mark A. Harman, MBA

Fiscal Manager

Merced County Employees' Retirement Association

A Component Unit of the County of Merced and a Pension Trust Fund of the County of Merced and Participating Employers.

Merced, California

3199 M Street Merced, California 95348 (209) 726-2724

www.mercedcera.com

MercedCERA's mission is to provide benefits to its members, to manage assets prudently in accordance with plan provisions, and to provide competent and efficient services to our members.

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Merced County Employees' Retirement Association Letter of Transmittal

December 16, 2022

Board of Retirement Merced County Employees' Retirement Association 3199 M Street Merced, CA 95326

Dear Board Members:

As the Plan Administrator of the Merced County Employees' Retirement Association (MercedCERA or the Association), I am pleased to present this Annual Comprehensive Financial Report (ACFR) for the fiscal years ended June 30, 2022 and 2021. This report is intended to provide readers with complete and reliable information about MercedCERA's financial status, compliance with the law and MercedCERA policies. This is MercedCERA's 72nd year of operation.

MercedCERA's Mission Statement and Core Values

MercedCERA's mission is to provide benefits to its members, manage assets prudently in accordance with plan provisions, and provide competent and efficient services to our members.

The Annual Comprehensive Financial Report (ACFR)

MercedCERA management is responsible for both the accuracy of the data and the completeness and fairness of the financial information contained in this ACFR. The ACFR is presented in five sections:

- The **Introductory Section** describes MercedCERA's management and organizational structure, identifies the members of the MercedCERA Board of Retirement (Board), provides a listing of professional consultants utilized by MercedCERA, and presents this Letter of Transmittal.
- The **Financial Section** presents the report of the independent auditor, Brown Armstrong Accountancy Corporation, along with MercedCERA management's discussion and analysis, basic financial statements, required supplementary schedules, other supplemental schedules, and other information.
- The **Investment Section** contains a report on MercedCERA's investment performance from MercedCERA's general investment consultant, Meketa Investment Group, along with information regarding MercedCERA's investment policies, asset allocation, investment holdings, and investment management fees.
- The **Actuarial Section** contains the independent actuary's certification letter from MercedCERA's actuary, Cheiron, Inc., along with a summary of actuarial assumptions and funding methods, and actuarial statistics.
- The **Statistical Section** presents information pertaining to MercedCERA's operations on a multi-year basis. The financial and operating information provides contextual data for MercedCERA's fiduciary net position, contributions, refunds, and different types of retirement benefits.

MercedCERA and its Services

MercedCERA is a public employee retirement system established by the County of Merced on July 1, 1950. MercedCERA is administered by the MercedCERA Board of Retirement to provide retirement, disability, death, and survivor benefits for eligible employees of the County of Merced, Superior Court of California for the County of Merced, and the Merced Cemetery District pursuant to the California Constitution, the County

Merced County Employees' Retirement Association Letter of Transmittal (continued)

Employees' Retirement Law of 1937, Government Code Section 31450 et. seq. (the 1937 Act), and the by-laws, policies, and procedures adopted by the MercedCERA Board. The County of Merced Board of Supervisors may also adopt resolutions, as permitted by the 1937 Act, which may affect benefits of MercedCERA members.

The MercedCERA Board is responsible for the overview of the Association, including managing the investment of the Association's assets. The day-to-day management of MercedCERA is vested in the Plan Administrator appointed by the Board.

The Board is comprised of nine members and two alternates: two elected by the active general membership, one regular and one alternate elected by the active safety membership, one regular and one alternate elected by the retired membership, four appointed by the County of Merced Board of Supervisors, and the County of Merced Treasurer, who serves as an ex-officio member. With the exception of the County Treasurer, Board members serve three-year terms, with no term limits.

Financial Information

A review of MercedCERA's fiscal affairs for the years fiscal years ended June 30, 2022 and 2021 is presented in Management's Discussion and Analysis (MD&A), which is located in the Financial Section of this ACFR. Together, the MD&A and this Letter of Transmittal provide an expanded overview of MercedCERA's financial activities for the fiscal years reported.

The audit of MercedCERA's financial statements has been performed by an independent auditor, Brown Armstrong Accountancy Corporation, who has determined that the financial statements are presented in conformity with Generally Accepted Accounting Principles (GAAP) and are free of material misstatement and that sufficient internal controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. This document has been prepared in compliance with the Governmental Accounting Standards Board (GASB) Statement No. 98 and all applicable prior and relevant standards.

Management is responsible for establishing and maintaining appropriate internal controls to ensure that MercedCERA's assets are protected from loss, theft, or misuse. We believe that internal controls are designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of control should not exceed the benefits to be derived and the assessment of control should not exceed the benefits to be derived and the assessment of costs and benefits requires estimates and judgments by management.

As of June 30, 2022, MercedCERA's fiduciary net position restricted for pension benefits totaled approximately \$1.064 billion reflecting a decrease of approximately \$98.8 million or -8.5% in fiduciary net position from the end of the previous fiscal year. This was primarily attributable to decrease in fair value of investments.

Actuarial Funding Status

MercedCERA's funding objective is to meet long-term benefit obligations by maintaining a well-funded plan and obtaining optimum investment returns consistent with a prudent level of risk.

Pursuant to provisions in the 1937 Act, MercedCERA engages an independent actuarial firm to perform annual actuarial valuations of the Association. As part of the valuation, economic assumptions are reviewed and, in addition, every three years a triennial experience study of MercedCERA membership is conducted and demographic and economic assumptions are reviewed and modified as necessary. The most recent experience study was conducted in 2019. As a result of the study, several economic and demographic assumptions were changed. The most recent actuarial valuation as of June 30, 2021, reported the

Merced County Employees' Retirement Association Letter of Transmittal (continued)

Association's actuarial funding status (the ratio of assets to actuarial liabilities) is 78.0%. This increase in funding ratio (78.0% from 65.1% as of June 30, 2020) was primarily due to a combination of MercedCERA's fair value of assets increasing at a rate faster than the increase of the actuarial liabilities, which was both driven by the changes in the assumptions and performance of MercedCERA's investments.

Investments

The Board has fiduciary control of all investments of MercedCERA and is responsible for establishing investment objectives, strategies, and policies. Pursuant to the California Constitution and the 1937 Act, the Board is authorized to invest in any form or type of investment to create a portfolio deemed prudent in the informed judgement of the Board. In making decisions regarding the MercedCERA investment portfolio, the Board acts in a fiduciary capacity and must discharge its duties in accordance with fiduciary principles. In carrying out its investment responsibilities, the Board receives guidance from professional investment consultants, Meketa Investment Group, Inc. and Cliffwater, LLC.

The Board has adopted Investment Policies, which provide the framework for the management of MercedCERA's investments. The Investment Policies establish the investment program goals, asset allocation policies, performance objectives, investment management policies, and risk controls.

The Investment Policy Statement also delineates the principal fiscal duties of the Board, MercedCERA's custodial bank, MercedCERA staff, and investment managers.

The asset allocation plan adopted by the Board is an integral part of MercedCERA's investment program. It is designed to provide an optimum mix of asset classes with return expectations to satisfy the expected growth of liabilities while finding a tolerable level of risk exposure. A summary of the asset allocation plan is located in the Investment Section of this ACFR.

The assets of MercedCERA are exclusively managed by external professional investment management firms. A listing of the investment service providers and investment fees is located on pages 79 and 78, respectively.

For the fiscal year ended June 30, 2022, MercedCERA's investment return, net of fees, as reported by Meketa Investment Group, was a negative 7.1% and the annualized rates of return, net of fees, over the last three and five years were a positive 7.8% and 7.5%, respectively.

Service Efforts and Accomplishments

- · Adopted and implemented a cost-of-living adjustment (COLA) of 3.0% effective April 1, 2022 for Tier 1 retired members.
- · For the eighteenth consecutive year, MercedCERA was awarded the GFOA Certificate of Achievement for Excellence in Financial Reporting for MercedCERA's 2021-2020 Annual Comprehensive Financial Report.
- · Approved commitments for each of the following private investments (regardless of funding progress at June 30, 2022):
 - · Marlin Heritage Fund III \$8 million
 - · Summit Partners XI \$8 million
 - · TCV Velocity Fund \$8 million
 - · Spark VII \$3 million
 - · Spark Growth IV \$6 million

Merced County Employees' Retirement Association Letter of Transmittal (continued)

- · GTCR Growth Fund I \$8 million
- · Accel KKR IV \$8 million
- · Ares Senior Direct Lending Fund II \$20 million
- · Carnelian Energy Capital IV \$8 million
- · Varagon Direct Lending Fund I \$20 million
- · Thoma Bravo IV \$8 million
- · Threshold Ventures IV \$8 million
- · Carmel Partners VIII \$8 million
- · Angelo Gordon Direct Lending Fund IV (Annex) \$10 million
- · Rockpoint RE Fund VII \$8 million
- · Accel KKR Credit Partners II \$10 million
- · Angelo Gordon Direct Lending Fund V \$10 million
- · Adopted the 2021 actuarial valuation report as presented by Cheiron, Inc.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to MercedCERA for its Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2021. The Certificate of Achievement is a prestigious national award that recognizes conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Annual Comprehensive Financial Report, whose contents conform to program standards. The Annual Comprehensive Financial Report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. This is MercedCERA's eighteenth Certificate of Achievement for excellence in Financial Reporting. We believe our current report continues to conform to the Certificate of Achievement program requirements.

Acknowledgements

The compilation of this report reflects the dedicated efforts of MercedCERA's Fiscal Manager, Mark Harman, and Accountant, Kenter Ludlow. I would also like to thank MercedCERA's professional consultants: our actuary, our investment consultants, and our auditor for their assistance.

Sincerely,

Kristen Santos Plan Administrator



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Merced County Employees' Retirement Association California

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

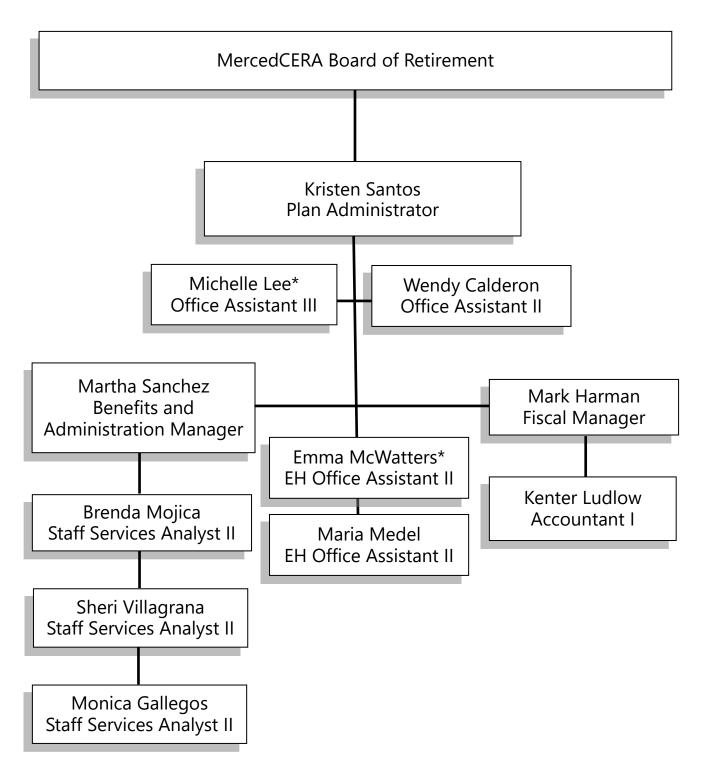
June 30, 2021

Christopher P. Morrill

Executive Director/CEO

<u>Trustees</u>	Term Expiration	Appointed/Elected by
Ryan Paskin, Chair	December 31, 2022	Board of Supervisors
Scott Johnston, Vice Chair	December 31, 2023	Retired Members
Alfonse Peterson, Secretary	December 31, 2023	Board of Supervisors
Karen Adams, County Treasurer	Permanent by office	Ex-officio Member
Janey Cabral	December 31, 2023	General Members
David Ness	December 31, 2022	Board of Supervisors
Scott Silveira	December 31, 2023	Board of Supervisors
Wendy Alvares*	December 31, 2022	General Members
Aaron Rosenberg	December 31, 2022	Safety Members
Vacant, Alternate	December 31, 2022	Safety Members
Michael Harris	December 31, 2023	Retired Members

^{*}Wendy Alvares left the MercedCERA Board of Retirement in August of 2022.



^{*}Emma McWatters left MercedCERA in July of 2022 and Michelle Lee left MercedCERA in October of 2022.

Consulting Services

Investment Consultant

Meketa Investment Group, Inc. Cliffwater, LLC

Actuary

Cheiron, Inc.
Segal Consulting

Auditor

Brown Armstrong Accountancy Corporation

Fiscal Consultant

Macias Gini & O'Connell LLP

Master Custodian

Northern Trust Corporation

Electronic Systems Services

Merced County Information Systems

Legal Counsel

Hanson Bridgett LLP
Merced County Counsel
Nossaman LLP
Ted Cabral

Medical Advisor

National Disability Evaluations, Inc.

Commission Recapture Brokers

ConvergEx Group
Capital Institutional Services, Inc.

Please refer to the Investment Section of this report for a List of Investment Services Providers located on pages 79 and 80 and the Schedules of Investment Fees located on page 78.

Additionally, please refer to Other Supplementary Information in this report for a Schedule of Payments to Consultants on page 57.



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www.ba.cpa 661-324-4971

INDEPENDENT AUDITOR'S REPORT

To the Board of Retirement of the Merced County Employees' Retirement Association Merced, California

Report on the Audit of the Financial Statements and Other Information

Opinions

We have audited the accompanying Statements of Fiduciary Net Position of the Merced County Employees' Retirement Association (MercedCERA), a component unit of the County of Merced, as of June 30, 2022 and 2021, the related Statements of Changes in Fiduciary Net Position for the fiscal years then ended, and the related notes to the basic financial statements, which collectively comprise MercedCERA's basic financial statements as listed in the table of contents. We have also audited the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan totals for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) (other information) as of and for the fiscal year ended June 30, 2022, listed as other information in the table of contents.

In our opinion, the basic financial statements and other information referred to above present fairly, in all material respects, the fiduciary net position of MercedCERA as of June 30, 2022 and 2021; its changes in fiduciary net position for the fiscal years then ended; and the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan totals for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense excluding that attributable to employer-paid member contributions (specified column totals) as of and for the fiscal year ended June 30, 2022, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Basic Financial Statements and Other Information section of our report. We are required to be independent of MercedCERA 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 opinions.

Responsibilities of Management for the Financial Statements and Other Information

Management is responsible for the preparation and fair presentation of the basic financial statements and other information 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 basic financial statements and other information that are free from material misstatement, whether due to fraud or error.

BAKERSFIELD 4200 Truxtun Avenue, Suite 300 Bakersfield, CA 93309 661-324-4971 FRESNO 10 River Park Place East, Suite 208 Fresno, CA 93720 559-476-3592 STOCKTON 2423 West March Lane, Suite 202 Stockton, CA 95219 209-451-4833

REGISTERED with the Public Company Accounting Oversight Board and MEMBER of the American Institute of Certified Public Accountants

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

Management is also responsible for maintaining a current plan instrument, including all MercedCERA plan amendments; administering MercedCERA; and determining that MercedCERA's transactions that are presented and disclosed in the basic financial statements and other information are in conformity with MercedCERA's plan provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Financial Statements and Other Information

Our objectives are to obtain reasonable assurance about whether the basic financial statements and other information as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. 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 GAAS and Government 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 judgment made by a reasonable user based on the basic financial statements and other information.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the basic financial statements and other
 information, 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 basic financial statements and other information.
- 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 MercedCERA'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
 basic financial statements and other information.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about MercedCERA'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.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements and other information. Such information is the responsibility of management and, although not a part of the basic financial statements and other information, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements and other information in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the management's discussion and analysis and required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial

Merced County Employees' Retirement Association Independent Auditor's Report (continued)

statements and other information, and other knowledge we obtained during our audit of the basic financial statements and other information. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplemental Schedules

Our audit was conducted for the purpose of forming opinions on the financial statements and other information that collectively comprise MercedCERA's basic financial statements. The other supplemental schedules, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements and other information. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements and other information. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and other information and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements and other information or to the basic financial statements and other information themselves, and other additional procedures in accordance with GAAS. In our opinion, the other supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements and other information as a whole.

Additional Information

Management is responsible for the additional information included in the Annual Comprehensive Financial Report. The additional information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic financial statements and other information and our auditor's report thereon. Our opinions on the basic financial statements and other information do not cover the additional information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements and other information, our responsibility is to read the additional information and consider whether a material inconsistency exists between the additional information and the basic financial statements and other information, or the additional information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the additional information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 16, 2022, on our consideration of MercedCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of MercedCERA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering MercedCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION
Brown Armstrong
Secountancy Corporation

Bakersfield, California December 16, 2022

Merced County Employees' Retirement Association Management's Discussion and Analysis

We are pleased to provide this overview and analysis of the financial activities of the Merced County Employees' Retirement Association (MercedCERA or the Association) for fiscal years ended June 30, 2022 and 2021. We encourage readers to consider the information presented here in conjunction with the additional information furnished in the Letter of Transmittal and the financial statements following this section.

Financial Highlights

- At the close of the fiscal year June 30, 2022, MercedCERA's fiduciary net position restricted for pensions totaled \$1.064 billion. All of the fiduciary net position is available to meet MercedCERA's ongoing obligations to plan participants and their beneficiaries.
- During fiscal year 2022, MercedCERA's fiduciary net position restricted for pensions decreased by \$98.8 million. This change mostly reflects the decrease in fair value of investments.
- MercedCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. As of June 30, 2021, the date of MercedCERA's last actuarial funding valuation, MercedCERA's funded ratio was 78.0%. In general, this indicates that for every one dollar of benefits due, MercedCERA has approximately \$0.78 of assets available for payment.
- Additions, as reflected in the Statements of Changes in Fiduciary Net Position, were -\$9.4 million in the fiscal year ended June 30, 2022. These additions include employer and employee contributions of \$77.7 million, investment income of \$10.6 million, other income of \$57.2 thousand, a net depreciation in the fair value of investments of \$94.8 million, and investment expenses of \$3.0 million.
- Deductions, as reflected in the Statements of Changes in Fiduciary Net Position, increased from \$86.4 million to \$89.5 million in the current fiscal year (an increase of approximately 3.49%). This increase was primarily due to benefits paid.

Overview of the Financial Statements

The following discussion and analysis are intended to help the reader understand the purpose and meaning of the key components within the financial section. The financial statements are comprised of the **Statements** of **Fiduciary Net Position**.

The **Statements of Fiduciary Net Position** are a snapshot of account balances as of the fiscal year ends. They indicate the assets available for future payment to retirees and any current liabilities. The difference between assets and liabilities represents the fiduciary net position restricted for pensions. The statements also present prior year-end balances for comparative purposes.

The **Statements of Changes in Fiduciary Net Position** provide a view of the current year additions to and deductions from the Association that caused the change in the net position during the fiscal years.

MercedCERA's financial statements are in compliance with the generally accepted accounting principles in the United States of America (GAAP) and reporting guidelines set forth in Governmental Accounting Standards Board (GASB) Statement Nos. 28, 34, 40, 44, 51, 53, 63, 67, 72, 82, 84, and 98. These pronouncements require certain disclosures, and also require that defined pension plans of state and local governments report use the full accrual method of accounting. MercedCERA complies with all material requirements of these pronouncements.

These financial statements report information about MercedCERA's financial activities. As previously noted, the statements include all assets and liabilities using the full accrual basis of accounting. The current year's additions are recognized when earned and deductions are recognized when incurred regardless of when cash

Merced County Employees' Retirement Association Management's Discussion and Analysis (continued)

is received or paid. Investment gains or losses are shown at the trade date, not the settlement date. In addition, both realized and unrealized gains and losses are reported. All capital assets are depreciated over their useful lives.

The information reported regarding MercedCERA's fiduciary net position restricted for pensions is generally considered to be a good measure of MercedCERA's financial position. Over time, increases or decreases in the Association's net position is one indicator of whether the Association's financial health is improving or deteriorating. Other factors, however, such as investment market conditions and the employers' net pension liability, should also be considered in measuring the Association's overall health.

The **Notes to Basic Financial Statements** are an integral part of the financial report and provide additional information that is essential to a full understanding of the data provided in the financial statements.

In addition to the financial statements and accompanying notes, this report presents certain required supplementary information. The **Required Supplementary Information** includes the Schedules of Changes in Net Pension Liability and Related Ratios, Schedules of Employer Contributions, and the Schedules of Investment Returns. The Schedules of Changes in Net Pension Liability and Related Ratios present the changes in the employers' net pension liability. The Schedules of Employer Contributions provide historical information about actuarial determined contributions of the employer and the actual contributions made. The Schedules of Investment Returns represent the investment returns weighted by the cash inflows and outflows from the investment funds. Together, these schedules and the supporting **Notes to Required Supplementary Information** provide information to help promote understanding of the Association's fiduciary net position in relation to the total pension liability, employers' actual contributions and investment returns over time. Other Supplemental Schedules represent information concerning MercedCERA's operations on a multi-year basis. Finally, Other Information consists of two schedules pertaining to GASB Statement No. 68, Accounting and Financial Reporting for Pensions—an Amendment of GASB Statement No. 27. The two schedules include the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan and the Schedule of Cost Sharing Employer Allocations. Under GASB Statement No. 68, plan sponsors are required to report Net Pension Liability on their balance sheets and changes in Net Pension Liability on their operating statements as pension expenses, deferred inflows of resources, and deferred outflows of resources.

Financial Analysis

As previously noted, the Net Position may serve over time as a useful indication of MercedCERA's financial position. At the close of the fiscal year June 30, 2022, MercedCERA's assets exceeded its liabilities by \$1.064 billion. All of the Net Position is available to meet MercedCERA's ongoing obligations to plan participants and their beneficiaries. As of June 30, 2022, the Net Position totaled \$1.064 billion, which is \$98.8 million less than the prior year. This result essentially reflects the decrease in net investment income at fair value, regardless of the increase in benefits and administrative expenses.

MercedCERA's Management believes that the Association remains in a financial position that will enable MercedCERA to meet its future obligations to participants and beneficiaries. MercedCERA remains focused on the long-term performance of the fund, dependent on a strong and successful investment program, risk management, and strategic planning.

MercedCERA's Fiduciary Net Position

For Fiscal Years Ended June 30, 2022 and 2021:

	2022	2021	Increase/ (Decrease) Amount	% Change
Current and Other Assets	\$11,400,528	\$10,593,765	\$806,763	7.6%
Investments at Fair Value	1,052,415,019	1,151,767,257	(\$99,352,238)	-8.6%
Capital Assets/Prepaid Expenses	1,401,286	1,607,293	(\$206,007)	-12.8%
Total Assets	1,065,216,833	1,163,968,315	(\$98,751,482)	-8.5%
Total Liabilities	776,088	714,471	\$61,617	8.6%
Fiduciary Net Position Restricted for Pensions	\$1,064,440,745	\$1,163,253,844	(\$98,813,099)	-8.5%

For Fiscal Years Ended June 30, 2021 and 2020:

	2021	2020	Increase/ (Decrease) Amount	% Change
Current and Other Assets	\$10,593,765	\$17,533,476	(\$6,939,711)	-39.6%
Investments at Fair Value	1,151,767,257	901,161,517	250,605,740	27.8%
Capital Assets/Prepaid Expenses	1,607,293	1,837,838	(230,545)	-12.5%
Total Assets	1,163,968,315	920,532,831	243,435,484	26.4%
Total Liabilities	714,471	717,759	(3,288)	-0.5%
Fiduciary Net Position Restricted for Pensions	\$1,163,253,844	\$919,815,072	243,438,772	26.5%

The increase in current and other assets during the 2021-2022 fiscal year is mostly attributable to a modest increase in cash year-over-year. The decrease in total assets during the 2021-2022 fiscal year was due primarily to the decrease in the fair value of investments. The modest increase in total liabilities during the June 30, 2022 fiscal year is mostly due to having a larger amount of accounts payable at year-end.

Reserves

Reserves are not required, nor recognized, under GAAP. These are not shown separately on the Statements of Fiduciary Net Position, but they equate to, and are accounts within, the Fiduciary Net Position Restricted for Pensions and are vital to MercedCERA's operations. MercedCERA's reserves are established from contributions and accumulation of investment income after satisfying investment and administrative expenses. Under GAAP, including Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*, investments are stated at fair value rather than at cost, and fair value includes the recognition of unrealized gains and losses in the current period. These unrealized gains and losses are tracked in a reserve account called the Fair Value Fluctuation Reserve. The Fair Value Fluctuation Reserve decreased by \$123.4 million in the current fiscal year mostly as a result of an decrease in the fair value of investments.

MercedCERA's Reserves

For Fiscal Years Ended June 30, 2022, 2021, and 2020:

	2022	2021	2020
Active Members' Reserve	\$117,153,891	\$114,579,642	\$110,614,910
Employer Advance Reserve	336,057,437	291,069,692	246,441,171
Retired Members' Reserve	259,831,255	275,755,873	290,820,111
Interest Fluctuation Reserve	133,988,380	141,008,117	116,239,196
Fair Value Fluctuation Reserve	217,409,782	340,840,520	155,699,684
Total Reserves at Fair Value	\$1,064,440,745	\$1,163,253,844	\$919,815,072

MercedCERA's Activities

Financial markets performed markedly worse compared to the prior fiscal year, which resulted in the June 30, 2022 fiscal year decrease of \$98.8 million in MercedCERA's Net Position (a decrease of 8.5% from the previous year). The key element of this decrease was a substantial reduction in the fair value of investments.

Additions to Fiduciary Net Position

The reserves needed to finance retirement benefits are normally accumulated through the collection of employer and employee contributions and through earnings on investment income (net of investment expenses). Additions to the fiduciary net position for the fiscal year ended June 30, 2022 totaled -\$9.4 million. Overall, additions for the fiscal year decreased \$339.2 million from the fiscal year ended June 30, 2021 primarily due to a depreciation in the fair value of investments year-over-year. In fiscal year 2020-2021, additions totaled \$329.9 million, which was an increase of \$194.4 million from fiscal year 2019-2020. Increases in employer and member contributions year-over-year nominally offset the depreciation in the fair value of assets that is reflected in the net investment loss of \$87.1 million for the fiscal year ended June 30, 2022. The Investment Section of this report provides a more detailed review of the investment markets and investment performance for the current fiscal year.

For Fiscal Years Ended June 30, 2022 and 2021:

	2022	2021	Increase/ (Decrease) Amount	% Change
Member Contributions	\$12,124,583	\$11,895,243	\$229,340	1.93%
Employer Contributions	65,629,994	64,512,161	1,117,833	1.73%
Net Investment Income	(87,115,891)	253,466,527	(340,582,418)	-134.37%
Total Additions	\$(9,361,314)	\$329,873,931	\$(339,235,245)	-102.84%

FOI FISCAL TEALS ENGEG JUNE 30, 2021 AND 2020	ed June 30, 2021 and 2020:	cal Years Ended	For Fiscal
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	2021	2020	Increase/ (Decrease) Amount	% Change
Member Contributions	\$11,895,243	\$10,796,855	\$1,098,388	10.2%
Employer Contributions	64,512,161	67,413,475	(2,901,314)	-4.3%
Net Investment Income	253,466,527	57,232,017	196,234,510	342.9%
Total Additions	\$329,873,931	\$135,442,347	\$194,431,584	143.6%

Deductions from Fiduciary Net Position

MercedCERA was created to provide lifetime retirement annuities, survivor benefits, and permanent disability benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments, as designated by the plan; refunds of contributions to terminated employees; and the cost of administering the Association. Effective for the 2011 fiscal year, the County Employees Retirement Law of 1937 (1937 Act) limits administration costs to the greater of 21/100ths of 1 percent of the Association's accrued actuarial liability or \$2 million, as adjusted annually by the amount of an annual cost of living adjustment (COLA). The 1937 Act also allows for some expenses to be excluded from the calculation. These exclusions are investment, actuarial, custodial banking, legal, and technology expenses. Deductions for the current fiscal year totaled \$89.5 million while in fiscal year 2019-2020 deductions totaled \$86.4 million, an increase of 3.5% from the previous year. The increase in deductions can be primarily attributed to the retiree payroll increase of 3.7%.

For Fiscal Years Ended June 30, 2022 and 2021

	2022	2021	Increase/ (Decrease) Amount	% Change
Benefits Paid	\$85,912,580	\$82,836,595	\$3,075,985	3.71%
Refunds of Contributions	896,116	977,485	(81,369)	-8.32%
Administrative Expense	2,522,797	2,494,246	28,551	1.14%
Actuarial Expense	120,292	126,833	(6,541)	-5.16%
Total Deductions	\$89,451,785	\$86,435,159	\$3,016,626	3.49%

For Fiscal Years Ended June 30, 2021 and 2020:

	2021	2020	Increase/ (Decrease) Amount	% Change
Benefits Paid	\$82,836,595	\$78,755,515	\$4,081,080	5.2%
Refunds of Contributions	977,485	910,147	67,338	7.4%
Administrative Expense	2,494,246	2,253,113	241,133	10.7%
Actuarial Expense	126,833	211,784	(84,951)	-40.1%
Total Deductions	\$86,435,159	\$82,130,559	\$4,304,600	5.2%

Merced County Employees' Retirement Association Management's Discussion and Analysis (continued)

Change in Fiduciary Net Position

As of June 30, 2022, Fiduciary Net Position decreased \$98.8 million, resulting in a 8.5% decrease in Fiduciary Net Position over the previous fiscal year. This decrease is due primarily to the decrease in the fair value of investments. As of June 30, 2021, Fiduciary Net Position increased \$243.4 million, resulting in a 26.5% increase in Fiduciary Net Position over the previous fiscal year. This increase is due primarily to the increase in the fair value of investments.

MercedCERA's Fiduciary Responsibilities

MercedCERA's Board of Retirement and management are fiduciaries of the pension trust fund. Under the California Constitution, the Association's assets must be used exclusively for the benefit of the plan participants and their beneficiaries.

Requests for Information

This financial report is designed to provide MercedCERA's Board of Retirement, our membership, taxpayers, investment managers, creditors, and others with a general overview of MercedCERA's financial condition and to demonstrate accountability for the funds MercedCERA receives and manages. Questions concerning any of the information provided in this report, or requests for additional information should be addressed to:

Merced County Employees' Retirement Association

Attn: Fiscal Operations 3199 M Street

Merced, CA 95348 T: 209.726.2724 F: 209.726.3637

Respectfully Submitted,

Mark A. Harman, MBA Fiscal Manager

December 16, 2022

	2022	2021
Assets		
Cash and short-term investments		
Cash invested with Merced County Treasurer	\$962,632	\$815,284
Cash invested with Northern Trust	5,405,400	5,578,046
Other cash and cash equivalents with Northern Trust	1,606,020	1,137,164
Total cash and short-term investments	7,974,052	7,530,494
Receivables		
Bond interest	594,819	598,599
Dividends	-	9,947
Contributions	2,748,334	2,388,837
Distributions	66,780	2,736
Other	16,543	63,152
Total receivables	3,426,476	3,063,271
Investments		
U.S. government and agency obligations	39,370,729	49,045,240
Domestic fixed income	163,748,458	192,544,624
Common stock (domestic)	24,197,364	31,836,007
Common stock (index funds)	211,862,277	243,030,022
Common stock (international)	184,743,517	251,148,371
Real estate	91,666,608	89,400,417
Alternative investments	336,826,066	294,762,576
Total investments	1,052,415,019	1,151,767,257
Prepaid expenses	119,533	114,216
Capital assets: Net of accumulated depreciation of \$2,149,188 and \$1,890,499	1,281,753	1,493,077
Total Assets	1,065,216,833	1,163,968,315
Liabilities		
Accounts payable	682,234	626,229
Securities purchased	8,451	2,839
Unclaimed contributions	85,403	85,403
Total Liabilities	776,088	714,471
Fiduciary Net Position Restricted for Pensions	\$1,064,440,745	\$1,163,253,844

The accompanying notes are an integral part of these basic financial statements.

	2022	2021
Additions		
Contributions		
Plan members	\$12,124,583	\$11,895,243
Employer	65,629,994	64,512,161
Total contributions	77,754,577	76,407,404
Investment income from investment activities		
Net appreciation / (depreciation) in fair value of investments	(94,850,878)	247,870,174
Investment income	10,671,989	8,346,163
Other income	57,231	9,312
Less investment expenses	(2,994,233)	(2,759,122)
Total net investment income/(loss)	(87,115,891)	253,466,527
Total Additions	(9,361,314)	329,873,931
Deductions		
Benefits paid	85,912,580	82,836,595
Refunds of contributions	896,116	977,485
Administrative expenses	2,522,797	2,494,246
Actuarial expenses	120,292	126,833
Total Deductions	89,451,785	86,435,159
Net Increase/(Decrease)	(98,813,099)	243,438,772
Fiduciary Net Position Restricted for Pensions		
Beginning of year	1,163,253,844	919,815,072
End of year	\$1,064,440,745	\$1,163,253,844

The accompanying notes are an integral part of these basic financial statements.

Note 1 - PLAN DESCRIPTION

A. General Information

The Merced County Employees' Retirement Association (MercedCERA or the Association) was established July 1, 1950, under and subject to the legislative authority of the State of California as enacted and amended in the County Employees Retirement Act of 1937 (the "1937 Act"). The Association was voter approved by a greater than 2/3 majority of the electorate of Merced County (the County). The Association was integrated with Social Security on January 1, 1956. Members of the Association at that time had a one–time option to convert to the new Association or remain in the previous system. MercedCERA administers a cost sharing, multiple-employer defined benefit pension plan (the Plan). MercedCERA's active employers are the County, the Merced Superior Courts, Merced Cemetery District, and the Merced County Law Library. MercedCERA's annual financial statements are included in the County's financial reports as a pension trust fund.

The management of the Association is vested in a Board of Retirement (Board) that consists of nine members and two alternates:

- 1. County Treasurer
- 2. Two elected general members
- 3. Four members appointed by the County Board of Supervisors
- 4. One elected retired member and one alternate
- 5. One elected safety member and one alternate

Day-to-day management of MercedCERA is vested in a Plan Administrator who is appointed by, and serves at the direction, of the Board.

MercedCERA, with its own governing board, is an independent governmental entity separate and distinct from the County and derives its authority from California Government Code Section 31450 et seq., and the California Constitution.

B. Membership

Plan members are classified as either General or Safety members. Membership becomes effective on the first day of service. Members include all permanent employees appointed to permanent positions or permanent part-time positions within Merced County, Merced Superior Courts, Merced Cemetery District, and Merced County Law Library. Newly hired persons age 60 and over and elected officials may waive membership in the Association.

All employees hired prior to June 13, 1994 are members of Tier I. Executive "A" Level management appointed prior to December 31, 2012 per Amendment to County Board of Supervisors Resolution 94-89, effective July 1, 2000 are Tier I. The Tier I retirement benefit is based on the highest one year compensation. The minimum age to retire is 50 or any age with 30 years of service credit (20 years for Safety). General and Safety Tier I members are eligible for post-retirement cost-of-living adjustments (COLA).

The County Board of Supervisors adopted a new retirement tier (Tier II) for both General and Probation Safety members hired after June 13, 1994 and all other Safety members hired after July 1, 1998. Benefits for members under Tier II are based on 3 years final average salary and are not eligible for post-retirement COLAs. The minimum age to retire is 55 for General members or any age with 30 years of service credit and 50 for Safety members or any age with 20 years of service credit.

The County Board of Supervisors adopted two more tiers in 2012 for both General and Safety members.

Members hired between October 1, 2012 and December 31, 2012 are Tier III. Tier IV was adopted after the State of California approved Assembly Bill (AB) 340, the Public Employee Pension Reform Act of 2013 (PEPRA). New members defined by the new legislation and hired after January 1, 2013 are Tier IV. Both Tier III and Tier IV benefits are based on 3 years final average salary and are not eligible for post-retirement COLAs. For Tier III, the minimum age to retire is 55 for General members or any age with 30 years of service credit and 50 for Safety members or any age with 5 years of service credit.

Membership Structure on June 30, 2022 was as follows:

	(General	Tiers		:	Safety	Tiers	;	
Active Members	ı	II	Ш	IV	- 1	Ш	Ш	IV	Total
Vested	37	616	58	400	4	141	5	65	1,326
Non-vested	-	5	1	712	1	-	-	110	829
Inactive Members									
Deferred vested	37	234	30	61	1	43	3	3	412
Deferred non-vested	2	64	9	445	-	7	1	57	585
Reciprocity	13	117	-	10	3	30	-	2	175
Unclaimed members	3	14	-	-	-	-	-	-	17
Total active and inactive members	92	1,050	98	1,628	9	221	9	237	3,344
Retired Members									
Service retirements	1185	546	7	10	189	36	-	2	1,975
Beneficiaries	198	27	-	-	49	1	-	-	275
Service connected disability	30	20	-	-	59	32	-	-	141
Non-service connected disability	27	14	1	1	2	1	-	-	46
Survivors	14	7	-	-	5	2	-	-	28
Total retired members	1,454	614	8	11	304	72	-	2	2,465

Membership Structure on June 30, 2021 was as follows:

	General Tiers				Safety Tiers				
Active Members	ı	II	III	IV	ı	II	Ш	IV	Total
Vested	50	680	65	374	5	145	5	57	1,381
Non-vested	-	6	-	657	1	-	-	105	769
Inactive Members									
Deferred vested	39	227	18	29	2	44	3	2	364
Deferred non-vested	2	64	9	325	-	7	1	50	458
Reciprocity	20	122	-	5	5	31	-	1	184
Unclaimed members	3	14	-	-	-	-	-	-	17
Total active and inactive members	114	1,113	92	1,390	13	227	9	215	3,173
Retired Members									
Service retirements	1,213	498	7	4	187	33	-	1	1,943
Beneficiaries	187	25	-	-	48	1	-	-	261
Service connected disability	31	18	-	-	61	30	-	-	140
Non-service connected disability	29	14	-	-	2	1	-	-	46
Survivors	13	6	-	-	4	2	-	-	25
Total retired members	1,473	561	7	4	302	67	-	1	2,415

Merced County Employees' Retirement Association Notes to Basic Financial Statements (continued) June 30, 2022 and 2021

C. Benefit Provisions

- Safety members and General Tier I members with ten years of service and who have attained the minimum age of 50 are eligible to receive a lifetime monthly retirement benefit.
- General members with 10 years of service who have attained the minimum age of 55 in Tiers II and III are eligible to receive a lifetime benefit.
- Safety members with 20 years of service, regardless of age, are eligible for lifetime monthly retirement benefits for Tiers I, II, and III.
- General members with 30 years of service, regardless of age, are eligible for lifetime monthly retirement benefits for Tiers I, II, and III.
- Members who are at least 70 years of age are eligible to retire, regardless of years of service, for all Tiers.
- Tier IV Safety members are eligible for retirement with 5 years of service and a minimum age of 50.
- Tier IV General members are eligible for retirement with 5 years of service and a minimum age of 52.
- The service retirement benefit is a percentage of monthly final average salary per year of service, depending on age at retirement and Tier.
- For members integrated with Social Security, the benefit is reduced by 1/3 of the percentage multiplied by the first \$350 of the monthly final average salary, per year of service credited after January 1, 1956 (not applicable to Tier 4 Members).
- The actual benefit paid will also be affected by the benefit payment option selected by the member.

The County Board of Supervisors adopted Government Code Section 31676.17 of the 1937 Act for all County General members, Tier I and Tier II, except Merced Cemetery District members and any member who was deferred or in inactive reciprocity status prior to the dates of adoption, on March 15, 2005; Government Code Section 31664.1 for all Safety members, Tier I and Tier II, on July 1, 2005; Government Code Section 31676.17 for Superior Court of California and County members on November 4, 2005; Government Code Section 31676.1 for General members, Tier III, on October 1, 2012; and Government Code Section 31664 for all Safety members, Tier III, on October 1, 2012. The County adopted PEPRA Tier IV for all General and Safety members on January 1, 2013.

The following chart demonstrates the percentage of Final Average Salary a member of each tier would receive per year of service at different ages.

Developes of Final	Average Calamy for	Fach Voor of Com	vice (Deveded) Com	vant Employees			
Percentage of Final							
	Tie	r I	Tie	er II			
Retirement Age	General	Safety	General	Safety			
50	2.00%	3.00%	-	3.00%			
55	2.50%	3.00%	2.50%	3.00%			
60+	3.00%	3.00%	3.00%	3.00%			
	Tier	· III	Tie	r IV			
Retirement Age	General	Safety	General	Safety			
50	-	2.00%	-	2.00%			
55	1.49%	2.62%	1.30%	2.50%			
57	1.64%	2.62%	1.50%	2.70%			
65	2.43%	2.62%	2.30%	2.70%			
67+	2.43%	2.62%	2.50%	2.70%			
Percentage of Final A	verage Salary for I	Each Year of Servi	ice (Rounded) for M	lerced Cemetery			
District, Deferred, and							
	Tie	r I	Tie	Tier II			
Retirement Age	General	Safety	General	Safety			
50	1.24%	2.00%	-	2.00%			
55	1.67%	2.62%	1.49%	2.62%			
60	2.18%	2.62%	1.92%	2.62%			

(1) Retirement Options

65+

Under the current "Fixed Formula" retirement, a member may elect the "**Unmodified**" allowance, which provides the maximum allowance to the member for life, with a continuance of 60% of the allowance to the spouse or registered domestic partner is designated as beneficiary. No allowance, however, shall be paid to a surviving spouse or domestic partner unless he or she is married to the member or has been registered as a domestic partner at least one year prior to the date of retirement. In the event of the death of the retiree, spouse or domestic partner, any balance of the retiree's contributions, less retirement allowances received, is payable to an alternate beneficiary.

2.62%

2.61%

- **Option 1** The member may elect to receive a slightly reduced monthly retirement allowance, payable throughout their life, with the provision that upon death, their accumulated contributions less the actual annuity payments received by the retiree will be paid to a designated beneficiary. Under this option, beneficiaries may be changed after retirement.
- **Option 2** The member receives a considerably reduced monthly retirement allowance, with the provision that 100% of the retiree's benefit will continue to be paid after the member's death to a beneficiary named at the time of retirement. All payments stop at the death of both annuitants.
- **Option 3** The member receives a reduced monthly retirement allowance, with the provision that 50% of the retiree's benefit will continue to be paid after the member's death to a beneficiary named at the time of retirement. As in Option 2, all payments stop at the death of both annuitants.
- **Option 4** The member receives a reduced monthly retirement allowance for life. The reduction depends on the member's age and the age of the member's beneficiary(ies). This is the only option that allows for

2.43%

2.62%

multiple beneficiaries. A beneficiary does not have to be a spouse or domestic partner, but must have an insurable interest in the member's life. This option also allows the member to assign the percent of continuance to each beneficiary. This option and any estimates for this option are calculated by MercedCERA's actuary and the cost is paid by the member.

(2) Cost-of-Living Adjustment

Annual COLAs to retirement allowances may be granted by the Retirement Board in accordance with governing law. The current maximum increase in a retirement allowance is 3% per year. Any increase is based on the change in the Bureau of Labor Statistics' Consumer Price Index (CPI) for All Urban Consumers for the calendar year prior to the April 1 effective date of the COLA. The amount of any actual CPI above the 3% maximum is accumulated. Accumulated COLAs may be used in future years, at the Board's discretion, when the cost-of-living change is less than the maximum 3%. Tiers II, III, and IV members are not eligible for any cost-of-living increases in their monthly retirement allowances.

(3) Disability Benefits

Members with five years of service, regardless of age, are eligible for non-service connected disability benefits. Member benefits are 1.5% (1.8% for Safety members) of final average salary for each year of service. If this benefit does not equal 1/3 of final average salary, the benefit is increased by the above percentage of final average salary for the years that would have been credited had the member worked to age 65 (age 55 for Safety members). The total benefit cannot exceed 1/3 of the final average salary.

If the disability is service connected, the member may retire regardless of length of service, and the benefit is 50% of final average salary, unless the member is also eligible for a service retirement, in which case the member receives the greater of the two amounts.

(4) Death Benefit Before Retirement

In addition to the return of the member's contributions plus interest, MercedCERA provides a basic death benefit payable to the member's beneficiary or estate equal to one month's salary for each completed year of service under the Association, based on the final year's average salary, but not to exceed six months' salary. Depending on length of service, a monthly allowance could be selected by the surviving spouse to be paid for the rest of his or her life as an alternate benefit.

If a member dies while eligible for service retirement or non-service connected disability, the spouse may receive 60% of the allowance that the member would have received for retirement on the day of his or her death in lieu of the basic death benefit. If the member was below the qualifying retirement age at the time of death, the surviving spouse may elect to leave the member's accumulated contributions on deposit until such time as the member would have attained the qualifying age had he or she lived, at which time the spouse may exercise the option above. Unmarried minor children of the deceased member may continue to receive this allowance until marriage or attaining age 18 (21 if full-time student in an accredited school), upon the death of the surviving spouse or in place of the spouse if he or she does not survive the death of the member.

If a member dies as a result of service-connected injury or disease arising out of the course of his or her employment, his or her surviving spouse may elect, in lieu of the basic death benefit, to receive a monthly allowance of 1/2 of the member's final compensation.

Merced County Employees' Retirement Association Notes to Basic Financial Statements (continued) June 30, 2022 and 2021

Unmarried minor children of the member may receive the same monthly allowance prior to their marriage or attaining age 18 (21 if a full-time student in an accredited school) if there is no surviving spouse or upon the death of the spouse.

(5) Death Benefit After Retirement

Once a member dies after retirement, a lump sum amount of \$3,000 (Government Code Section 31789.3 adopted May 2, 2006) is paid to the beneficiary or estate. However, if the member is a reciprocal system member, this benefit is payable only to active members of the County at the time of retirement.

If the retirement was for service-connected disability, 100% of the amount the member was receiving at the time of death is continued to the surviving spouse for life. If the retirement was for other than a service-connected disability, there are several options available to the member.

(6) Terminated Members

A member leaving covered employment after completing five years of credited service becomes eligible for a deferred retirement allowance, provided the member lives to the minimum service retirement age and does not withdraw his or her accumulated contributions. A member must elect deferred status within 180 days after termination. Members leaving employment with less than five years of service are not eligible to receive a retirement benefit. Non-vested members (less than five years of service credit) may leave their contributions on deposit and continue to be credited interest or they can choose to withdraw their contributions at any time. A non-vested member that enters a reciprocal retirement system after terminating employment with a MercedCERA agency may wish to arrange for reciprocal benefits. Under a reciprocal arrangement, the member funds are kept on deposit with MercedCERA.

(7) Vesting

Active members of the Association receive a 100% vested interest in the Plan after five years of service, but cannot receive a service retirement benefit until they have been a member of the Association for ten years and obtained age fifty for Tier I General members; Tier I, Tier II, and Tier III Safety members; and age fifty-five for Tier II and Tier III General members. Members may receive a service retirement benefit after being a member of the Association for 30 years for General members and 20 years for Safety members regardless of age. Tier IV members can receive a service retirement benefit with five years of service credit and attaining age fifty-two for General members and age fifty for Safety members.

(8) Contribution Rates

The 1937 Act establishes the basic obligations for employer and member contributions to the Association. The actual employer and member contribution rates in effect each year are based on recommendations made by an independent actuary and adopted by the Board.

Benefits payable by the Association are financed through member contributions; employer contributions from Merced County, Merced Cemetery District, Merced Superior Courts; and earnings from investments.

a. Member

MercedCERA members are required to contribute a percentage of their annual covered salary. The rates are set to provide a retirement amount that is equal to a fractional part of the highest one year's or three years' salary, based on membership and tier. Government Code Section 31621.8 sets forth the basis for the determination of the normal rates of contribution for General Tier I and Tier II members. Government Code Section 31639.5 sets forth the basis for the normal rates of contribution for Safety Tier I and Tier II

members. The law further provides that the contribution rates of members will be based on the age nearest birthday at the time of entrance into the Association. Section 31453 states that no adjustment will be included in the rates of contribution for time prior to the effective date of any revisions. Member basic contribution rates are based on entry age into the Association, except for Tier IV, which are 50% of the normal cost, and range between 3.87% and 17.23% for the fiscal year ended June 30, 2022 and 3.56% and 19.90% for the fiscal year ended June 30, 2021. For members integrated with Social Security, the contributions are reduced by 1/3 of such contribution payable with respect to the first \$350 of monthly salary.

b. Plan Sponsors

The County of Merced, Merced Superior Court, and the Merced Cemetery District are required by statute to contribute the amounts necessary to finance the estimated benefits accruing to MercedCERA members not otherwise funded by employee contributions or investment earnings. Pursuant to provisions of the 1937 Act, the Board recommends annual contribution rates for adoption by the County Board of Supervisors each year based upon the rates recommended by the Association's actuary.

The employers' actuarially determined contribution (ADC) is an actuarially determined amount that is required on a sustained, ongoing basis to systematically fund the normal cost and to amortize the unfunded actuarial accrued liability (UAAL) attributed to past service cost over a period not to exceed thirty years. MercedCERA's actuarially determined contribution rates for the fiscal years ended June 30, 2022 and 2021 were 46.51% and 51.25%, respectively, of annual payroll.

In order to determine the ADC, the actuary must first adopt assumptions with respect to certain factors such as the following:

Non-economic assumptions

- The probabilities of members separating from active service on account of:
 - 1. Non-vested and vested withdrawal
 - 2. Retirement for service
 - 3. Mortality
 - 4. Service and non-service connected disability
- The mortality rates to be experienced among retired persons

Economic assumptions

- Rate of future investment earnings
 - 1. Inflation rate
 - 2. Real rate of return
- The relative increases in a member's salary from the date of the valuation to the date of separation from active service
 - 1. Merit increases
 - 2. Longevity increases
 - 3. COLA

Employer contribution rates vary from year to year and depend on the level of benefits established, the rate of return on investments, and the cost of administering benefits. MercedCERA's Schedules of Employer Contributions for the pension benefit plan are presented on page 53 in the Required Supplementary Information following the notes to the basic financial statements.

Note 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

While the Association is governed by the Board and is considered an independent entity, it is a component unit of the County in accordance with Governmental Accounting Standards Board (GASB) Statement No. 39, Determining Whether Certain Organizations Are Component Units – an Amendment of GASB Statement No. 14 and GASB Statement No. 84, Fiduciary Activities.

B. Basis of Accounting

MercedCERA's financial statements are prepared on an accrual basis of accounting, which recognizes income when earned and expenses when the obligation is incurred. Employer and employee contributions are recognized when due, pursuant to statutory or legal requirements per GASB Statement 67, Financial Reporting for Pension Plans – An Amendment of GASB Statement No. 25. Investment income is recognized as revenue when earned. Retirement benefits and refunds are recognized when currently due and payable in accordance with the benefit terms. The net appreciation (depreciation) in fair value of investments consists of realized and unrealized gains and losses on those investments.

C. <u>Investment Expenses</u>

Investment expenses include fees paid for investment consulting services, fund due diligence services, securities custodian services, and rebate and bank fees incurred during the reporting period. Fees paid are charged against the Association's investment earnings pursuant to Section 31596.1 of the 1937 Act.

D. General Administrative Expense

MercedCERA's administrative costs for the fiscal years ended June 30, 2022 and 2021 are calculated pursuant to Government Code Section 31580.2 (a) which provides that the administrative expenses incurred in any year may not exceed the greater of either (1) twenty-one hundredths of 1 percent (.21%) of the actuarial accrued liability of the Association or (2) two million dollars (\$2,000,000), as adjusted annually by the amount of the annual COLA computed in accordance with Article 16.5. Government Code Section 31580.2 (b) provides that expenditures for computer software, hardware, and computer technology consulting services in support of the computer products shall not be considered a cost of administration of the Association. The administrative limit per this Government Code Section allowed MercedCERA \$2.967 million (\$1,412.88 million x .21%) of administrative costs for the fiscal year ended June 30, 2022. For the fiscal years ended June 30, 2022 and 2021, total administrative costs were \$2,522,797 and \$2,494,246, respectively. Included in these figures are computer technology related activities, inclusive of associated depreciation expense, of \$648,419 and \$678,980, respectively. The costs of administering the Plan are financed by the earnings of the retirement fund.

E. Required Supplementary Information

The Schedules of the Changes in Net Pension Liability and Related Ratios and Schedules of Employer Contributions that provide information about the employer's annual contribution to the Plan as well as the annual investment returns are presented on pages 51 through 53.

F. Administrative Budget and Non-Administrative Projection

MercedCERA prepares an administrative budget, governed by Government Code Section 31580.2, which is subjected by the same section to a budgetary cap. Additionally, MercedCERA provides a non-administrative

projection, which expenses are governed by Government Code Sections 31580.2(b), 31596.1, and 31529.9. MercedCERA's budgets and projections are on a fiscal year basis starting July 1 and ending June 30. Non-administrative expenditures are not subject to the budgetary cap in Government Code Section 31580.2. Projections are subject to change periodically. All expenditures are reported at MercedCERA's Administrative Board Meetings on a monthly and quarterly basis.

G. Capital Assets

Capital assets are carried at cost, net of accumulated depreciation. Capital assets with an initial cost of more than \$5,000 and an estimated useful life in excess of one year are depreciated. Depreciation is calculated using the straight-line method over the estimated useful lives of the depreciable assets. Partial year depreciation is recognized based upon placed-in-service date of the asset. Equipment and furniture are depreciated over eight years. MercedCERA's pension administration system (an intangible asset) is amortized over ten years. Long-lived building improvements are depreciated over twenty years. Buildings are depreciated over thirty years.

MercedCERA reported \$1,281,753 and \$1,493,077 in capital assets as of June 30, 2022 and 2021, net of accumulated depreciation of \$2,149,188 and \$1,890,499, respectively. Of these amounts, \$499,098 is for land held by the Association as of June 30, 2022 and 2021, which is not subject to depreciation.

Schedule of Capital Assets For the fiscal year ended June 30, 2022								
	Historical Cost	Net Balance at June 30, 2021	Reclassifications & Additions	Reclassifications & Deletions	Less Depreciation	Net Balance at June 30, 2022		
Capital Assets, non-depreciable								
Land	\$499,098	\$499,098	\$ -	\$ -	\$ -	\$499,098		
Capital Assets, depreciable								
CPAS Software	2,408,181	822,795	-	-	240,818	581,977		
Building	313,159	99,165	-	-	10,440	88,725		
Office Furniture and Technology	113,132	17,269	16,837	-	6,150	29,711		
Building Improvements	97,372	54,750	39,409	8,880	1,282	84,741		
Totals	\$3,430,942	\$1,493,077	\$56,246	\$8,880	\$258,690	\$1,281,753		

Schedule of Capital Assets For the fiscal year ended June 30, 2021								
	Historical Cost	Net Balance at June 30, 2020	Reclassifications & Additions	Reclassifications & Deletions	Less Depreciation	Net Balance at June 30, 2021		
Capital Assets, non-depreciable								
Land	\$499,098	\$499,098	\$ -	\$ -	\$ -	\$499,098		
Capital Assets, depreciable								
CPAS Software	2,408,181	1,063,613	-	-	240,818	822,795		
Building	313,159	109,605	-	-	10,440	99,165		
Office Furniture and Technology	96,295	14,341	12,585	-	9,657	17,269		
Building Improvements	66,883	38,627	19,760	-	3,637	54,750		
Totals	\$3,383,576	\$1,725,284	\$32,345	\$ -	\$264,552	\$1,493,077		

H. Methods Used to Value Investments

Investments are reported at fair value in the accompanying Statements of Fiduciary Net Position. Cash deposited in the Merced County Treasurer's pool is stated at fair value. The value of the Association's pool shares is determined on an amortized cost basis, which is not materially different from fair value.

The fair value of fixed income and equity investments are based upon the closing sale prices reported on recognized securities exchanges on the last business day of the period. For listed securities having no reported sales and for unlisted securities, fair value is based upon the last reported sales price.

GASB Statement No. 72, Fair Value Measurements, became effective for financial statements for fiscal years beginning after June 15, 2015. This statement enhances comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. This statement also enhances fair value application guidance and related disclosures in order to provide information to financial statement users about the impact of fair value measurements on a government's financial position.

The real estate investment holdings are determined by the partners using industry standard appraisal techniques and assumptions, which are updated annually, to determine the fair value of these holdings. The appraisals incorporate subjective judgments and consider assumptions including capitalization rates, discount rates, cash flows, and other factors that are not observable in the market.

The fair value of alternative investments (private equity, hedge funds, infrastructure, and natural resources) is based on the partners' most recent financial statements for the quarter ended June 30. The majority of MercedCERA's alternative investments are determined by the partnerships using unobservable inputs, which reflect the partnerships' own estimates about the assumptions that market participants would use in pricing the investments. The assumptions are based on the best information available in the circumstances, which might include the partnership's own data. The remaining of MercedCERA's alternative investments are determined by the partnerships based on quoted market prices in active markets.

Management, in consultation with the investment advisor, has determined the reasonableness of the procedures used to calculate fair value for real estate and alternative investments.

I. Securities Transactions and Related Investment Income

Securities transactions are accounted for on a trade date basis. Interest income is recognized when earned and dividend income is recognized on the ex-dividend date. Stock dividends or stock splits are recorded as memo items and do not affect the total value of the securities. The Association presents, in the Statements of Changes in Fiduciary Net Position, either the net appreciation or depreciation in fair value of investments, which consists of realized and unrealized gains and losses on those investments.

J. Management's Estimates

The preparation of basic financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Note 3 - CASH AND INVESTMENTS

A. <u>Investment Stewardship</u>

The Board has exclusive control over all investments of the Association and is responsible for establishing investment objectives, strategies and policies. Pursuant to the California Constitution and California Government Code Sections 31594 and 31595, the Board is authorized to invest in any investment the Board deems prudent.

(1) Investment Policy

The Board has adopted an Investment Policy, which provides the framework for the management of MercedCERA's investments. The Investment Policy establishes MercedCERA's investment objectives and defines the principal duties of the Board, the custodian bank, and the managers. investment The asset allocation plan is an integral part of the Investment Policy and is designed to provide an optimum and diversified mix of asset classes with return expectations to satisfy expected liabilities, while minimizing MercedCERA exposure. employs external investment managers to manage its assets subject to the provisions of the Investment Policy. To the right is MercedCERA's adopted asset allocation policy as of June 30, 2022 and 2021.

Target Allocation							
Asset Class	June 30, 2022	June 30, 2021					
Domestic Equity	22%	21%					
Developed Markets Equity	11%	10%					
Emerging Markets Equity	8%	8%					
Private Equity	15%	15%					
Direct Lending	5%	0%					
Real Estate	8%	8%					
Domestic Fixed Income	11%	18%					
Opportunistic Credit	5%	5%					
Hedge Funds	10%	10%					
Real Assets	5%	5%					
	100%	100%					

(2) Rate of Return

For the fiscal years ended June 30, 2022 and June 30, 2021, the annual money-weighted rate of return on MercedCERA's investments was –6.9% and 26.9%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

B. Cash and Short-Term Investments

Cash and cash equivalents consist of short-term investments held by the Merced County Treasurer and MercedCERA's custodian bank, Northern Trust. Cash and cash equivalents are highly liquid investments with a short maturity. Cash and cash equivalents are recorded at cost, which approximates fair value.

(1) Merced County Treasury

Cash from deposits and the cash needed for daily operational purposes is held in a pooled account with other County funds. The Merced County Treasury Oversight Committee is responsible for regulatory oversight of the pool.

Interest on funds in the Merced County investment pool is computed quarterly based on the average daily balance. A deposit in the pooled account approximates fair value. The fair value of the Association's cash invested with the Merced County Treasurer totaled \$962,632 and \$815,284 at June 30, 2022 and 2021, respectively. Cash and investments included within the County Treasurer's pool are described in Merced County's Annual Comprehensive Financial Report.

(2) Short-Term Investment Funds and Funds Pooled with Northern Trust

The short-term investment funds that are in the custody of Northern Trust are liquidity funds. The cash is invested in short-term obligations and deposits, including U.S. treasury and agency obligations, corporate bonds, commercial paper, repurchase agreements, certificates of deposit, bankers acceptances, time deposits, and floating rate notes.

All participants in the Northern Trust pool proportionately share earnings and losses. Balances in the pooled accounts approximate fair value. At June 30, 2022 and 2021, short-term investments totaled \$7,011,420 and \$6,715,210, respectively, which is the total of cash invested with Northern Trust and other cash and cash equivalents with Northern Trust.

MercedCERA's cash and short-term investments stated at fair value as of June 30, 2022 and 2021 are as follows:

Cach and Shart town Investments	Fair Val	Fair Value			
Cash and Short-term Investments	2022	2021			
Cash invested with Merced County Treasury	\$962,632	\$815,284			
Cash invested with Northern Trust	5,405,400	5,578,046			
Other cash and cash equivalents with Northern Trust	1,606,020	1,137,164			
Total cash and short-term investments	\$7,974,052	\$7,530,494			

C. Fair Value Measurements

Fair Value is defined as 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. MercedCERA holds significant amounts of investments that are measured at fair value on a recurring basis. Because investing is a key part of MercedCERA's activities, GASB Statement No. 72 establishes a hierarchy of inputs to measure fair value. That hierarchy has three levels. Level 1 inputs are quoted process (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices, included within Level 1 that are observable for the asset or liability, either directly or indirectly. Finally, Level 3 inputs are unobservable inputs.

Inputs used to measure fair value might fall in different levels of the fair value hierarchy. Categorization within the hierarchy is based on the lowest level input that is significant to the fair value measurement.

Equity securities are generally valued based on quoted prices from an active market and are therefore categorized in Level 1. In the absence of quoted market prices, such as equity securities that trade infrequently or not at all, valuations are based on the last traded price or a price provided by the investment managers and generally categorized in Level 3.

Fixed income securities classified in Level 2 are valued using the latest bid prices or evaluated quotes from independent pricing vendors. The third-party vendors use a variety of methods when pricing these securities that incorporate relevant observable market data to arrive at an estimate of what a buyer in the marketplace would pay for a security under current market conditions. Fixed income securities held in mutual funds are based on quoted prices in an active market and are therefore categorized in Level 1. When independent price sources are not available, debt securities are priced based on the last traded price or a valuation provided by the investment manager and are categorized in Level 3. In addition, debt securities held in commingled, limited partnerships, and similar vehicles are categorized in Level 3.

Funds priced using a net asset value (NAV) that is published daily and validated with a sufficient level of observable activity are categorized in Level 1. If observable activity is limited, yet supports that the NAV represents an exit value of the security at the measurement date, the securities are categorized in Level 2. Investments in nongovernmental entities that are measured at NAV as a practical expedient, such as alternative investments and real estate investments, are excluded from the fair value hierarchy if the NAV per share (or its equivalent) was calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies. Funds not meeting these criteria are categorized in Level 3.

Investments in real estate, other than in mutual funds, which are publicly traded and categorized in Level 1, have been valued based on the NAV per share (or its equivalent), as provided by the general partner. This type includes one mutual fund, commingled fund, and twelve funds structured as private limited partnerships. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 10 to 15 years.

MercedCERA is contracted with Cliffwater, LLC to assist with the Association's hedge fund portfolio that has the appropriate risk and return characteristics. Specifically, MercedCERA has ten hedge funds with low market risk (low beta), equity market downside protection and diversification with unique investment strategies such as shorting, arbitrage, currencies and commodities. Return characteristics include reasonable expected returns that outperform bonds, reasonable expected returns that will be less that the expected returns on

stocks and generate alpha of 4% net of fees. MercedCERA is dedicated to building a diversified portfolio of the following strategies: market neutral, credit event, equity long short, global macro, and multi-strategy. The fair values of the investments in these types has been determined using the NAV per share (or its equivalent) of the investments, as provided by the general partner. Funds may be subject to redemption restrictions, including lock-up periods and/or gate provisions, which prohibit redemptions for a specific time after capital is initially invested, or subject to limitations on the amount that can be withdrawn on any single redemption date.

Infrastructure includes six funds structured as limited partnerships that invest primarily in global infrastructure investments. The fair values of the investments in these types have been determined using the NAV per share (or its equivalents) of the investment as provided by the general partner.

Natural resources include eight funds structured as limited partnerships that invest primarily in debt, equity, partnership interests, direct asset investments, working interests, and royalty interests of public and private mining and metals companies and companies within the energy markets including but limited to, companies engaged in the exploration and production of oil and natural gas, coal, midstream, energy services, refining and marketing, power generation, renewable energy, and other commodity driven sectors. The fair values of the investments in these types has been determined using the NAV per share (or its equivalents) of the investment as provided by the general partner.

The private equity portfolio includes forty-four funds structured as limited partnerships participating in diverse strategies including buyouts, venture capital/growth equity, and opportunistic funds which includes such categories as distressed debt (debt instruments of companies which may be publicly traded or privately held that are financially distressed and are either in bankruptcy or likely candidates for bankruptcy), mezzanine, secondary, royalties, etc. The fair values of the investments in these types has been determined using the NAV per share (or its equivalent) of the investment as provided by the general partner. These funds have a finite term. Distributions will be received as the underlying investments are sold, which is expected to occur over a rolling 15-year period.

The Plan has the following recurring fair value measurements as of June 30, 2022:

Investments by Fair Value Level	June 30, 2022	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Common Stock				
Domestic	\$24,197,364	\$ -	\$ -	\$24,197,364
Domestic Index Funds	211,862,277	-	-	211,862,27
International	184,743,517	-	-	184,743,51
US Government and Agency Obligations				
US Treasury and TIPS	15,935,254	-	15,935,254	
US Government Agency Obligations	23,435,475	-	23,435,475	
Domestic Fixed Income				
Asset Backed Securities	6,372,064	-	6,372,064	
Collateralized Mortgage Obligations	148,419	-	148,419	
Commercial Mortgage Backed Securities	558,007	-	558,007	
Corporate and Other Credit	30,703,066	-	30,703,066	
Mutual Funds	104,084,694	104,084,694	-	
Limited Partnerships	21,882,208	-	-	21,882,20
Real Estate	22,302,394	22,302,394	-	
Total Investments by Fair Value Level	\$646,224,739	\$126,387,088	\$77,152,285	\$442,685,36
Investments Measured at the Net Asset Value (NAV)				
Real Estate	69,364,214			
Alternative Investments				
Direct Lending	14,268,299			
Hedge Funds	123,801,528			
Infrastructure	24,931,353			
Natural Resources	14,119,389			
Private Equity	139,888,048			
Proxy Fund	19,817,449			
Total Alternative Investments	336,826,066			
Total Investments Measured at NAV	406,190,280			
Total Investments Measured at Fair Value and NAV	1,052,415,019			
Investments Measured at the NAV	June 30, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Real Estate*	69,364,214	33,672,864	See footnote	See footnot
Alternative Investments				
Direct Lending	14,268,299	36,093,670	N/A	N/A
Hedge Funds**	123,801,528	-	Varies	Varie
Infrastructure	24,931,353	13,768,830	N/A	N/A
Natural Resources	14,119,389	25,184,787	N/A	N/A
Private Equity	139,888,048	83,463,122	N/A	N/
Proxy Fund	19,817,449	-	Daily	T-

^{**}The ten hedge funds that were funded as of June 30, 2022, have varying lockup periods and redemption notice requirements.

The Plan has the following recurring fair value measurements as of June 30, 2021:

Investments by Fair Value Level	June 30, 2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Common Stock				
Domestic	\$31,836,007	\$ -	\$ -	\$31,836,007
Domestic Index Funds	243,030,022	-	-	243,030,022
International	251,148,371	-	-	251,148,371
US Government and Agency Obligations				
US Treasury and TIPS	23,143,122	-	23,143,122	
US Government Agency Obligations	25,902,118	-	25,902,118	
Domestic Fixed Income				
Asset Backed Securities	3,641,643	-	3,641,643	
Collateralized Mortgage Obligations	194,638	-	194,638	
Commercial Mortgage Backed Securities	376,108	-	376,108	
Corporate and Other Credit	36,091,229	-	36,091,229	
Mutual Funds	128,514,848	128,514,848	-	
Limited Partnerships	23,726,158	-	-	23,726,15
Real Estate	24,249,539	24,249,539	-	
Total Investments by Fair Value Level	\$791,853,803	\$152,764,387	\$89,348,858	\$549,740,55
Investments Measured at the Net Asset Value (NAV)				
Real Estate	\$65,150,878			
Alternative Investments				
Hedge Funds	124,617,701			
Infrastructure	22,781,362			
Natural Resources	13,264,768			
Private Equity	101,672,915			
Proxy Fund	32,425,830			
Total Alternative Investments	294,762,576			
Total Investments Measured at NAV	359,913,454			
Total Investments Measured at Fair Value and NAV	\$1,151,767,257			
Investments Measured at the NAV	June 30, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Real Estate*	\$65,150,878	\$31,055,884	See footnote	See footnot
Alternative Investments				
Hedge Funds**	124,617,701	-	Varies	Varie
Infrastructure	22,781,362	14,537,077	N/A	N/A
Natural Resources	13,264,768	20,467,555	N/A	N/A
Private Equity	101,672,915	77,170,826	N/A	N/A
Proxy Fund	32,425,830	-	Daily	T-
	\$359,913,454	\$143,231,342		

^{**}The ten hedge funds that were funded as of June 30, 2021, have varying lockup periods and redemption notice requirements.

D. Commission Recapture Policy

In order to minimize the net cost of trading, MercedCERA encourages its investment managers, on a "best efforts" basis, to execute 25% to 35% of total trades annually through brokers who have a commission recapture program. MercedCERA's policies require investment managers to seek the best price and execution on all trades. This means that commission recapture trades should only be executed when such trades meet this standard. If an investment manager can execute the trade through MercedCERA's commission recapture brokerage firms, while not incurring any incremental commission or market impact costs, then MercedCERA would like the manager to do so. This program should not interfere with or reduce an investment manager's incentive to reduce trading costs.

E. Real Estate and Alternative Investments

The balance of the unfunded capital to MercedCERA's real estate and alternative investments as of June 30, 2022 was \$192,183,273 and as of June 30, 2021 was \$143,231,342. Capital invested in private equity partnerships is subject to a relatively high degree of risk as compared to other potential investments, with the assumption that the investor will be rewarded with higher returns for that assumption of risk (i.e., the "risk/return trade-off"). Controlling risk in the private equity portfolio is equally as important as seeking higher returns. MercedCERA controls risk by diversifying the portfolio based on geographic and economic region, liquidity, vintage year, firm, and time.

Geographic and economic region, referring to the selection of private equity investments, the portfolio does not favor particular economic or geographic regions. Most likely, the focus is globally oriented.

Liquidity risk is managed by minimizing the possibility of forced sales that may arise from exceeding the maximum exposure limits or lowering asset allocation exposure limits. Exposure through a fund of funds minimizes this risk.

Vintage year risk refers to the variability of private equity commitments over time. A secondary investment that is a vehicle in the special situation subclass allows the portfolio to gain prior year vintage exposure, further minimizing vintage risk.

Firm risk is the amount of exposure to a private equity general partner. The maximum commitment to private equity is 5% to 20% of the total fund. There are no limits on commitments to individual partners or funds.

Time risk refers to the long duration of the investment, which makes it difficult to predict business, economic and managerial developments that may have a significant impact on the value of the investments.

F. Custodial Credit Risk

The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. MercedCERA does not have a formal policy for custodial credit risk. At June 30, 2022 and 2021, MercedCERA had no investments that were exposed to custodial credit risk.

G. Credit Risk Concentration

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. As of June 30, 2022 and 2021, the Association had no single issuer that exceeded 5% of total investments or fiduciary net position. Investments issued or explicitly guaranteed by the U.S government and investments in mutual funds, external investment pools, and other pooled investments are excluded. MercedCERA's investment policy does not allow for an investment in any one issuer that is in excess of 5% of the value of a portfolio and no single industry (based on North American Industry Classification System (NAICS) codes) can represent more than 15% of the fair value of the investment portfolio. These single security and single industry restrictions do not apply to U.S. government issued or guaranteed investments, investments in mutual funds, external investment pools, and other pooled investments.

H. Credit Risk

Credit risk is the risk that an issuer or other counterparty to a debt instrument will not fulfill its obligation as described by nationally recognized statistical rating organizations, rating agencies, as of the date of the financial statements. An investment grade security is defined as a security which has been rated investment grade (BBB or higher) by at least one (but preferably two) of the three nationally recognized rating agencies: Fitch Ratings, Moody's, and Standard & Poor's. MercedCERA's core fixed income portfolio requires that no more than 5% of an investment manager's fixed income portfolio be invested in below investment grade rated securities (BB or B rated bonds). No security rated below single B may be purchased at any time. Securities that have at least a single B, but subsequently fall below single B ratings, shall be sold in an orderly manner. This is the case of MercedCERA's workout portfolio that is managed by MercedCERA's core fixed income manager, Barrow Hanley. The fair values of MercedCERA's workout portfolio for the fiscal years ended June 30, 2022 and 2021, as reported by Barrow Hanley, were \$337,979 and \$422,179, respectively. These securities are being liquidated or held for longer time frames by comparing their individual fundamental values against executable market prices.

The table below presents the Moody's credit quality ratings of fixed income securities at June 30, 2022 and 2021:

Quality	Aaa	Aa	Α	Baa	Ва	В	Caa	Ca	NR*	NA**
Percent of Fixed Income as of June 30, 2022	2.27%	0.65%	6.30%	7.47%	0.26%	0.00%	0.04%	0.07%	9.97%	72.97%
Percent of Fixed Income as of June 30, 2021	1.12%	0.83%	6.01%	7.16%	0.36%	0.01%	0.04%	0.08%	10.07%	74.32%

^{*}NR represents those securities that are not rated and includes FNMA and FHLMC mortgage backed securities that are not rated by credit rating agencies, but are perceived to have an implicit guarantee by the U.S. Government.

I. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. MercedCERA's Investment Policy Statement does not have a formal policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. However, MercedCERA's bond portfolios are managed duration neutral to their benchmarks, the Barclays U.S. Aggregate Bond Index and the Barclays US Government 1-3 and 1-5 year Indices.

As of June 30, 2022 and 2021, the County's pool has a fair value of \$1,657,209,862 and \$1,364,564,235,

^{**}NA represents those securities that are not applicable to the rating disclosure requirements.

respectively, and a weighted average maturity of 586 and 658 days, respectively.

As of June 30, 2022 and 2021, the weighted average maturity of the short-term investment pooled funds with Northern Trust was 39 and 49 days, respectively.

The following table presents the fair value, weighted percentage of each sector, and the effective duration of MercedCERA's fixed income investments as of June 30, 2022:

Investment Type	Fair Value 2022	Weight of Fixed Income 2022	Modified Duration (years) 2022
U.S. Government agency obligations	\$23,435,475	11.54%	6.15
Commercial mortgage backed securities	558,007	0.27%	0.08
Asset backed securities	6,372,064	3.14%	1.87
U.S. Treasury and TIPS	15,935,254	7.85%	8.61
Corporate and other credit	30,703,066	15.12%	8.14
Collateralized mortgage obligations	148,419	0.07%	1.35
Mutual funds	104,084,694	51.24%	3.85
Limited partnerships	21,882,208	10.77%	3.90
Total Fair Value	\$203,119,187	100.00%	
Portfolio Effective Duration			6.56

The following table presents the fair value, weighted percentage of each sector, and the effective duration of MercedCERA's fixed income investments as of June 30, 2021:

Investment Type	Fair Value 2021	Weight of Fixed Income 2021	Modified Duration (years) 2021
U.S. Government agency obligations	\$25,902,118	10.72%	4.02
Commercial mortgage backed securities	376,108	0.16%	0.28
Asset backed securities	3,641,643	1.50%	1.74
U.S. Treasury and TIPS	23,143,122	9.58%	9.87
Corporate and other credit	36,091,229	14.94%	8.45
Collateralized mortgage obligations	194,638	0.08%	1.38
Mutual funds	128,514,848	53.20%	3.56
Limited partnerships	23,726,158	9.82%	4.64
Total Fair Value	\$241,589,864	100.00%	
Portfolio Effective Duration			6.48

J. Foreign Currency

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Assets in international equity portfolios will be primarily composed of foreign ordinary shares and American Depositary Receipts (ADR) (including ADR's that are 144A securities). Short-term, high-grade fixed income securities may be purchased as previously stated, similar types of securities denominated in foreign currencies may be purchased, or the fund's custodial sweep account may be employed. International equity portfolios will invest in stocks with market capitalizations consistent with their underlying benchmarks. Emerging market equity portfolios can invest in stock with large, mid, and small market capitalizations. Firms will continually monitor the country, currency, sector, and security selection risks associated with their international and emerging market portfolios. All the risks will be included in the manager's quarterly reports and performance attribution based on these factors. Currency hedging, consistent with the stated derivative policy, is an acceptable investment activity. However, prior to initiating such hedging activities, the firms must adequately demonstrate their capability and expertise in this area to the Board.

The following table represents securities and dividends receivable held in a foreign currency as of June 30, 2022 and 2021:

Currency	Fair Value (U.S. Dollars)				
Currency	2022	2021			
Euro	\$15,586,882	\$12,949,333			
Norwegian krone	-	5,116			
Total foreign currency	\$15,586,882	\$12,954,449			

K. Derivatives

MercedCERA's investment policy permits the use of derivative instruments to minimize the exposure of certain investments to adverse fluctuations in financial and currency markets and enhance yields. The Association does not use derivatives for speculative use or to create leverage. Exposure to risk by use of derivative instruments must be consistent with MercedCERA's overall investment policy as well as an individual manager's specific investment guidelines. Any other derivative investment purpose may be allowed by the explicit authorization of the Board. MercedCERA does not have any derivative instruments as defined by GASB Statement No. 53 as of June 30, 2022 and 2021.

Note 4 - RESERVES

As required by the 1937 Act and the Board's policy, the following reserves for Net Position Restricted for Pensions have been established to account for the members', employers', and retirees' contributions. MercedCERA maintains the following reserves at June 30, 2022 and 2021.

A. Active Members' Reserves

These reserves represent the cumulative contributions made by active employees. Additions include member contributions and related earnings. Deductions include refunds of member contributions and, upon retirement, the member contributions plus interest credited to their account are transferred from this reserve to the Retired Members' Reserves.

B. Employer Advance Reserves

These reserves represent the cumulative contributions made by the employers for future retirement payments to current active members. Additions include contributions from the employer and related earnings. Deductions include transfers to the Retired Members' Reserve and lump sum death benefits.

C. Retired Members' Reserves

These reserves are established upon the retirement of an employee. Employee contributions plus interest earnings credited to the employee account are transferred from the Active Members' Reserves to the Retired Members' Reserves. In addition, the present value of the actuarially determined pension benefits is also transferred from the Employer Advance Reserves to the Retired Members' Reserves. From these reserves, the Association pays the retiree pension benefits in an amount computed in accordance with the 1937 Act.

D. Interest Fluctuation Reserve

This reserve is used for interest crediting purposes and for holding any funds allocated by the Retirement Board as a reserve for future interest earnings deficiencies. To the extent that net earnings are available, interest is credited to specified reserves. Interest is credited semi-annually according to MercedCERA's interest crediting policy.

E. Fair Value Fluctuation Reserve

The Board established this designation account on June 30, 1997 to track the increase (or decrease) in the fair value of the MercedCERA assets.

F. Contingency Reserve

This reserve is comprised of surplus/excess earnings, up to 1% of the fair value of assets, that are held as a reserve against deficiencies in investment earnings in other years, losses on investments, and other contingencies. As of June 30, 2012, the Contingency Reserve was not funded and all balances were transferred to the Interest Fluctuation Reserve. The Contingency Reserve will be funded and excluded from the fair value of assets only in years when the fair market value of assets exceeds the actuarial accrued liability.

A summary of the various reserve accounts, which comprise fiduciary net position restricted for pensions at June 30, 2022 and 2021, is as follows:

Reserve	2022	2021
Active Members'	\$117,153,891	\$114,579,642
Employer Advance	336,057,437	291,069,692
Retired Members'	259,831,255	275,755,873
Interest Fluctuation	133,988,380	141,008,117
Fair Value Fluctuation	217,409,782	340,840,520
Total Reserves	\$1,064,440,745	\$1,163,253,844

Note 5 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

MercedCERA engages on an annual basis, an independent actuarial consulting firm, Cheiron, Inc., to conduct its annual actuarial valuation.

A. Actuarial Assumptions

The actuarial assumptions used in the June 30, 2021 valuation were based on the results of an actuarial experience study for the period July 1, 2016 through June 30, 2019. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2022 and the Total Pension Liability as of the valuation date June 30, 2021, using update procedures to roll forward to MercedCERA's fiscal year end of June 30, 2022. There were no significant events between the valuation date and the measurement date, so the roll forward procedures only included the addition of service cost and interest cost offset by actual benefit payments.

The components of the employers' Net Pension Liability were as follows:

	FYE June 30, 2022	FYE June 30, 2021
Total Pension Liability	\$1,530,082,398	\$1,492,788,116
Less: Plan Fiduciary Net Position	1,064,440,745	1,163,253,844
Net Pension Liability	\$465,641,653	\$329,534,272
Fiduciary Net Position as a Percentage of the Total Pension Liability	69.57%	77.92%

The Total Pension Liabilities as of June 30, 2022 and June 30, 2021 were determined based on the June 30, 2021 and June 30, 2020 actuarial valuations, rolled forward to June 30, 2022 and June 30, 2021, respectively, using the following actuarial assumptions applied to all periods included in the measurement:

ACTUARIAL VALUATION ASSUMPTIONS				
Valuation Date	June 30, 2021	June 30, 2020		
Investment Rate of Return	6.75%	7.00%		
Projected Salary Increases	2.75%, plus service-based rates	2.75%, plus service-based rates		
Attributed to Inflation	2.75%	2.75%		
Cost-of-Living Adjustments	For Tier I, 100% of CPI up to 2.5% annually with banking, assumed to be 2.40% annually	For Tier I, 100% of CPI up to 2.5% annually with banking, assumed to be 2.40% annually		

Post-retirement mortality rates for the June 30, 2021 and June 30, 2020 valuation dates were based on the CalPERS RP2009 tables and, for Healthy Safety Annuitants, 1.05 times the 2010 Public Safety Below Median Mortality Table for Healthy Retirees, both projected on a generational basis for mortality improvements from a base year of 2009 using the Society of Actuaries MP-2019 projection scale.

B. Long-Term Expected Rate of Return

Long-term capital market expectations are derived through a process that relies on both quantitative and qualitative methodologies. The first step in the process is to build out ten-year forecasts for each asset class identified using proprietary, valuation-based fundamental models that consider those critical factors driving asset class returns. The ten-year expectations serve as the primary foundation for longer-term, twenty-year expectations. Twenty-year return expectations are formed by combining our ten-year expectations for each asset class with the observed historical returns for each asset class to then infer a forecast of the following ten

-year returns (i.e., years 11-20). The final step is a review by the Investment Committee to determine if any qualitative adjustments are necessary. Return assumption at the total Plan level is derived according to the underlying asset class weightings, using nominal rates of return.

Best estimates of geometric real rates of return for each major asset class included in the target asset allocation as of June 30, 2022 and June 30, 2021 are summarized in the table below.

Long-Term Expected Real Rate of Return				
	FYE June 30, 2022	FYE June 30, 2021		
US Equity	4.6%	4.7%		
International Equity	5.3%	5.0%		
Emerging Markets Equity	6.2%	6.0%		
Private Equity	7.4%	6.8%		
Real Estate	5.2%	4.7%		
Domestic Fixed Income	0.2%	-0.4%		
Opportunistic Credit	2.0%	2.1%		
Direct Lending	4.9%	4.5%		
Hedge Funds	2.2%	2.2%		
Infrastructure	5.1%	4.8%		
Natural Resources	6.3%	6.2%		
Cash	-1.1%	-1.0%		

C. Discount Rate

The discount rate used to measure the Total Pension Liability was 6.75% for June 30, 2022 and June 30, 2021. The projection of cash flows used to determine the discount rate assumed that contributions from Plan members will be made at the current contribution rate and that contributions from the employers will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of 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.

D. <u>Sensitivity of the Net Pension Liability to Changes in the Discount Rate</u>

The following table presents the net pension liability of MercedCERA calculated using the discount rate of 6.75% for 2022 and 2021, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is one percentage point lower and higher.

	1% Decrease	Current Rate	1% Increase
	(5.75%)	(6.75%)	(7.75%)
2022 Net Pension Liability	\$654,832,923	\$465,641,653	\$308,446,353
	1% Decrease	Current Rate	1% Increase
	(5.75%)	(6.75%)	(7.75%)
2021 Net Pension Liability	\$515,533,257	\$329,534,272	\$175,111,872

Note 6 – LITIGATION

The case, Alameda County Deputy Sheriff's Assn. et al v. Alameda County Employees' Retirement Assn., et al. (2018) 19 Cal.App.5th 61 ("Alameda") is now considered resolved and has been implemented in the Association and all impacted retirees have been notified and benefits recalculated to remove terminal pay from the member's final average compensation.

Note 7 – SUBSEQUENT EVENTS

MercedCERA has evaluated subsequent events through December 16, 2022, the date on which the financial statements were available to be issued. There were no subsequent events identified by management which would require disclosure in the financial statements.

Schedules of Changes in Net Pension Liability and Related Ratios For the Years Ended June 30* (continued on next page)					
Total Pension Liability	2022	2021	2020	2019	
Service cost (MOY)	\$26,989,609	\$25,786,520	\$26,267,588	\$22,794,246	
Interest (includes interest on service cost)	98,777,169	96,764,536	93,583,425	92,452,056	
Changes of benefit terms	-	-	-		
Differences between expected and actual experience	(1,660,800)	10,336,744	7,534,677	1,249,075	
Changes of assumptions	-	32,840,818	20,714,915	-	
Benefit payments, including refunds of member contributions	(86,808,696)	(83,814,080)	(79,665,662)	(74,810,675)	
Net changes in total pension liability	37,294,282	81,914,538	68,434,943	41,684,702	
Total pension liability—beginning	1,492,788,116	1,410,873,578	1,342,438,635	1,300,753,933	
Total pension liability—ending	\$1,530,082,398	\$1,492,788,116	\$1,410,873,578	\$1,342,438,635	
Fiduciary net position					
Contributions—members	\$65,629,994	\$11,895,243	\$10,796,855	\$10,695,680	
Contributions—employers	12,124,583	64,512,161	67,413,475	66,586,464	
Net investment income (loss)	(87,115,891)	253,466,527	57,232,016	39,728,950	
Benefit payments, including refunds of member contributions	(86,808,696)	(83,814,080)	(79,665,662)	(74,810,675)	
Administrative expense	(2,643,089)	(2,621,079)	(2,464,896)	(2,351,105)	
Net change in fiduciary net position	\$(98,813,099)	\$243,438,772	\$53,311,788	\$39,849,314	
Fiduciary net position—beginning	1,163,253,844	919,815,072	866,503,284	826,653,970	
Fiduciary net position—ending	\$1,064,440,745	\$1,163,253,844	\$919,815,072	\$866,503,284	
Net pension liability—ending	\$465,641,653	\$329,534,272	\$491,058,506	\$475,935,351	
Fiduciary net position as a percentage of the total pension liability	69.57%	77.92%	65.19%	64.55%	
Covered payroll	\$142,704,679	\$137,234,030	\$135,618,404	\$131,365,778	
Net pension liability as a percentage of covered payroll	326.30%	240.13%	362.09%	362.30%	
*Schedules are intended to show information for 10 years. Add table was provided by Cheiron, Inc.	ditional years will be d	isplayed as they bed	come available. Info	rmation for this	

provided by Cheiron, Inc.

Schedules of Changes in Net Pension Liability and Related Ratios For the Years Ended June 30* (continued)					
Total Pension Liability	2018	2017	2016	2015	2014
Service cost (MOY)	\$22,172,594	\$19,512,609	\$19,384,855	\$19,672,490	\$19,384,434
Interest (includes interest on service cost)	89,402,353	88,982,290	86,323,551	84,203,356	81,090,569
Changes of benefit terms	-	-	-	-	
Differences between expected and actual experience	2,914,187	(8,886,191)	(5,488,413)	(12,380,077)	
Changes of assumptions	15,960,129	36,908,183	-	-	-
Benefit payments, including refunds of member contributions	(70,720,210)	(66,904,315)	(65,082,403)	(62,951,924)	(58,042,021
Net changes in total pension liability	59,729,053	69,612,576	35,137,590	28,543,845	42,432,982
Total pension liability—beginning	1,241,024,880	1,171,412,304	1,136,274,714	1,107,730,869	1,065,298,068
Total pension liability—ending	\$1,300,753,933	\$1,241,024,880	\$1,171,412,304	\$1,136,274,714	\$1,107,731,050
Fiduciary net position					
Contributions—members	\$10,441,876	\$9,384,621	\$9,042,663	\$8,945,316	\$9,642,819
Contributions—employers	64,757,288	60,349,189	56,617,088	52,005,656	48,032,338
Net investment income (loss)	70,689,084	83,097,416	(388,209)	19,318,849	96,219,056
Benefit payments, including refunds of member contributions	(70,720,210)	(66,904,315)	(65,082,403)	(62,951,924)	(58,042,021)
Administrative expense	(2,283,396)	(2,173,407)	(2,492,684)	(2,323,446)	(1,547,347)
Net change in fiduciary net position	\$72,884,642	\$83,753,504	\$(2,303,545)	\$14,994,451	\$94,304,845
Fiduciary net position—beginning	753,769,328	670,015,824	672,319,369	657,324,918	563,020,073
Fiduciary net position—ending	\$826,653,970	\$753,769,328	\$670,015,824	\$672,319,369	\$657,324,918
Net pension liability—ending	\$474,099,963	\$487,255,552	\$501,396,480	\$463,955,345	\$450,406,132
Fiduciary net position as a percentage of the total pension liability	63.55%	60.74%	57.19%	59.17%	59.34%
Covered payroll	\$126,705,902	\$119,621,964	\$114,397,644	\$110,111,994	\$110,259,316
Net pension liability as a percentage of covered payroll	374.17%	407.33%	438.29%	421.35%	408.50%

Merced County Employees' Retirement Association

Schedules of Employer Contributions

The schedules of employer contributions show whether the employer has made contributions that are consistent with an actuarial method of funding the benefits to be provided consistent with the parameters established by GASB Statement No. 67.

Schedules of Employer Contributions Last 10 Fiscal Years Ended June 30 Dollar Amounts in Thousands					
	2022	2021	2020	2019	2018
Actuarially Determined Contribution	\$65,630	\$64,512	\$67,413	\$66,586	\$64,757
Contributions in Relation to the Actuarially Determined Contribution	65,630	64,512	\$67,413	66,586	64,757
Contribution Deficiency/(Excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$142,705	137,234	\$135,618	\$131,366	\$126,706
Contributions as a Percentage of Covered Payroll	45.99%	47.01%	49.71%	50.69%	51.11%
	2017	2016	2015	2014	2013
Actuarially Determined Contribution	\$60,349	\$56,617	\$52,006	\$48,032	\$43,784
Contributions in Relation to the Actuarially Determined Contribution	60,349	56,617	52,006	48,032	43,784
Contribution Deficiency/(Excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$119,622	\$114,398	\$110,112	\$110,259	\$109,401
Contributions as a Percentage of Covered Payroll	50.45%	49.49%	47.23%	43.56%	40.02%

Schedules of Investment Returns

The money-weighted rate of return is equivalent to the internal rate of return (IRR). Money-weighted rate of return incorporates the size and timing of cash flows.

Schedules of Investment Returns Fiscal Years ended June 30										
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Annual money- weighted rate of return, net of investment expense	-6.9%	26.9%	6.6%	5.5%	10.1%	9.5%	-0.3%	1.1%	17.0%	11.8%

Note 1 – CHANGES OF BENEFIT TERMS

There were no changes in benefit terms for the fiscal year ended June 30, 2021.

Note 2 – CHANGES OF ASSUMPTIONS AND METHODS

Changes to assumptions were adopted by the Board at their September 23, 2021 meeting. The actuarial assumed rate of return was updated to 6.75%.

Note 3 – METHODS AND ASSUMPTIONS USED IN CALCULATIONS OF ACTUARIALLY DETERMINED CONTRIBUTIONS

Actuarial Valuation Methods and Assumptions

	2022	2021	2020	2019	2018
Valuation Date	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016
Effective Date	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Fair Value	Fair Value
Amortization Years Remaining*	24	24	24	24	24
Discount Rate	7.00%	7.00%	7.25%	7.25%	7.25%
Price Inflation	2.50%	2.50%	2.50%	2.50%	2.50%
Salary Increases**	2.75%	2.75%	2.75%	2.75%	2.75%
Cost-of-Living Adjustments	2.50%	2.50%	2.50%	2.50%	2.50%
Mortality***	See Notes	See Notes	See Notes	See Notes	See Notes
	2017	2016	2015	2014	2013
Valuation Date	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011
Effective Date	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method	Fair Value	Fair Value	Fair Value	Actuarial Value	Actuarial Value
Amortization Years Remaining*	24	24	16	17	18
Discount Rate	7.75%	7.75%	7.75%	7.75%	7.75%
Price Inflation	3.00%	3.00%	3.75%	3.75%	3.75%
Salary Increases**	3.00%	3.00%	3.75%	3.75%	3.75%
Cost-of-Living Adjustments	2.60%	2.60%	2.70%	2.70%	2.70%
Mortality***	See Notes	See Notes	See Notes	See Notes	See Notes
* Closed Period as a level percentage	e of payroll method us	ed for all years shown .			

^{**} Includes merit component based on years of service.

^{***} As of 2019 valuation, CalPERS 2009 with future improvements applying SOA MP-2019 projection from base year of 2019. Basis Gender distinct RP-2000 Combined Mortality used for all valuation years shown prior to 2016.

Schedules of Administrative Expenses For the Fiscal Years Ended June 30, 2022 and 2021			
	2022	2021	
Personnel Services:			
Salaries, wages and benefits	\$1,217,531	\$1,159,346	
Office Expenses:			
Communications	6,177	5,308	
Requested maintenance / utilities / cost allocation	70,464	76,811	
Office supplies	17,548	27,604	
Postage	18,139	16,498	
Total Office Expenses	112,328	126,221	
Professional Services:			
Audit fees	68,799	62,837	
Attorney fees	334,033	326,383	
Publications / legal notices / other	3,510	3,327	
Software, technology, and information services	404,786	430,086	
Total Professional Services	811,128	822,633	
Miscellaneous Expenses:			
Memberships	5,435	5,870	
Board election expenses	-	20,938	
Fiduciary meeting	9,500	11,100	
Fiduciary and staff travel / training	6,008	3,246	
Insurance	95,796	80,339	
Depreciation expense	265,071	264,553	
Total Miscellaneous Expenses	381,810	386,046	
Total Administrative Expenses	\$2,522,797	\$2,494,246	

Schedules of Investment Expenses For the Fiscal Years Ended June 30, 2022 and 2021			
Investment managers' fees	2022	2021	
Domestic equities			
Dimensional Fund Advisors	\$ -	\$29,758	
Mellon Capital Management	427,769	439,053	
PanAgora Asset Management		42,584	
Total domestic equities	427,769	511,395	
International equities			
Acadian Asset Management	128,234	124,820	
Driehaus Asset Management	127,706	116,972	
Total international equities	255,940	241,792	
Alternative investments			
GSO	213,321	147,681	
GTCR	92,455	-	
KKR	63,092	131,544	
SSgA	80,480	58,433	
Taconic Capital	51,650	17,234	
Total alternative investments	500,998	354,892	
Real estate			
UBS Global –Trumbull Property Management	277,539	300,881	
Taconic Capital	127,875	131,276	
Total Real Estate	405,414	432,157	
Fixed income			
Barrow Hanley	226,669	208,365	
Total investment managers' fees	1,816,790	1,748,601	
Other investment expenses			
Custodian	112,319	114,705	
Investment counsel	378,864	256,976	
Investment consultant	623,000	619,000	
Miscellaneous investment expense	63,260	19,840	
Total other investment expenses	1,177,443	1,010,521	
Total fees and other investment expenses	\$2,994,233	\$2,759,122	

Schedules of Payments to Consultants For the Fiscal Years Ended June 30, 2022 and 2021				
	2022	2021		
Investment professional service fees				
Custodial services - Northern Trust, BNY Mellon*	\$112,319	\$114,705		
Investment counsel - Nossaman, LLP	378,864	259,976		
Actuarial services - Cheiron, Inc. and Segal Consulting	120,292	126,833		
Total investment professional service fees	\$611,475	\$501,514		
Administrative professional service fees				
Audit services - Brown Armstrong Accountancy Corporation, MGO	\$68,799	\$62,837		
Legal services	334,033	326,383		
Other specialized services	3,510	3,327		
Software and information systems	404,786	430,086		
Total administrative professional service fees	\$811,128	\$822,633		

^{*}MercedCERA continues to receive investment class action services from BNY Mellon.

Schedule of Cost Sharing Employer Allocations For the Fiscal Year Ended June 30, 2022

Employer	2021-2022 Amortization Share of Pensionable Payroll	Employer Proportionate Share Percentage		
County of Merced	\$46,784,083	94.6651%		
Merced Superior Court	2,616,254	5.2939%		
Merced Cemetery District	20,280	0.0410%		
Total	\$49,420,617	100.0000%		
The accompanying notes are an integral part of this schedule.				

	Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan As of and for the Fiscal Year Ended June 30, 2022 (continued on next page)	r Pension Amor Year Ended Ju	unts Allocated ne 30, 2022 (c	l by Cost Sharii ontinued on n	ng Plan ext page)	
			Deferred	Deferred Outflows of Resources	esources	
Employer	Net Pension Liability	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
County of Merced	\$440,800,198	\$6,675,824	\$22,624,896	\$20,446,847	\$321,926	\$50,069,493
Merced Superior Court	24,650,377	373,325	1,265,227	1,143,426	802,117	3,584,095
Merced Cemetery District	191,078	2,893	9,807	8,863	22,038	43,601
Total	\$465,641,653	\$7,052,042	\$23,899,930	\$21,599,136	\$1,146,080	\$53,697,189

Note: Information compiled form GASB 67/68 Report Prepared by Cheiron, Inc. dated June 30, 2022.

The accompanying notes are an integral part of this schedule.

		Sche	dule of Employe As of and for the	Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan As of and for the Fiscal Year Ended June 30, 2022 (Continued)	s Allocated by 0 June 30, 2022	Cost Sharing Plan (Continued)		
		Defen	Deferred Inflows of Resources	sources		Pension Expens Employer-	Pension Expense Excluding that Attributable to Employer-Paid Member Contributions	Attributable to ntributions
Employer	Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Pension Expense Excluding That Attributable to EmployerPaid Member Contributions
County of Merced	\$ 1,179,149	· ∨	. ←	\$802,242	\$1,981,391	\$49,771,197	\$(451,238)	\$49,319,959
Merced Superior Court	65,940	ı	ı	336,682	402,622	2,783,299	464,858	3,248,157
Merced Cemetery District	511	٠	•	7,156	7,667	21,575	(13,620)	7,955
Total	\$1,245,600 \$	- ∽	-	\$1,146,080	\$2,391,680	\$52,576,071	- \$	\$52,576,071

Note: Information compiled form GASB 67/68 Report Prepared by Cheiron, Inc. dated June 30, 2022.

The accompanying notes are an integral part of this schedule.

A. Basis of Presentation and Basis of Accounting

Employers participating in MercedCERA are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with GASB Statement No. 68, Accounting and Financial Reporting for Pensions—an Amendment of GASB Statement No. 27.

MercedCERA's actuary prepares the GASB Statement No. 67 and No. 68 Actuarial Valuation based on the June 30, 2021 measurement date for Employer Reporting as of June 30, 2022, in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations based on information provided by MercedCERA. This document provides the required information for financial reporting related to MercedCERA that employers may use in their financial statements.

B. Use of Estimates in the Preparation of These Schedules

The preparation of these schedules in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain amounts and disclosures. However, actual results could differ from those estimates.

C. Amortization of Deferred Outflows and Deferred Inflows of Resources

The net difference between projected and actual investment earnings on pension plan investments is amortized over 5 years on a straight-line basis. One-fifth was recognized in pension expense/(credit) during the measurement period and the remaining net difference between projected and actual investment earnings on pension plan investments at June 30, 2022 is to be amortized over the remaining amortization periods.

The difference between expected and actual experience, changes in proportion, and the difference between employer contributions and proportionate share of contributions are amortized over the average of the expected remaining service lives of all employees that are provided with pensions through the plan determined as of the beginning of the related measurement period. Employers are required to recognize pension expense based on the balance of the closed period "layers" attributable to each measurement period. The average expected remaining service lives determined as of the beginning of each measurement period are described below:

Ave	erage Exp	ected Rer	naining S	ervice Live	es, Year En	ded June	30 (In yea	rs)
2022	2021	2020	2019	2018	2017	2016	2015	2014
4	4	4	4	4	4	4	4	4

The Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan do not include contributions to the plan subsequent to the measurement date as defined in GASB Statement No. 68 Paragraphs 54, 55, and 57. Appropriate treatment of such amounts is the responsibility of the employers.



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80 University Ave Westwood, MA 02090 781.471.3500 Meketa.com

MEMORANDUM

TO: MercedCERA Board and Staff

FROM: Paola Nealon, Mika Malone, Inwoo Hwang (Meketa Investment Group)

DATE: October 13, 2022

RE: Letter from Investment Consultant

This letter reviews the investment performance of the Merced County Employees' Retirement Association (MercedCERA) for the fiscal year ending June 30, 2022.

MercedCERA's stated mission is to provide benefits to its members, to manage assets prudently in accordance with plan provisions and to provide competent and efficient services to our members. Meketa Investment Group, MercedCERA's general consultant, works in concert with Cliffwater, MercedCERA's alternative investments consultant, to provide guidance to the Board (the Association's fiduciary), and assist the Board with performance evaluation, asset allocation, manager selection, and other industry best practices.

Rates of return are represented using a time weighted rate of return methodology based upon market values.

Fiscal 2022 Year in Review

We entered fiscal year 2022 in an environment of improvements related to COVID-19, supportive monetary policy, relatively low interest rates, and the belief that inflation would be transitory. As the year progressed it became clear that as supply chain issues lingered inflation was going to remain high. The inflation picture was further complicated by the war in Ukraine and China's strict policies related to the virus, as well as relatively strong demand here in the US driven by policy support. With inflation levels at multi-decade highs the US central bank, and others, were forced to aggressively start increasing interest rates. This led to one of the worst starts to a calendar year on record and weighed heavily on the overall fiscal year results.

Related to COVID-19, there was a global push for vaccine development and distribution, as well as advances in therapeutics. This led to increased optimism that there was a path to normal life and a return to typical economic patterns that we had not seen since early 2020. Despite these improvements there were pockets of disruption related to the virus during the fiscal year with various outbreaks reintroducing restrictions. Here in the US the Omicron variant led to a massive spike in cases toward the end of 2021 and into 2022.

While COVID-19 was still present worldwide, it evolved into a less virulent form and much of the world has learned to live with it. Many restrictions on travel were removed, and spending patterns among individuals and businesses adjusted to reflect that. Early in the pandemic, much of consumer spending in the US was on real estate, home renovation, and other goods to make living and for some working

BOSTON CHICAGO LONDON MIAMI NEW YORK PORTLAND SAN DIEGO

Merced County Employees' Retirement Association Investment Consultant's Report (Continued)



October 13, 2022

solely at home more comfortable. As the global economy reopened, spending patterns shifted to reflect preferences for travel and leisure.

One exception to the reopening of the global economy has been China. The Chinese government has continued the "COVID Zero" policy instituted early in the pandemic that includes mass testing, restrictions on mobility, and the closure of commercial and manufacturing centers. The policy also weighs on the resolution of supply chain issues and contributes to inflation globally.

At the beginning of fiscal year 2022 (July 2021), CPI stood at 5.4%. At the time, many market commentators and the Federal Reserve were labeling increases in inflation as "transitory," a result of pandemic-induced supply chain issues and accumulated savings over a year of stay-at-home orders. The Federal Reserve declined to act at the time, citing elevated unemployment levels and an incomplete recovery. Capital markets started to digest the high inflation numbers, with the Bloomberg Commodity index increasing 6.6% and the Bloomberg TIPS index returning 1.8% in the third calendar year quarter of 2021. Ultimately for the July-September period, US equity markets were slightly positive. Developed equity markets outside the US were slightly negative (in US dollar terms), while the MSCI Emerging Markets index declined 8.1% for the period driven by concerns in China related to the property market and the government's crackdown on the technology sector. Rates stayed largely unchanged through September in the US as investors waited for clarity on the path of the economy and monetary policy.

It was also late in 2021 that news of a new COVID-19 variant of concern, Omicron, were beginning to come out of South Africa. Early reports were that it was significantly more transmissible, and possibly less virulent. Depending on the region of the world, restrictions were reintroduced, exacerbating supply chain issues. Additionally, high natural gas prices were threatening the economic recovery in Europe and troubles related to China's overleveraged property sector and crackdown on the technology sector continued to rattle markets.

By December of 2021, CPI had increased to 7.0%, well above trend and at risk of becoming entrenched in consumer expectations. It was at this time that the Federal Reserve acknowledged that increases in inflation may not be "transitory" and gave indications that price increases were broadening out to goods and services not directly related to pandemic dislocations. The change in tone from the Federal Reserve did not significantly affect capital markets in the fourth quarter of 2021, as many asset classes were still positive. The S&P 500 returned 11.0% for the September to December quarter, with developed market equities registering lower (+2.7%) but positive returns, and emerging market equities declining (-1.3%).¹ The broad US bond market was flat, while TIPS (+2.4%) benefited from increasing inflation concerns.¹

In early 2022, market participants in the US started to digest the hawkish pivot of the Federal Reserve in December given inflation pressures were not easing. US and non-US equity markets posted negative returns in January, with non-US equities generally outperforming US equities. Rates began to increase across the US yield curve, but the curve also began to flatten, given policy expectations. Bond markets

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Merced County Employees' Retirement Association Investment Consultant's Report (Continued)



October 13, 2022

also posted negative returns on concerns of higher interest rates in the inflationary environment, marking an unusual positive correlation between the two asset classes.

Russia invaded the Ukraine the last week of February and the West responded with sweeping sanctions that exceeded market expectations. Restricting access to foreign reserves was key, leading to Russia's central bank dramatically increasing policy rates (9.5% to 20%) to try to protect the currency. Food and energy prices added to inflation pressures in Europe and the US, pushing interest rates higher. During the first quarter of 2022, all major asset classes declined except for commodities. Value stocks in the US significantly outperformed growth stocks, given higher rates and a preference by many investors for companies presumably better able to weather the tightening financial conditions. An increase in inflation expectations, and the pricing in of higher policy rates, proved to be a challenging headwind for nearly all bond indices. The broad US bond market experienced one of its worst quarters on record, down 5.9%.1

The Federal Reserve began lifting interest rates in the last quarter of the fiscal year. It started with a 25 basis point hike in April and followed that with a 50 basis point increase in early May. In June, reacting to a CPI reading of 8.6%, the Federal Reserve hiked rates by 75 basis points, which was the largest one-time increase since 1994. A similar increase took place in July 2022 with further increases expected into 2023. All major equity indices suffered steep declines in June weighing on overall second quarter 2022 results, with the S&P hitting bear market territory by the end of the second calendar quarter. Emerging markets proved slightly more resilient than developed markets on a partial re-opening in China from pandemic-related lockdowns. The global bond selloff continued, as inflation fears, and policy expectations weighed on all major global bond markets.

Over the full fiscal year, US stocks outperformed other regions, with the S&P 500 returning -10.6% for the year, compared to the MSCI EAFE at -17.8%, and a decline of 25.3% for the MSCI Emerging Market index. Despite positive performance in June, the MSCI China index declined the most among major regions with a full fiscal year return of -31.8%. Within fixed income, higher inflation and higher rates led the Bloomberg TIPS index to decrease 5.1% over the full fiscal year, while the Bloomberg Aggregate index declined by 10.3%. Economic growth in the US fell in the first and second quarters of 2022, at -1.6% and -0.9%, respectively. Europe's economic output moderated but was still positive in the first two quarters of 2022. Japan's economic growth was slightly negative to begin 2022, while China's GDP remained positive but below the prior trend. Inflation remained stubbornly high, with CPI increasing 8.6% in the US over the fiscal year, the highest reading since 1981. The Eurozone matched the US with an 8.6% inflation print for the fiscal year ending in June.

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2023 Outlook

Fiscal year 2022 was a tale of two periods in the context of economic growth and market returns. Outsized economic growth and positive returns globally in the last six months of 2021 coupled with slowing economic growth and negative returns in the first six months of 2022. Above trend price increases continued for the entirety of fiscal year 2022. One of the central questions now, is whether central banks around the world can rein in inflation without sending global economies into a deep recession, all while the war in Ukraine continues and some supply chain dislocations remain. Economic uncertainties abound. These include:

- → Central Banks find themselves potentially behind the curve on inflation, with available tools that may not be the most effective in dealing with the cost-push type of inflation we are experiencing. This dynamic creates the risk of creating a stagflationary environment. Longer-term, we could also see a slowing or decline in globalization creating more persistent inflationary pressures.
 - Supply chain issues and geopolitical risks have placed a premium on supply chain stability relative to supply chain efficiency. Beginning in the 1990s and accelerating after the inclusion of China in the World Trade Organization in 2001, many companies globalized their sourcing and production and embraced lean manufacturing techniques to drive efficiency. But the move toward globalization, though greatly reducing most costs, exposed companies to an abundance of supply chain risks, which the pandemic and Russian invasion of Ukraine laid bare. As a result, many companies are focused on making supply chains more resilient and robust. This often entails the reshoring of large segments of the supply chain and an embrace of redundancies, including input and inventory stockpiling, and diversifying sourcing from nearshored, and/or reshored suppliers. Ultimately, with a focus on supplier reliability over cost. This transition is likely a secular change which could lead to pricing pressure for years to come, that is largely unaffected by monetary policy.
- → Current levels of inflation may not come down as much as market metrics imply.
 - Measures of breakeven inflation, or the difference in yields between TIPS and nominal bonds, imply that inflation will return to sub-3% levels over the next 5 years. Additionally, because of expectations of rapid declines in inflation, some metrics are even implying a pause or rate cuts next year. If inflation does not come down quickly enough, further rate increases may be necessary, leading to potentially more losses in bond markets.
- → Unemployment levels are low, and back near levels consistent with full employment, but the labor force participation rate has not recovered. There also continues to be an imbalance between job openings and the available workers to fulfill them.
 - Potential for a wage-price spiral: early retirements and other trends associated with the
 pandemic and the "Great Resignation" have left millions more job openings than available
 workers in the US.⁴ The labor force participation rate⁴ was at 63.4% in January of 2020, prior to
 the pandemic, and was still only at 62.2% at the end of fiscal year 2022. As companies look to
 respond to increased demand as the economy reopens, they have faced a distinct shortage in

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available workers. In response, some companies have been aggressively raising wages to fill vacancies. As companies look to offset the higher input costs, often they respond by raising the prices of the goods and services they sell, furthering contributing to pricing pressure. Which then can feed into wage expectations and ultimately additional wage growth eventually leading to a cyclical feedback loop. Ultimately, such a condition may only exist during a strong economic expansion and ultra-tight labor markets. As a result, inflation arising from this process should be sensitive to monetary policy to the extent that the central bank is willing to slow economic growth to break the cycle.

- → The invasion of Ukraine by Russia evolves into a long-term conflict and threatens to pull in other nations to the fight.
 - This development increases the possibility of lower economic growth worldwide, and most likely
 causes prices to stay elevated for longer periods of time, versus the absence of global conflict.
- → Economic growth continues to slow globally.
 - After growth in calendar year 2021 that exceeded historical norms, growth forecasts continue
 to be revised downward across countries as economies adjust to higher prices and tighter
 monetary conditions.
- → Another COVID-19 variant of concern emerges that may be more dangerous.
 - The novel coronavirus is still out there, and as it continues to spread there is always a chance that a new, more virulent variant could emerge.

While there are many risks to markets as the pandemic continues, prices are higher, rates are increasing, and global conflicts persist, there are reasons to remain optimistic as well. These include:

- → Inflation potentially peaks in fiscal year 2023, and central banks reduce the pace of monetary tightening or end it altogether. It is also possible that we could even start seeing rate decreases in the coming years.
- → Despite the recent rate increases, interest rates in the US are still low relative to historical levels and economic projections remain positive.
- → As a result of equity market declines in fiscal year 2022, valuations are more reasonable and near historical averages. The recent decline in equities also leads to higher expected returns going forward. Similarly, higher interest rates also lead to increases in expected returns for bonds.
- → Spending by the US consumer has held up well in the face of higher prices, and if inflation peaks while the job market is still strong, positive economic growth would be expected to occur.

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¹ Source: Bloomberg and InvestMetrics

² Source: Bloomberg

³ Source: Bureau of Economic Analysis

⁴ Source: US Bureau of Labor Statistics

⁵ Source: Eurostat



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MercedCERA Fiscal Year 2022 Performance

The MCERA portfolio posted a -7.1% return on a net of fees basis for the fiscal year ended June 30, 2022, which trailed the policy index by 190 basis points. The International Equities segment of the portfolio was a key detractor from performance due to the poor performance of the sleeve over the period (-26.5%) as well as the overall size of the allocation (17.5% of portfolio). Private Equity was the strongest performer on both absolute (31.4%) and relative to benchmark (15.3%) basis.

US Equities returned -14.3%, trailing its benchmark by 40 bps. The US Fixed Income sleeve posted a -10.3% return in the trailing year, in line with its benchmark. Opportunistic credit returned -5.6% outperforming its benchmark return of -9.0%. The Real Estate sleeve returned 10.7%, compared to its benchmark return of 29.5%. Direct Lending, a newly added asset class to the portfolio, returned 2.0%, compared to the benchmark return of -0.8%. Hedge funds returned -0.5%, compared to the benchmark return of -5.4%. Real Assets returned 15.3% compared to the benchmark return of 5.8%.

From a longer-term perspective, the fund returned 7.8% for the trailing three years and 7.5% over the trailing five years. The portfolio outperformed the benchmarks by 20 basis points over the three-year period and by 10 basis points over the five-year period.

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Investment Results

	Α	nnualized Returns	s (%)
Periods Ended June 30, 2022	One Year	Three Years	Five Years
US Equity (net)	-14.3	8.9	10.2
Russell 3000	-13.9	9.6	10.2
Rank	64	52	33
International Equity (net)	-26.5	6.0	5.2
International Equity Custom	-20.7	1.4	2.6
Rank	94	2	3
US Fixed Income (net)	-10.3	-1.1	0.7
BBgBarc US Aggregate TR	-10.3	-1.0	0.9
Rank	64	76	87
Opportunistic Credit (net)	-5.6	2.7	N/A
50% Barclays US Aggregate / 25% Barclays US High Yield / 25% Credit Suisse Leveraged Loans	-9.0	0.2	N/A
Rank	N/A	N/A	N/A
Real Estate (net & Private Real Estate 1-quarter lagged)	10.7	5.1	6.0
Custom Blended Real Estate Benchmark	29.5	12.3	9.9
Rank	87	88	88
Private Equity (net & 1-quarter lagged)	31.4	25.2	21.0
Custom Blended Private Equity Benchmark	15.3	23.6	20.7
Rank	17	28	27
Direct Lending (net & 1-quarter lagged)	2.0	N/A	N/A
S&P LTSA Leverage Loan Index + 2%	-0.8	N/A	N/A
Rank	N/A	N/A	N/A
Hedge Funds (net)	-0.5	4.8	4.9
Custom Blended Hedge Fund Benchmark	-5.4	3.9	3.7
Rank	13	56	37
Real Assets (net & certain managers 1-quarter lagged)	15.3	11.3	10.3
Custom Blended Real Assets Benchmark	5.8	3.7	6.8
Rank	22	10	15
Total Fund (net)	-7.1	7.8	7.5
Policy Index	-5.2	7.6	7.4
Rank	14	2	4

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Total Fund Returns (Gross of Fees) vs. Universe Period Ended June 30, 2022								
	3 mo	Fiscal YTD	3 yrs	5 yrs	7 yrs	10 yrs	Inception Return	Since
Total Fund	-8.1%	-6.8%	8.1%	7.8%	7.4%	8.5%	8.1%	12/31/1994
Fund Benchmark	-8.6%	-5.2%	7.6%	7.4%	7.3%	8.4%	6.2%	12/31/1994
IF Public Defined Benefit Gross Rank	11	12	4	5	8	15	40	12/31/1994
IF Public Defined Benefit Gross Median	-10.1%	-5.2%	5.6%	6.5%	6.6%	7.9%	7.8%	12/31/1994

Outline of Investment Policies

The Board of Retirement (Board) has exclusive control of all investments of the Merced County Employees' Retirement Association (MercedCERA or the Association) and is responsible for establishing investment objectives, strategies, and policies.

Pursuant to the California Constitution and the County Employees' Retirement Law of 1937 (the 1937 Act), the Board is authorized to invest in any form or type of investment deemed prudent in the informed judgment of the Board. In making decisions regarding the MercedCERA investment portfolio, the Board acts in a fiduciary capacity and must discharge its duties in accordance with fiduciary principles. In this regard, investment decisions are to be made in the sole interest and for the exclusive purpose of providing benefits, minimizing employer contributions, and defraying the reasonable expenses of the Association.

The Board adopted an Investment Policy Statement (IPS) on February 23, 2017 and most recently amended April 22, 2022, which provides the framework for the management of MercedCERA's investments. The IPS establishes the investment program goals, asset allocation policies, performance objectives, investment management policies and risk controls. The IPS defines the principal duties of the Board, MercedCERA's custodian bank, consultant, and MercedCERA's investment managers. The Board makes revisions to the Investment Policy as necessary.

Pursuant to the IPS, the basic goal of MercedCERA's investment program is to obtain a fully funded plan status, while assuming a risk posture consistent with the Board's risk tolerance. In pursuing this goal, the Board has adopted a long-term investment horizon in which the chances and duration of investment losses are carefully weighed against the long-term potential for appreciation of assets. The primary investment objective is to exceed the actuarial assumption for return on assets. The risk assumed in the pursuit of this investment objective must be appropriate for the return anticipated and consistent with the total diversification of the fund. The asset allocation plan, adopted by the Board, is an integral part of MercedCERA's investment program. It is designed to provide an optimum, diversified mix of asset classes with return expectations to satisfy expected liabilities, while minimizing risk exposure.

Summary of Proxy Voting Guidelines and Procedures

Voting of MercedCERA's proxy voting ballots shall be in accordance with MercedCERA's proxy voting guidelines as set forth in the Investment Policy. The basic directive of the proxy voting guidelines is that, when voting proxy ballots on behalf of MercedCERA, investment managers shall vote according to the best interests of the MercedCERA membership. On a quarterly basis, the investment managers are required to provide a report to MercedCERA detailing their proxy votes.

Asset Allocation Information For the Fiscal Year Ended June 30, 2022						
Investment Class	Allocation June 30, 2022	Target	Allocation Minimum	Allocation Maximum		
Domestic Equity	22.4%	22.0%	16.0%	27.0%		
Developed Markets Equity	11.6%	11.0%	6.0%	16.0%		
Emerging Markets Equity	5.9%	8.0%	4.0%	12.0%		
Private Equity	12.6%	15.0%	5.0%	20.0%		
Direct Lending	1.9%	5.0%	0.0%	10.0%		
Real Estate	8.5%	8.0%	6.0%	10.0%		
Domestic Fixed Income	15.7%	11.0%	6.0%	16.0%		
Opportunistic Credit	5.5%	5.0%	3.0%	7.0%		
Hedge Fund	9.9%	10.0%	5.0%	15.0%		
Real Assets	5.4%	5.0%	3.0%	7.0%		
Cash	0.6%	0.0%	0.0%	5.0%		
	100.0%	100.0%				

Asset Allocation Information For the Fiscal Year Ended June 30, 2021					
Investment Class	Allocation June 30, 2021	Target	Allocation Minimum	Allocation Maximum	
Domestic Equity	24.0%	21.0%	15.0%	26.0%	
Developed Markets Equity	12.4%	10.0%	5.0%	15.0%	
Emerging Markets Equity	9.5%	8.0%	4.0%	12.0%	
Private Equity	8.1%	15.0%	5.0%	20.0%	
Real Estate	7.5%	8.0%	6.0%	10.0%	
Domestic Fixed Income	16.9%	18.0%	13.0%	23.0%	
Opportunistic Credit	5.9%	5.0%	3.0%	7.0%	
Hedge Fund	9.3%	10.0%	5.0%	15.0%	
Real Assets	5.8%	5.0%	3.0%	7.0%	
Cash	0.6%	0.0%	0.0%	5.0%	
	100.0%	100.0%			

Investment Summary For the Fiscal Year Ended June 30, 2022				
	Value	Percent of Total		
Domestic Equity				
Large Cap	\$102,037,142	9.7%		
Large Cap Active	109,825,135	10.4%		
Small Cap	24,197,364	2.3%		
Total	236,059,641	22.4%		
International Equity				
Large Cap	97,294,375	9.2%		
Small Cap	25,488,174	2.4%		
Emerging Market	61,960,968	5.9%		
Total	184,743,517	17.6%		
Fixed Income				
Domestic Core	77,152,285	7.3%		
Mutual Fund	86,990,157	8.3%		
Opportunistic Credit	38,976,745	3.7%		
Total	203,119,187	19.3%		
Alternative Investments				
Private Equity	178,938,790	17.0%		
Direct Lending	14,268,299			
Hedge Funds	123,801,528	11.8%		
Real Asset Proxy	19,817,449	1.9%		
Total	336,826,066	32.0%		
Real Estate				
Domestic Property Fund	53,648,353	5.1%		
Domestic Private Real Estate	30,613,667	2.9%		
International Private Real Estate	7,404,588	0.7%		
Total	91,666,608	8.6%		
Cash and Short-Term Investments	7,974,052	0.8%		
Total Investments, Cash and Short-Term Investments	\$1,060,389,071	100%		

Merced County Employees' Retirement Association Schedule of Investment Results (Gross of Fees) For the Fiscal Year Ended June 30, 2022

	Current		A	Annualize	d	
Domestic Equity	Year	3Yrs	5Yrs	7Yrs	10Yrs	Inception
Large Cap:						
Mellon Dynamic	-12.7	11.0	12.6	13.1		15.5
Mellon Large Cap Index	-13.0	10.3	11.1			12.1
Small Cap:						
Champlain Small Cap*	-23.2					3.2
Total Domestic Equity	-14.0	9.2	10.4	10.8	13.1	10.0
Index: Russell 3000	-13.9	9.6	10.2	10.1	12.3	9.9
International Equity						
Developed Markets:						
Acadian ACWI ex U.S. Small Cap Equity	-17.2	9.5				9.0
Driehaus International Small Cap Growth	-27.1	6.5				6.9
GQG International Equity	-11.1					5.7
First Eagle International Value Fund	-9.4					1.5
Emerging Markets:						
Artisan Developing World Trust	-47.9					1.0
RWC Global Emerging Equity Fund	-29.4					1.2
Total International Equity	-25.9	6.7	5.9	5.3	7.1	5.6
Index: International Equity Custom	-20.7	1.4	2.6	3.3	5.4	4.0
US Fixed Income						
Barrow Hanley	-10.8	-0.5	1.2	1.8	1.9	3.2
Vanguard Short-Term Treasury Index Fund	-3.6	0.1				1.1
Vanguard Total Bond Market Index Fund	-10.4	-0.9				0.1
Total Fixed Income	-10.2	-1.0	0.8	1.6	2.1	4.8
Index: BBgBarc US Aggregate TR	-10.3	-1.0	0.9	1.6	1.7	4.9
Opportunistic Credit						
PIMCO Income Fund	-8.5	0.3				0.8
GoldenTree Multi-Sector Credit	-7.1	2.4				2.7
Sculptor Credit Opportunities Domestic Partners, LP	3.3					12.9
Total Opportunistic Credit	-5.1	3.1				3.4
Index: 50% Barclays US Aggregate / 25% Barclays US High Yield / 25% Credit Suisse Leveraged Loans	-9.0	0.2				0.8

Merced County Employees' Retirement Association Schedule of Investment Results (Gross of Fees) (Continued) For the Fiscal Year Ended June 30, 2022

	Current			Annualized		
Real Estate	Year	3Yrs	5Yrs	7Yrs	10Yrs	Inception
Vanguard REIT Index	10					9.8
UBS Trumbull	24.6	5.2	5.0	5.9	7.4	7.9
Greenfield GAP VII	55.5	27.7	21.6	20.1		19.2
Patron V	-17.1	-8.2	3.6			2.9
Carlyle Realty VIII	151.4	50.2				13.0
Taconic CRE Dislocation Fund II	5.9	9.3				7.6
Carmel Partners Investment Fund VII	1.0	-24.9				-28.4
AG Realty Value Fund X, L.P.	28.2	6.9				6.7
Rockpoint Real Estate Fund VI, L.P.	40.4					21.9
Cerberus Real Estate Debt Fund, L.P	3.1					13.4
Taconic CRE Dislocation Onshore Fund III*	6.7					6.2
Starwood Distressed Opportunity Fund XII Global*	241.0					419.4
Carlyle Realty Partners IX*						
Carmel Partners Investment Fund VIII*						-8.7
Total Real Estate**	10.8	5.1	6.0	6.7	7.7	8.1
Index: Custom Blended Real Estate Benchmark	29.5	12.3	9.9	9.6	10.3	8.0
Real Assets						
Proxy Fund						
SSgA	8.6	9.0	7.5			7.1
Private Infrastructure:						
KKR Global Infrastructure Investors II	8.5	28.3	20.9	17.4		17.3
North Haven Infrastructure II	18.4	8.4	12.7	8.0		7.9
ISQ Global Infrastructure Fund II	14.8	13.9				2.7
KKR Global Infrastructure Investors III	-8.7	-1.3				-5.8
Ardian Infrastructure Fund V	8.6					-17.3
ISQ Global Infrastructure Fund III*						
KKR Global Infrastructure Investors IV*						
Private Natural Resources:						
GSO Energy Opportunities	29.9	10.4	10.5			13.9
Taurus Mining	174.6	34.2	24.4			25.0
Taurus Mining Annex	49.00	24.8	23.7			27
EnCap XI	49.9	-1.2				-14.3
EnCap IV	198.2	47.9				29.7
BlackRock GEPIF III	6.6					15.0
Tailwater Energy Fund IV	39.2					-0.5
Carnelian Energy Capital IV*						
Total Real Assets	15.5	11.5	10.4	9.7	9.8	
Index: Custom Blended Real Assets Benchmark	5.8	3.7	6.8	7.1		

Merced County Employees' Retirement Association Schedule of Investment Results (Gross of Fees) (Continued) For the Fiscal Year Ended June 30, 2022

	Current			Annualized		
Private Equity	Year	3Yrs	5Yrs	7Yrs	10Yrs	Inception
Adams St	12.7	22.0	19.3	16.5	15.9	12.8
Invesco VI	81.6	64.2	42.4	31.4		27.1
Ocean Ave II	52.6	49.0	40.4	29.9		24.9
Pantheon I	-24.5	-18.0	-8.7	-5.5	-1.4	0.2
Pantheon II	9.5	22.1	19.8	17.6	16.5	15.2
Pantheon Secondary	-20.2	-11.6	-3.3	-2.6	-1.6	1.7
Raven Asset Fund II	561.1	73.8	44.9	27.2		22.9
Davidson Kempner Long-Term Distressed Opportunities Fund IV	38.5	16.1				15.3
GTCR Fund XII	48.9	44.7				21.1
Carrick Capital Partners III	35.6	26.6				15.1
Cressey & Company Fund VI	51.6	35.3				23.5
TCV X	47.0	38.8				35.4
Accel-KKR Growth Capital Partners III	45.8	13.7				13.7
Genstar Capital Partners IX	33.9					26.3
Cortec Group Fund VII	32.2					28.9
Spark Capital Growth Fund III	54.2					26.8
Spark Capital VI	6.4					-4.3
Summit Partners Growth Equity Fund X-A	18.1					12.8
Taconic Market Dislocation Fund III L.P.	22.8					23.6
Marlin Heritage Europe II, L.P.	-9.1					-6.4
Khosla Ventures VII*	13.7					5.4
Accel-KKR Capital Partners VI*	48.0					-9.5
Khosla Ventures Seed E*	773.0					325.6
TCV XI	11.8					4.2
Thoma Bravo Discover Fund III	9.3					13.0
Summit Partners Venture Capital Fund V-A*	-6.8					-7.4
GTCR Fund XIII/A & B*	135.0					308.5
Genstar Capital Partners X*						8.9
Nautic Partners X*						-4.7
Spark Capital Growth Fund IV*						-3.5
Spark Capital VII*						-2.0
TCV Velocity Fund I*						-22.3
Accel-KKR Growth Capital Partners IV						-21.1
Total Private Equity**	31.4	25.2	21.1	16.2	13.7	11.1
Index: Custom Blended Private Equity Benchmark	15.3	23.6	20.7	18.0	20.1	

	Current			Annualized	Ł	
Direct Lending	Year	3Yrs	5Yrs	7Yrs	10Yrs	Inception
Silver Point Specialty Credit Fund II, L.P.	2.4					11.8
Ares Senior Direct Lending Fund II*						5.5
Varagon Capital Direct Lending Fund*						-0.4
AG Direct Lending Fund IV Annex*						0.0
Total Direct Lending**	-0.8	4.2	5.0	5.3	5.8	6.2
Index: S&P LSTA Leverage Loan Index + 2%	2.4					11.8
Hedge Funds						
Sculptor (OZ) Domestic II	-12.1	4.8	5.9	5.4		5.8
Graham Absolute Return	14.8	7.1				6.0
Wellington-Archipelago	2.3	5.9				5.7
Marshall Wace Eureka	6.9	10.1				8.3
Silver Point Capital	4.8	12.0				8.6
Laurion Capital	-14.3	13.4				12.7
Taconic Opportunity Fund	-1.2	3.0				3.7
Marshall Wace Global Opportunities	2.2					4.1
Caxton Global Investments	16.5					10.8
Total Hedge Funds	0.4	5.7	5.5	4.4		4.7
Index: Hedge Fund Custom	-5.5	3.9	3.7	3.1		3.2
Total Fund***	-6.7	8.1	7.8	7.4	8.5	8.1
Total Fund Custom Index***	-5.2	7.6	7.4	7.3	8.4	6.2

^{*}There is no fiscal year data available; MercedCERA has been in the fund for less than a year.

^{**}Performance results lag by a up to a quarter due to financial reporting constraints.

^{***}Using time-weighted rate of return based on market rate return and are presented gross of fees.

Top 10 Largest Holdings by Fair Value June 30, 2022						
PAR		Bonds	Fair Value			
4,825,000	US TREASURY NOTE	1.125% DI 02/29/2020 DD 02/28/2025	\$4,592,420			
3,295,000	US TREASURY NOTE	1.250% DI 08/31/2019 DD 08/31/2024	3,174,398			
3,205,000	US TREASURY NOTE	1.500% DI 01/31/2020 DD 01/31/2027	2,992,418			
3,855,000	US TREASURY BOND	1.375% DI 08/15/2020 DD 08/15/2050	2,537,524			
1,640,000	US TREASURY BOND	2.250% DI 05/15/2021 DD 05/15/2041	1,368,503			
949,563	FNMA POOL #FM6557	2.000% DI 03/01/2021 DD 03/01/2051	827,814			
788,024	FHLMC POOL #RB5170	4.000% DI 05/01/2022 DD 06/01/2042	791,168			
817,719	GNMA II POOL #MA7768	3.000% DI 12/01/2021 DD 12/20/2051	772,202			
790,855	FNMA POOL #FS1807	3.500% DI 05/01/2022 DD 07/01/2051	767,910			
770,000	T-MOBILE USA INC	3.875% DI 04/15/2021 DD 04/15/2030	718,607			
			\$18,542,964			

A complete list of portfolio holdings is available upon request.

Schedules of Investment Management Fees For the Fiscal Years Ended June 30, 2022 and 2021						
Investment Managers' Fees	2022 Assets Managed	2022 Fees	2021 Assets Managed	2021 Fees		
Equity Managers						
Domestic	\$211,862,277	\$427,769	\$243,030,022	\$511,395		
International	24,488,174	354,375	37,977,287	241,792		
Fixed Income Managers	77,152,285	226,669	89,348,858	208,365		
Alternative Investment Managers	41,982,717	500,998	49,743,172	354,892		
Real Estate Managers	37,983,455	405,414	38,682,726	432,157		
Total Investment Manager Fees and Assets Managed	\$393,468,908	\$1,915,225	\$453,782,065	\$1,748,601		

Schedule of Brokerage Commissions For the Fiscal Year Ended June 30, 2022						
Brokerage Firm	Rank	Commissions	Shares/Par Value Traded	Commission Per Share		
Northern Trust Securities, Inc	1	\$191.82	6,394	\$0.03		
Total Brokerage Commissions		\$191.82	6,394	\$0.03		

Investment Ser	vice Providers
Fixed Income	Private Equity
Barrow, Hanley, Mewhinney & Strauss, Inc.	Accel-KKR
GoldenTree Asset Management LP	Adams Street Partners, LLC
PIMCO Investment Management	Carrick Capital Management Company
Vanguard	Cortec Group
	Cressey & Company LP
Domestic Equity	Davidson Kempner Capital Management LP
Champlain Investment Partners	Genstar Capital
Mellon Capital Management	GTCR LLC
	Invesco Private Capital
International Equity	Khosla Ventures
Acadian Asset Management	Marlin Equity Partners
Artisan	Nautic Partners
Driehaus Capital Management	Ocean Avenue Capital Partners
First Eagle	Pantheon Ventures, Inc.
GQG	Raven Capital Management
RWC	Silver Point Capital
	Spark Capital
Real Estate	Summit Partners
Angelo Gordon	Technology Crossover Ventures (TCV)
The Carlyle Group	Thoma Bravo, LP
Carmel Partners, Inc	
Cerberus Capital Management	
Greenfield Partners	Hedge Fund
Patron Capital	Caxton Associates LP
Rockpoint Group	Graham Capital Management
Starwood Capital Group	Laurion Capital Management, LLP
Taconic Capital Advisors LP	Marshall Wace, LLP
UBS Global Asset Management	Och-Ziff Capital Management
Vanguard	Silver Point Capital, L.P.
	Taconic Capital Advisors LP
Real Asset Proxy	Wellington Alternative Investments
SSgA	
	Continued on next page.

Investment Service Providers (Continued)			
Natural Resources	Infrastructure		
BlackRock , Inc	Ardian		
Carnelian Energy Capital	l Squared Capital		
EnCap Investments L.P.	KKR & Co. L.P.		
GSO Energy Select Opportunities Associates, LLC	Morgan Stanley		
Tailwater			
Taurus Funds Management	Commission Recapture Brokers		
	ConvergEx Group		
	Capital Institutional Services, Inc.		

Actuarial Section

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Classic Values, Innovative Advice

Via Electronic Mail

October 20, 2022

Actuarial Certification

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report (ACFR) for the Merced County Employees' Retirement Association (the Plan) as of June 30, 2022. This letter includes references to two documents produced by Cheiron for the Plan: the Actuarial Valuation Report as of June 30, 2021 (transmitted January 3, 2022) and the GASB 67/68 Report as of June 30, 2022 (transmitted October 19, 2022).

Actuarial Valuation Report as of June 30, 2021

The purpose of the annual Actuarial Valuation Report as of June 30, 2021 is to determine the actuarial funding status of the Plan on that date and to calculate recommended contribution rates for the participating employers and Plan members for the Fiscal Year 2022-2023. The prior review of Plan member and employer rates was conducted as of June 30, 2020 and included recommended contribution rates for the Fiscal Year 2021-2022.

The funding objective of the Plan is to accumulate sufficient assets over each Member's working life to provide for Plan benefits after termination of employment or retirement. The Board of Retirement is responsible for establishing and maintaining the funding policy of the Plan.

Actuarial funding is based on the Entry Age Normal Cost Method. Under this method, the employer contribution rate provides for current cost (normal cost and expected administrative expenses) plus a level percentage of payroll to amortize the Unfunded Actuarial Liability (UAL). Based on an action taken by the Board at their September 10, 2020 meeting, effective with the June 30, 2019 valuation, 15% of the outstanding balance as of June 30, 2019 of the June 30, 2013 UAL amortization base is carved out as a separate base and amortized over a closed 14-year period as a level percentage of payroll. The remaining 85% is amortized over a closed 14-year period, with 10 years of level payments as a percentage of payroll, and a four-year ramp down at the end of the period.

For the June 30, 2014 valuation, the Board of Retirement adopted a new funding policy for any subsequent unexpected change in the UAL after June 30, 2013. Any new sources of UAL due to actuarial gains and losses or method changes are amortized over a closed 24-year period, with a five-year ramp up period at the beginning of the period, a four-year ramp down at the end of the period, and 15 years of level payments as a percentage of payroll between the ramping periods. Assumption changes will be amortized over a closed 22-year period, with a three-year ramp up period, two-year ramp down period, and 17 years of level payments as a percentage of payroll.



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Merced County Employees' Retirement Association Actuarial Certification Letter (continued)

The Board also adopted a policy to replace the smoothed Actuarial Value of Assets with the Market Value of Assets for valuation purposes. These new amortization and funding policies in conjunction are a type of policy known as direct rate smoothing.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the ACFR, based on the June 30, 2021 actuarial valuation. All historical information prior to the June 30, 2013 actuarial valuation shown in these schedules is based on information reported by EFI Actuaries, which was acquired by Cheiron in January 2013.

- Statement of Current Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Development of 2021 Experience Gain/(Loss) (Analysis of Financial Experience)
- Schedule of Funded Liabilities by Type
- Summary of Plan Provisions

The assumptions used in this report reflect the results of an Experience Study performed by Cheiron covering the period from July 1, 2016 through June 30, 2019 and approved by the Board at their February 27, 2020 meeting. The Board adopted a reduction in the discount rate from 7.00% to 6.75% at their September 23, 2021 meeting. The assumptions used in the most recent valuation are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis will cover the years through 2022.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice, in particular Standards No. 4, 27, 35, and 44.

GASB 67/68 Report as of June 30, 2022

The purpose of the GASB 67/68 Report as of June 30, 2022, is to provide accounting and financial reporting information under GASB 67 for the Plan and under GASB 68 for the County of Merced and the other participating employers. This report is not appropriate for other purposes, including the measurement of funding requirements for the Plan.

For financial reporting purposes, the Total Pension Liability is based on the June 30, 2021, actuarial valuation updated to the measurement date of June 30, 2022. The beginning of year Total Pension Liability was based on the actuarial valuation as of June 30, 2020, updated to June 30, 2021. The Total Pension Liability measurements as of June 30, 2022 and June 30, 2021 presented in the GASB 67/68 Report were based upon the same data, plan provisions, actuarial methods, and assumptions as were used in the actuarial valuation reports as of June 30, 2021 and June 30, 2020, respectively, with the exception that the discount rate was lowered to 6.75% for the Total Pension Liability measurement as of June 30, 2021.

Please refer to our GASB 67 report as of June 30, 2022, for additional information related to the financial reporting of the System.



Merced County Employees' Retirement Association Actuarial Certification Letter (continued)

We prepared the following schedules for inclusion in the Financial Section of the ACFR based on the June 30, 2022, GASB 67/68 report:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

We certify that the report was performed in accordance with generally accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the Merced County Employees' Retirement Association. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this report.

These reports are for the use of the Plan and their auditor in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of these reports is not an intended user and is considered a third party.

Cheiron's reports were prepared solely for the Plan for the purposes described herein, except that the Plan auditor may rely on these reports solely for the purpose of completing an audit related to the matters herein. They are not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.



Merced County Employees' Retirement Association Actuarial Certification Letter (continued)

These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully Submitted, Cheiron

Graham A. Schmidt, ASA, EA, FCA, MAAA

Consulting Actuary 703-893-1456, x1137 gschmidt@cheiron.us

Anne D. Harper, FSA, EA, MAAA Principal Consulting Actuary 703-893-1456, x1107 aharper@cheiron.us



A. Economic Assumptions

The following economic assumptions and non-economic assumptions were recommended by the actuary and adopted by the Board of Retirement as of the most recent actuarial valuation (dated June 30, 2021):

Investment Rate of Return	6.75%, net investment and administrative expenses	
Inflation	2.50% per annum	
Cost-of-Living Adjustments	For Tier 1, 100% of Consumer Price Index (CPI) up to 3% annually with banking, assumed to be 2.40% annually	
Asset Valuation Method	Fair Market value of assets	
Interest Credited to Active Members' Reserves	Pursuant to MercedCERA Interest Crediting Policy, adopted September 14, 2017, interest will fall within a range from 0% to the actuarial interest rate	
Projected Annual Salary Increases	2.75%, plus service-based rates	

B. Non-Economic Assumptions

The date of the last study of the Plan's actual experience was June 30, 2019. The actuary compared the expected number of terminations from active service to the number actually experienced during a 3-year period and based on this comparison and the trends observed; the probabilities of separation were adjusted.

Mortality Tables Used:

1. Active Members

	General Members	CalPERS 2009 Non-Industrial Employees Mortality Table; projected generationally using SOA MP-2019 mortality improvement scale.
	Safety Members	2010 Public Safety Below Median Employee Mortality Table; projected generationally using SOA MP-2019 mortality improvement scale.
	Safety Members (Line of Duty)	CalPERS 2009 Industrial Employee Mortality; projected generationally using SOA MP-2019 mortality improvement scale.
2 .	Service Retirements	
	General Members	CalPERS 2009 Healthy Annuitant Mortality Table; projected using MP-2019
	Safety Members	105% times the 2010 Public Safety Below Median Healthy Retiree Mortality Table; projected generationally using MP-2019 mortality

3. Disability

Service Connected		Industrial sing MP-201		projected
Non-Service Connected		Non-Industr sing MP-201		projected

4. For employee contribution rate purposes

Same as for active members, except projected using Scale MP-2019 to 2041.

improvement scale.

Withdrawal Rates	Based upon the Experience Analysis as of 6/30/2019 (See Appendix B of 6/30/2019 Actuarial Valuation Report — Statement of Current Actuarial Assumptions.)
Disability Rates	Based upon the Experience Analysis as of 6/30/2019 (See Appendix B of 6/30/2019 Actuarial Valuation Report — Statement of Current Actuarial Assumptions.)
Service Retirement Rates	Based upon the Experience Analysis as of 6/30/2019 (See Appendix B of 6/30/2019 Actuarial Valuation Report — Statement of Current Actuarial Assumptions.)
Vested Termination	Rates of vested termination apply to active members who terminate their employment after five years of service and leave their contribution with the plan. Vested terminated General Members are assumed to begin receiving benefits at 60; terminated Safety Members are assumed to begin receiving benefits at age 51. Future reciprocal transfer General members are assumed to begin receiving benefits at age 61; future reciprocal transfer Safety members are assumed to begin receiving benefits at age 57. Current reciprocal transfer members are assumed to begin receiving benefits based on the probabilities of retirement applied to the active members. Future reciprocal transfers' pay growth is assumed to be 3.75% while employed by a reciprocal employer. Current reciprocal transfers' pay growth is assumed to increase according to the assumptions applied to the active members until the assumed
	retirement age.
Family Composition	55% of female General members, 75% of male General members and 85% of Safety members are assumed to be married at retirement. Male members are assumed to be three years older than their spouses are and female members are assumed to be two years younger than their spouses are.

C. Funding Method

The Entry Age Normal actuarial funding method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each Member's date of hire and assumed retirement. The Actuarial Liability is the difference between the Present Value of Future Benefits and the Present Value of Future Normal Cost. The Unfunded Actuarial Liability (UAL) is the difference between the Actuarial Liability and the Actuarial Value of Assets.

The UAL (or Surplus Funding) is amortized as a percentage of the projected salaries of present and future members of MCERA. Effective with the June 30, 2013 valuation, the UAL as of June 30, 2013 is amortized over a closed 16-year period. Effective with the June 30, 2014 valuation, any new sources of UAL due to actuarial gains and losses or method changes are amortized over a closed 24-year period, with five-year ramp up period at the beginning of the period, a four-year ramp down at the end of the period, and 15 years of level payments as a percentage of payroll. Assumption changes will be amortized over a closed 22-year period, with a three-year ramp up period, two-year ramp down period, and 17 years of level payments as a percentage of payroll. This method is a type of direct rate smoothing method.

D. Plan Description

A summary of plan provisions is located in Note 1 of the **NOTES TO BASIC FINANCIAL STATEMENTS.**

GENERAL MEMBERS

Age	Service- Connected Disability	Non-Service- Connected Disability
20	0.0165%	0.0165%
30	0.0190%	0.0190%
40	0.0806%	0.0806%
50	0.1829%	0.1829%
60	0.1196%	0.1196%
65	0.1196%	0.1196%

Service (Yrs)	Withdrawals	Transfers	Vested Terminations
0-4	92.5%	7.5%	0.0%
5-9	30.0%	35.0%	35.0%
10-14	20.0%	40.0%	40.0%
15+	5.0%	47.5%	47.5%

Service Retirement (by Service)			
Age	10-29 Yrs	30+	
50	10.00%	20.00%	
55	10.00%	25.00%	
60	20.00%	35.00%	
65	35.00%	35.00%	
70+	100.00%	100.00%	

SAFETY MEMBERS

Age	Service- Connected Disability	Non-Service- Connected Disability
20	0.0000%	0.0050%
30	0.2380%	0.0100%
40	0.5500%	0.0200%
50	0.9230%	0.0400%
60	3.0120%	0.1000%
65	3.6385%	0.1000%

Service (Yrs)	Withdrawals	Transfers	Vested Terminations
0-4	92.5%	7.5%	0.0%
5-9	25.0%	50.0%	25.0%
10+	15.0%	56.7%	28.3%

Active Member Mortality			
Age	Female	Male	
20	0.0233%	0.0508%	
30	0.0629%	0.0914%	
40	0.0928%	0.1157%	
50	0.1321%	0.1624%	
60	0.2599%	0.3822%	

Service Retirement (by Service)									
Age	Age 10-19 Yrs 20+								
40	0.00%	1.50%							
45	0.00%	1.50%							
50	15.00%	20.00%							
55	30.00%	30.00%							
60	100.00%	100.00%							

RATES OF TERMINATION

Years of Service	General Male	General Female	Safety	Years of Service	General Male	General Female	Safety
0	20.0%	20.0%	21.0%	20	4.5%	3.0%	0.0%
5	8.2%	8.2%	6.5%	25	4.5%	3.0%	0.0%
10	4.5%	4.5%	4.75%	30	0.0%	0.0%	0.0%
15	4.5%	3.0%	0.0%				

Note: Information compiled from Actuarial Report Prepared by Cheiron, Inc. dated June 30, 2021.

Merced County Employees' Retirement Association Schedule of Active Member Valuation Data

Valuation	Plan	Number	Annual	Average Annual	% Increase in Average
Date	Туре		Salary	Salary	Annual Salary
6/30/2012	General	1,596	\$90,706,280	\$56,834	-0.73%
	Safety	305	\$19,145,091	\$62,771	1.93%
	Total	1,901	\$109,851,371	\$57,786	-0.29%

6/30/2013	General	1,604	\$91,737,348	\$57,193	0.63%
	Safety	295	\$18,699,145	\$63,387	0.98%
	Total	1,899	\$110,436,493	\$58,155	0.64%
6/30/2014	General	1,624	\$91,704,083	\$56,468	-1.27%
	Safety	300	\$18,620,870	\$62,070	-2.08%
	Total	1,924	\$110,324,953	\$57,341	-1.40%
6/30/2015	General	1,664	\$93,938,857	\$56,454	-0.03%
	Safety	298	\$18,397,233	\$61,736	-0.54%
	Total	1,962	\$112,336,090	\$57,256	-0.15%
6/30/2016	General	1,729	\$97,337,917	\$56,297	-0.28%
	Safety	311	\$19,394,922	\$62,363	1.02%
	Total	2,040	\$116,732,839	\$57,222	-0.06%
6/30/2017	General	1,783	\$102,498,328	\$57,486	2.11%
	Safety	313	\$20,136,323	\$64,333	3.16%
	Total	2,096	\$122,634,651	\$58,509	2.25%
6/30/2018	General	1,827	\$108,067,248	\$59,150	2.89%
	Safety	322	\$22,018,174	\$68,379	6.29%
	Total	2,149	\$130,085,422	\$60,533	3.46%
6/30/2019	General	1,861	\$111,267,187	\$59,789	1.08%
	Safety	316	\$22,498,224	\$71,197	4.12%
	Total	2,177	\$133,765,411	\$61,445	1.51%
	•				
6/30/2020	General	1,828	\$112,315,867	\$61,442	2.76%
	Safety	321	\$22,982,055	\$71,595	0.56%
	Total	2,149	\$135,297,922	\$62,959	2.46%
6/30/2021	General	1,799	\$116,284,193	\$64,638	5.20%
	Safety	319	\$23,871,550	\$74,832	4.52%
	Total	2,118	\$140,155,743	\$66,174	5.11%

Note: Information compiled from Actuarial Report prepared by Cheiron, Inc. dated June 30, 2021. The data differs from the membership data in the notes to the financial statements due to timing differences and actuary changes in rounding of data.

	Schedule of Retirements and Beneficiaries Added to and Removed from Retiree Payroll For Fiscal Years Ended June 30											
Year	Beginning of Year	Added During Year	Allowances Added (\$000)	Removed During Year	Allowances Removed (\$000)	End of Year	Retiree Payroll (\$000)	% Increase in Retiree Payroll	Average Annual Allowances			
2012	1,885	175	\$6,485	64	\$960	1,996	\$52,888	14.53%	\$26,497			
2013	1,996	103	\$3,029	49	\$856	2,050	\$56,048	5.98%	\$27,340			
2014	2,050	116	\$3,950	31	\$591	2,135	\$60,297	7.58%	\$28,242			
2015	2,135	100	\$2,509	35	\$720	2,200	\$63,254	4.90%	\$28,752			
2016	2,200	68	\$1,716	34	\$946	2,234	\$65,506	3.56%	\$29,322			
2017	2,234	85	\$2,283	56	\$1,023	2,263	\$68,476	4.53%	\$30,259			
2018	2,263	120	\$3,617	73	\$1,672	2,310	\$72,003	5.15%	\$31,170			
2019	2,310	141	\$4,908	78	\$1,805	2,373	\$76,949	6.87%	\$32,427			
2020	2,373	126	\$4,590	66	\$1,555	2,433	\$81,827	6.34%	\$33,632			
2021	2,433	117	\$3,954	84	\$2,671	2,466	\$84,975	3.85%	\$34,459			

Note: The data differs from the membership data in the notes to the basic financial statements due to timing differences and rounding of data.

	Schedule of Funded Liabilities by Type For Fiscal Years Ended June 30 (Dollar Amounts in Thousands)												
	Actuarial Accrued Liabilities (AAL) For 1 2 3 Portion of Accrued												
Valuation	1 2 3 Active Member Member Contributions Retirees and Beneficiaries Employer Portion Accrued Assets							ed by sets					
Date	Contributions			Liabilities		1	2	3					
2012	\$66,407	\$632,319	\$276,882	\$975,608	\$528,728	100%	73%	0%					
2013	\$73,311	\$694,137	\$297,850	\$1,065,298	\$547,264	100%	68%	0%					
2014	\$75,582	\$739,428	\$281,231	\$1,096,241	\$657,325	100%	79%	0%					
2015	\$78,078	\$765,738	\$287,365	\$1,131,181	\$672,319	100%	78%	0%					
2016	\$81,880	\$804,658	\$314,657	\$1,201,195	\$670,016	100%	73%	0%					
2017	\$85,150	\$834,643	\$339,909	\$1,259,702	\$753,769	100%	80%	0%					
2018	\$86,585	\$871,095	\$344,239	\$1,301,919	\$826,654	100%	85%	0%					
2019	\$86,356	\$932,909	\$350,930	\$1,370,195	\$866,503	100%	84%	0%					
2020	\$84,767	\$986,071	\$342,043	\$1,412,881	\$919,815	100%	85%	0%					
2021	\$88,147	\$1,038,307	\$364,778	\$1,491,232	\$1,163,254	100%	100%	10%					

Note: Information compiled from Actuarial Report prepared by Cheiron, Inc. dated June 30, 2021.

Actuarial Analysis of Financial Experience For Fiscal Years Ended June 30 (Dollar Amounts in Thousands)

	Actuarial (G	ains)/Losses			Changes in	
Plan Year Ended	Asset Sources	Liability Sources	Total	Changes in Plan Provisions	Assumptions/ Methods	Total (Gains)/Loss
2012	\$40,054	\$11,401	\$51,455	N/A	\$(16,069)	\$35,386
2013	\$20,749	\$4,199	\$24,948	N/A	\$49,294	\$74,242
2014	\$(22,058)	\$(12,533)	\$(34,591)	N/A	\$(36,803)	\$(71,394)
2015	\$31,459	\$(5,096)	\$26,363	N/A	\$7,636	\$33,999
2016	\$52,420	\$(8,327)	\$44,093	N/A	\$41,488	\$85,581
2017	\$(34,498)	\$2,720	\$(31,778)	N/A	\$18,639	\$(13,139)
2018	\$(15,963)	\$1,158	\$(14,805)	N/A	\$576	\$(14,229)
2019	\$20,208	\$7,038	\$27,246	N/A	\$22,230	\$49,476
2020	\$3,288	\$9,654	\$12,942	N/A	\$(8,408)	\$(4,534)
2021	\$189,425	\$999	\$190,424	N/A	\$43,792	\$146,632

Schedule of Funding Progress For Fiscal Years Ended June 30 (Dollar Amounts in Thousands)

Actuarial Valuation Date	Valuation Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Active Member Projected Payroll	Unfunded AAL as a % of Covered Payroll
2012	\$528,728	\$975,608	\$446,880	54.2%	\$106,581	419.3%
2013	\$547,264	\$1,065,298	\$518,034	51.4%	\$115,983	446.6%
2014	\$657,325*	\$1,096,241	\$438,916	60.0%	\$115,939	378.6%
2015	\$672,319*	\$1,131,181	\$458,862	59.4%	\$117,822	389.5%
2016	\$670,016*	\$1,201,195	\$531,179	55.8%	\$123,018	431.8%
2017	\$753,769*	\$1,259,702	\$505,933	59.8%	\$129,624	390.3%
2018	\$826,654*	\$1,301,919	\$475,265	63.5%	\$137,668	345.2%
2019	\$866,503*	\$1,370,195	\$503,692	63.2%	\$142,328	353.9%
2020	\$919,815*	\$1,412,881	\$493,066	65.1%	\$143,992	342.4%
2021	\$1,163,254*	\$1,491,232	\$327,978	78.0%	\$145,531	225.4%

^{*}Reflects change in asset valuation methodology from valuation value of assets to market value of assets effective for the 2014 actuarial valuation.

Note: Information compiled from Actuarial Report prepared by Cheiron, Inc. dated June 30, 2021.



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Summary of Statistical Data

The Statistical Section presents information pertaining to MercedCERA's operations on a multi-year basis. The financial and operating information provides contextual data for MercedCERA's fiduciary net position, benefits, refunds, and different types of retirement benefits. The data presented in this section was produced and compiled by the Association.

	Additions by Source									
Fiscal Year Ended	Plan Member Contributions	Employer Contributions	Employer % of Covered Payroll	Net Investment Income and Other Income (Loss)	Total					
6/30/2013	\$ 9,927,749	\$43,783,663	40.03%	\$ 61,083,399	\$114,794,811					
6/30/2014	\$ 9,642,819	\$48,032,338	43.40%	\$ 96,219,056	\$153,894,213					
6/30/2015	\$ 8,945,316	\$52,005,656	47.22%	\$ 19,318,849	\$ 80,269,821					
6/30/2016	\$ 9,042,663	\$56,617,088	49.50%	\$ (388,209)	\$ 65,271,542					
6/30/2017	\$ 9,384,621	\$60,349,189	50.45%	\$ 83,097,416	\$152,831,226					
6/30/2018	\$10,441,876	\$64,757,288	51.11%	\$ 70,689,084	\$145,888,248					
6/30/2019	\$10,695,680	\$66,586,464	50.69%	\$ 39,728,950	\$117,011,094					
6/30/2020	\$10,796,855	\$67,413,475	49.71%	\$ 57,232,017	\$135,442,347					
6/30/2021	\$11,895,243	\$64,512,161	46.90%	\$253,466,527	\$329,873,931					
6/30/2022	\$12,124,583	\$65,629,994	46.37%	\$(87,115,891)	\$(9,361,314)					

	Deductions by Type										
Fiscal Year Ended	Benefits Paid	Administrative Expenses	Actuarial Expense	Refunds of Contributions	Total						
6/30/2013	\$54,257,547	\$1,496,338	\$ 71,402	\$ 1,082,050	\$56,907,337						
6/30/2014	\$57,338,930	\$1,434,671	\$ 112,676	\$ 703,091	\$59,589,368						
6/30/2015	\$61,780,089	\$2,197,281	\$ 126,165	\$ 1,171,835	\$65,275,370						
6/30/2016	\$63,928,672	\$2,416,563	\$ 76,121	\$ 1,153,731	\$67,575,087						
6/30/2017	\$66,116,108	\$1,966,898	\$ 206,509	\$ 788,207	\$69,077,722						
6/30/2018	\$69,836,223	\$2,177,186	\$ 106,210	\$ 883,987	\$73,003,606						
6/30/2019	\$74,238,692	\$2,271,779	\$ 79,326	\$ 571,983	\$77,161,780						
6/30/2020	\$78,755,515	\$2,253,113	\$ 211,784	\$ 910,147	\$82,130,559						
6/30/2021	\$82,836,595	\$2,494,246	\$ 126,833	\$ 977,485	\$86,435,159						
6/30/2022	\$85,912,580	\$2,522,797	\$ 120,292	\$ 896,116	\$89,451,785						

Merced County Employees' Retirement Association Schedules of Changes in Fiduciary Net Position (Dollars in Thousands)

	6/30/2022	6/30/2021	6/30/2020	6/30/2019	6/30/2018
Additions		·			
Plan members contributions	\$12,124	\$11,895	\$10,797	\$10,696	\$10,442
Employer contributions	65,630	64,512	67,413	66,586	64,757
Net investment income/(loss)	(87,115)	253,467	57,232	39,729	70,689
Total additions	(9,361)	329,874	135,442	117,011	145,888
Deductions					
Benefits paid	85,913	82,837	78,755	74,239	69,836
Administrative expenses	2,523	2,494	2,253	2,272	2,177
Actuarial expenses	120	127	212	79	106
Refunds	896	977	910	572	884
Total deductions	89,452	86,435	82,130	77,162	73,003
Change in fiduciary net position	(98,813)	243,439	53,312	39,849	72,885
Net position restricted for pensions at beginning of the year	1,163,254	919,815	866,503	826,654	753,769
Net position restricted for pensions at end of the year	\$1,064,441	\$1,163,254	\$919,815	\$866,503	\$826,654

	6/30/2017	6/30/2016	6/30/2015	6/30/2014	6/30/2013
Additions					
Plan members contributions	\$9,385	\$9,043	\$8,945	\$9,643	\$9,928
Employer contributions	60,349	56,617	52,005	48,032	43,784
Net investment income/(loss)	83,097	(388)	19,319	96,219	61,083
Total additions	152,831	65,272	80,269	153,894	114,795
Deductions					
Benefits paid	66,116	63,929	61,780	57,339	54,258
Administrative expenses	1,966	2,417	2,197	1,435	1,496
Actuarial expenses	207	76	126	112	71
Refunds	788	1,154	1,172	703	1,082
Total deductions	69,077	67,576	65,275	59,589	56,907
Change in fiduciary net position	83,754	(2,304)	14,994	94,305	57,888
Net position restricted for pensions at beginning of the year	670,015	672,319	657,325	563,020	505,132
Net position restricted for pensions at end of the year	\$753,769	\$670,015	\$672,319	\$657,325	\$563,020

Merced County Employees' Retirement Association Schedules of Benefit Expenses by Type (Amount in Thousands)

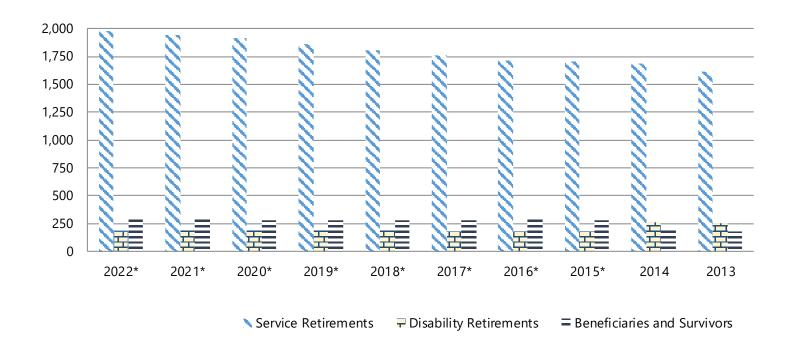
	2022*	2021*	2020*	2019*	2018*	2017*	2016*	2015*	2014	2013
Service Retiren	nent									
General	\$62,724	\$60,682	\$57,652	\$54,136	\$50,551	\$47,522	\$46,126	\$44,722	\$41,442	\$39,447
Safety	11,837	10,993	10,006	9,336	8,652	8,059	7,761	7,854	7,196	6,679
Total	\$74,561	\$71,675	\$67,658	\$63,472	\$59,203	\$55,581	\$53,887	\$52,576	\$48,638	\$46,126
Disability Retir	ement									
General	\$2,234	\$2,071	\$2,141	\$2,139	\$2,032	\$2,117	\$1,953	\$1,842	\$2,600	\$2,489
Safety	3,133	3,210	3,182	3,100	2,976	2,759	2,604	2,623	3,005	2,898
Total	\$5,367	\$5,281	\$5,323	\$5,239	\$5,008	\$4,876	\$4,557	\$4,465	\$5,605	\$5,387
Beneficiary/Sur	rvivor									
General	\$4,577	\$4,210	\$3,915	\$3,786	\$3,808	\$3,767	\$3,667	\$3,327	\$2,346	\$2,030
Safety	1,147	1,506	1,575	1,608	1,627	1,729	1,650	1,258	610	562
Total	\$5,724	\$5,716	\$5,490	\$5,394	\$5,435	\$5,496	\$5,317	\$4,585	\$2,956	\$2,592
Total Payroll Ex	xpense									
General	\$69,535	\$66,963	\$63,708	\$60,061	\$56,391	\$53,406	\$51,746	\$49,891	\$46,387	\$43,966
Safety	16,117	15,709	14,763	14,044	13,255	12,547	12,015	11,735	10,811	10,139
Total	\$85,652	\$82,672	\$78,471	\$74,105	\$69,646	\$65,953	\$63,761	\$61,626	\$57,198	\$54,105
Death Benefits										
General	\$213	\$149	\$128	\$99	\$102	\$111	\$129	\$84	\$96	\$96
Safety	15	15	3	24	18	12	15	18	18	12
Total	\$228	\$164	\$131	\$123	\$120	\$123	\$144	\$102	\$114	\$108
Separation Ref	und Exper	ıse								
General	\$689	\$868	\$680	\$446	\$643	\$674	\$978	\$1,033	\$582	\$985
Safety	206	109	230	126	241	114	176	139	121	97
Total	\$896	\$977	\$910	\$572	\$884	\$788	\$1,154	\$1,172	\$703	\$1,082
Active Death E	xpense									
General	\$32	\$ -	\$154	\$11	\$70	\$40	\$24	\$51	\$29	\$44
Safety	-	-	-	-	-	-	-	-	-	-
Total	\$32	\$ -	\$154	\$11	\$70	\$40	\$24	\$51	\$29	\$44

^{*}During the 2015 fiscal year, MercedCERA converted to the CPAS System. Because of differences in handling data, beneficiaries of disability retiree decedents are now grouped with Beneficiary/Survivors.

	General	Members	Safety	Members	Total			
Type of Benefit	Number	Average Monthly Allowance	Number	Average Monthly Allowance	Number	Average Monthly Allowance		
Service Retirement	1,748	\$3,021	227	\$4,209	1,975	\$3,157		
Disability	93	\$1,986	94	\$2,990	187	\$2,491		
Beneficiary/Survivor	246	\$1,757	57	\$2,673	303	\$1,929		
Total Retired Members	2,087	\$2,825	378	\$3,674	2,465	\$2,956		

This schedule excludes separation refunds and death refunds.

Ten Year Structure of Retiree Membership History



	2022*	2021*	2020*	2019*	2018*	2017*	2016*	2015*	2014	2013
Service Retirements	1,975	1,943	1,911	1,859	1,806	1,757	1,713	1,706	1,685	1,613
Disability Retirements	187	186	191	188	185	183	184	180	260	257
Beneficiaries and Survivors	303	286	281	284	283	285	286	276	187	176
Total	2,465	2,415	2,383	2,331	2,274	2,225	2,183	2,162	2,132	2,046

^{*}During the 2014-2015 fiscal year, MercedCERA migrated to a new pension administration system. Beneficiaries of disability retirees are no longer classified as disability retirements. This has resulted in a re-proportioning of these numbers.

	2022*	2021*	2020*	2019*	2018*	2017*	2016*	2015*	2014	2013
General										
Number	2,087	2,045	2,029	1,987	1,937	1,895	1,860	1,848	1,810	1,730
Basic annual allowance	\$53,103	\$51,416	\$49,178	\$46,562	\$43,874	\$41,930	\$41,265	\$40,316	\$37,646	\$35,885
Average basic monthly allowance	\$2,120	\$2,095	\$2,020	\$1,953	\$1,888	\$1,844	\$1,849	\$1,818	\$1,733	\$1,729
Total annual allowance**	\$69,535	\$66,963	\$63,708	\$60,061	\$56,391	\$53,406	\$51,746	\$49,891	\$46,387	\$43,966
Average total monthly allowance	\$2,777	\$2,729	\$2,617	\$2,519	\$2,426	\$2,349	\$2,318	\$2,250	\$2,136	\$2,118
Safety										
Number	378	370	354	344	337	330	323	314	322	316
Basic annual allowance	\$11,496	\$11,313	\$10,724	\$10,302	\$9,783	\$9,347	\$9,086	\$8,996	\$8,279	\$7,791
Average basic monthly allowance	\$2,534	\$2,548	\$2,524	\$2,496	\$2,419	\$2,360	\$2,344	\$2,387	\$2,143	\$2,054
Total annual allowance**	\$16,117	\$15,709	\$14,763	\$14,044	\$13,255	\$12,547	\$12,015	\$11,735	\$10,811	\$10,139
Average total monthly allowance	\$3,553	\$3,538	\$3,475	\$3,402	\$3,278	\$3,168	\$3,100	\$3,114	\$2,798	\$2,674
Total										
Number	2,467	2,415	2,383	2,331	2,274	2,225	2,183	2,162	2,132	2,046
Basic annual allowance	\$64,599	\$62,728	\$59,902	\$56,864	\$53,657	\$51,277	\$50,351	\$49,312	\$45,925	\$43,676
Average basic monthly allowance	\$2,184	\$2,165	\$2,095	\$2,033	\$1,966	\$1,920	\$1,922	\$1,901	\$1,795	\$1,779
Total annual allowance**	\$85,652	\$82,672	\$78,471	\$74,105	\$69,646	\$65,953	\$63,761	\$61,626	\$57,198	\$54,105
Average total monthly allowance	\$2,896	\$2,853	\$2,744	\$2,649	\$2,552	\$2,470	\$2,434	\$2,375	\$2,236	\$2,204

^{*}As of 2015, divorcees will be excluded from Membership data as they are technically not members and only represent a party to a single split benefit.

^{**}Total Annual Allowance includes COLA, and partial monthly payment/one-time catch up payment. This excludes death refunds, lump sum death benefits and separation refunds.

Merced County Employees' Retirement Association Schedule of Retired Members by Type of Retirement As of June 30, 2022

		Type of Retirement* Option Selected							Optio	n Sele	cted*	*		
Amount of Monthly Benefit	Number of	1	2	3	4	5	6	7	U	1	2	3	4	SD
General Members	Members													
\$1 - \$999	526	162	247	82	13	1	6	15	390	27	80	16	0	13
\$1,000 - \$1,999	536	179	245	54	3	14	32	9	440	9	64	18	2	3
\$2,000 - \$2,999	364	154	140	27	3	25	5	10	307	9	36	8	1	3
\$3,000 - \$3,999	210	82	112	10	2	4	0	0	182	5	15	5	1	2
\$4,000 - \$4,999	131	68	53	4	0	6	0	0	116	4	9	2	0	0
\$5,000 - \$5,999	104	38	65	1	0	0	0	0	87	5	8	3	1	0
\$6,000 - \$6,999	61	23	36	2	0	0	0	0	52	3	4	2	0	0
\$7,000 - \$7,999	49	22	20	7	0	0	0	0	41	0	6	1	1	0
\$8,000 - \$8,999	21	8	13	1	0	0	0	0	17	1	2	0	1	0
\$9,000 - \$9,999	19	11	7	3	0	0	0	0	16	1	2	0	0	0
\$10,000 & over	66	30	33	0	0	0	0	0	53	3	10	0	0	0
Totals	2,087	777	971	191	21	50	43	34	1,701	67	236	55	7	21
Safety Members														
\$1 - \$999	38	20	1	2	2	13	0	0	22	4	8	2	0	2
\$1,000 - \$1,999	58	30	3	14	1	8	2	0	43	1	12	1	0	1
\$2,000 - \$2,999	85	42	4	6	1	25	1	6	71	1	10	2	0	1
\$3,000 - \$3,999	76	24	2	7	3	32	0	8	66	0	5	0	2	3
\$4,000 - \$4,999	43	28	5	4	0	5	0	1	36	0	5	1	1	0
\$5,000 - \$5,999	25	16	4	0	0	3	0	2	20	2	3	0	0	0
\$6,000 - \$6,999	18	15	1	0	0	2	0	0	14	0	2	1	1	0
\$7,000 - \$7,999	9	7	1	0	0	1	0	0	9	0	0	0	0	0
\$8,000 - \$8,999	6	6	0	0	0	0	0	0	6	0	0	0	0	0
\$9,000 - \$9,999	7	6	0	0	0	1	0	0	6	0	0	1	0	0
\$10,000 & over	13	10	2	0	0	1	0	0	12	0	1	0	0	0
Totals	378	204	23	33	7	91	3	17	305	8	46	8	4	7
Grand Totals	2,465	981	994	224	28	141	46	51	2,006	75	282	63	11	28

^{*}Type of Retirement:

- 1-Normal retirement for age and service
- 2-Early retirement
- 3-Beneficiary payment, normal or early retirement
- 4-Beneficiary payment, death in service
- 5-Service-connected disability retirement
- 6-Non-service-connected disability retirement
- 7-Beneficiary payment, disability retirement

**Option Selected:

Unmodified Plan-Beneficiary receives 60% continuance

The following options reduce the retired member's monthly Benefit:

Option 1- Beneficiary receives lump sum or member's reduced allowance

Option 2 - Beneficiary receives 100% of member's reduced allowance

Option 3 - Beneficiary receives 50% of member's reduced allowance

Option 4 - Multiple beneficiaries receive a designated percentage of a reduced allowance

The monthly benefit for the following option varies dependent upon multiple factors:

Option SD-Pre-retirement death in service

Merced County Employees' Retirement Association Retired Members Average Benefit Payments Last Ten Fiscal Years

	Years of Credited Service							
Retirement Effective Dates	0-4	5-9	10-14	15-19	20-24	25-29	30+	
Period 7/1/2021 to 6/30/2022				,				
Average monthly benefit	\$479	\$1,304	\$2,080	\$2,598	\$3,428	\$4,496	\$9,137	
Average final average salary	\$9,304	\$7,231	\$6,755	\$5,850	\$5,760	\$5,778	\$10,067	
Number of retired members	9	12	16	12	24	14	8	
Period 7/1/2020 to 6/30/2021								
Average monthly benefit	\$911	\$1,036	\$2,001	\$2,717	\$3,855	\$4,922	\$6,069	
Average final average salary	\$12,131	\$6,480	\$5,879	\$5,617	\$6,175	\$6,552	\$6,934	
Number of retired members	8	15	13	17	20	6	10	
Period 7/1/2019 to 6/30/2020								
Average monthly benefit	\$440	\$1,195	\$1,844	\$3,575	\$4,400	\$5,481	\$5,373	
Average final average salary	\$9,061	\$6,086	\$5,193	\$7,592	\$7,376	\$7,319	\$6,166	
Number of retired members	6	7	24	15	25	13	9	
Period 7/1/2018 to 6/30/2019								
Average monthly benefit	\$473	\$1,026	\$1,930	\$3,352	\$4,144	\$6,511	\$6,540	
Average final average salary	\$7,581	\$6,545	\$5,392	\$6,982	\$6,792	\$8,710	\$7,142	
Number of retired members	12	9	18	22	14	12	12	
Period 7/1/2017 to 6/30/2018								
Average monthly benefit	\$309	\$1,421	\$1,432	\$2,240	\$4,202	\$4,691	\$4,969	
Average final average salary	\$6,936	\$5,742	\$4,324	\$4,786	\$6,713	\$5,943	\$5,639	
Number of retired members	6	19	16	21	17	11	11	
Period 7/1/2016 to 6/30/2017								
Average monthly benefit	\$574	\$1,044	\$1,852	\$1,657	\$3,490	\$4,866	\$7,294	
Average final average salary	\$9,068	\$6,544	\$5,327	\$4,073	\$5,618	\$6,112	\$8,780	
Number of retired members	11	15	19	18	13	6	3	
Period 7/1/2015 to 6/30/2016								
Average monthly benefit	\$212	\$1,273	\$2,067	\$3,227	\$2,997	\$3,724	\$4,669	
Average final average salary	\$7,449	\$5,585	\$6,322	\$6,299	\$4,703	\$4,750	\$4,875	
Number of retired members	8	15	19	11	4	4	2	
Period 7/1/2014 to 6/30/2015								
Average monthly benefit	\$448	\$1,083	\$1,650	\$2,434	\$2,981	\$3,438	\$8,150	
Average final average salary	\$7,700	\$5,994	\$5,007	\$5,401	\$5,303	\$4,903	\$8,849	
Number of retired members	10	11	28	17	14	5	3	
Period 7/1/2013 to 6/30/2014								
Average monthly benefit	\$426	\$1,121	\$1,634	\$2,714	\$4,018	\$5,013	\$5,992	
Average final average salary	\$8,946	\$4,750	\$4,587	\$5,441	\$6,527	\$6,566	\$7,088	
Number of retired members	7	17	22	16	15	13	13	
Period 7/1/2012 to 6/30/2013								
Average monthly benefit	\$467	\$1,240	\$1,750	\$2,183	\$3,895	\$4,201	\$6,431	
Average final average salary	\$8,663	\$6,466	\$5,215	\$4,591	\$7,293	\$5,695	\$7,463	
Number of retired members	4	11	24	15	9	8	6	

Participating employers	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
County of Merced										
General members	1,690	1,703	1,683	1,736	1,690	1,665	1,596	1,542	1,490	1,478
Safety members	326	318	321	318	320	320	311	300	298	294
Total County of Merced	2,016	2,021	2,004	2,054	2,010	1,985	1,907	1,842	1,788	1,772
Percentage of membership	93.55%	94.00%	93.47%	93.96%	93.88%	93.68%	93.39%	93.65%	93.56%	93.21%
Merced Cemetery District	1	1	1	-	1	1	1	1	1	1
Percentage of membership	0.05%	0.05%	0.05%	-	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
Merced County Law Library	1	-	-	-	-	-	-	-	-	-
Percentage of membership	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Merced Superior Court	137	128	139	132	130	133	129	118	112	115
Percentage of membership	6.35%	5.95%	6.48%	6.04%	6.07%	6.28%	6.32%	6.00%	5.86%	6.05%
Regional Waste Management Authority	-	-	-	-	-	-	5	6	10	13
Percentage of membership	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.31%	0.52%	0.68%
Total Active Membership										
General	1,829	1,832	1,823	1,868	1,821	1,799	1,731	1,667	1,613	1,607
Safety	326	318	321	318	320	320	311	300	298	294
Total	2,155	2,150	2,144	2,186	2,141	2,119	2,042	1,967	1,911	1,901



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Merced County Employees' Retirement Association

3199 M Street Merced, California 95326 209.726.2724 www.mercedcera.com