

# Merced County Employees' Retirement Association

A Pension Trust Fund of the County of Merced, California



Comprehensive Annual Financial Report  
For the fiscal years ended June 30, 2017 and 2016



# Comprehensive Annual Financial Report

For the Fiscal Years Ended June 30, 2017 and 2016

# MCERA



Issued By

**Kristen Santos**

Plan Administrator

**Bren Horrocks**

Fiscal Supervisor

## Merced County Employees' Retirement Association

A Pension Trust Fund of the County of Merced, California

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# Merced County Employees' Retirement Association

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# Introductory Section



# Merced County Employees' Retirement Association

## Letter of Transmittal

December 29, 2017

Dear Board Members:

As the administrator of the Merced County Employees' Retirement Association (MCERA), I am pleased to present this Comprehensive Annual Financial Report (CAFR) for the fiscal years ended June 30, 2017 and 2016. This Report is intended to provide readers with complete and reliable information about MCERA's financial status, compliance with the law and MCERA policies. This is MCERA's 67th year of operation.

### MCERA's Mission Statement and Core Values

MCERA'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 Comprehensive Annual Financial Report (CAFR)

MCERA management is responsible for both the accuracy of the data and the completeness and fairness of the financial information contained in this CAFR. The Comprehensive Annual Financial Report is presented in five sections:

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

### MCERA and its Services

The Merced County Employees' Retirement Association is a public employee retirement system established by the County of Merced on July 1, 1950. MCERA is administered by the Board 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, Merced Cemetery District and Regional Waste Management Authority for Merced County pursuant to the California Constitution, the County Employees' Retirement Law of 1937, Government



# Merced County Employees' Retirement Association

## Letter of Transmittal Continued

code section 31450 et. Seq. (the 1937 Act), and the by-laws, policies, and procedures adopted by the MCERA Board. The County of Merced Board of Supervisors may also adopt resolutions, as permitted by the 1937 Act, which may affect benefits of MCERA members.

The MCERA Board is responsible for the general management of the retirement association, including making benefit determinations and managing the investment of the Association's assets. The day-to-day management of MCERA is vested in an 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 MCERA's fiscal affairs for the years ended June 30, 2017 and 2016 is presented in Management's Discussion and Analysis (MD&A), which is located in the Financial Section of this CAFR. Together, the MD&A and this Letter of Transmittal provide an expanded overview of MCERA's financial activities for the years.

The audit of MCERA's financial statements has been performed by an independent auditor, Brown Armstrong Accountancy Corporation, who has opined 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 Statement No. 82 and all prior and relevant standards.

Management is responsible for establishing and maintaining appropriate internal controls to ensure that MCERA's assets are protected from loss, theft, or misuse. MCERA recognizes that even sound internal controls have inherent limitations. We believe that internal controls are designed to provide reasonable, but not absolute, 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, 2017, MCERA's fiduciary net position restricted for pension benefits totaled approximately \$754.5 million reflecting an increase of approximately \$83.8 million or 12.5% in fiduciary net position from the end of the previous fiscal year. This was primarily attributable to increase in fair value of investments.

### Actuarial Funding Status

MCERA'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. The higher the level of plan funding, the larger the ratio of assets accumulated to actuarial accrued liability and the higher the level of investment return potential.

Pursuant to provisions in the 1937 Act, MCERA 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,

# Merced County Employees' Retirement Association

## Letter of Transmittal Continued

tion, every three years a triennial experience study of MCERA membership is conducted and non-economic assumptions are reviewed and modified as necessary. The most recent triennial experience study was conducted in 2016 as a result of the study, several economic and non-economic assumptions were changed. The impact of the changes were significant, so they are being phased in over two years. The most recent actuarial valuation as of June 30, 2016, reported the Association's actuarial funding status (the ratio of actuarial assets to actuarial liabilities) is 55.8%. This decrease in funding ratio (down from 59.4% as of June 30, 2015) was primarily due to MCERA's investment return not meeting the actuarial assumptions.

### Investments

The Board of Retirement has exclusive control of all investments of the Association 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 MCERA 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, Verus and Cliffwater.

The Board of Retirement has adopted an Investment Policy, which provides the framework for the management of MCERA's investments. The Investment Policy establishes the investment program goals, asset allocation policies, performance objectives, investment management policies, and risk controls.

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

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

The assets of MCERA are exclusively managed by external professional investment management firms. A listing of the investment service providers and investment fees can be located on page 73 and 72, respectively.

For the fiscal year ending June 30, 2017 MCERA's investment return, net of fees, was a positive 12.5% and the annualized rate of return over the last three and five years was a positive 5.1% and 8.8% respectively.

### Service Efforts and Accomplishments

- Conducted a Request for Proposal for financial audit services and contracted with Brown Armstrong Accountancy Corporation
- Contracted with Northern Trust for custodial services commencing on July 1, 2017.
- Segal Consulting performed an actuarial audit of MCERA's actuary Cheiron, Inc.
- Adopted and implemented a COLA of 3% effective April 1, 2017 for Tier 1 retired members
- For the thirteenth consecutive year, MCERA was awarded the GFOA Certificate of Achievement for Excellence in Financial Reporting for MCERA's 2015-2016 Comprehensive Annual Financial Report
- Approved \$5 million commitment Taurus Mining Annex Fund
- Approved the investment in SSgA as a proxy for alternative investments

# Merced County Employees' Retirement Association

## Letter of Transmittal Continued

- Adopted the 2016 valuation with an amortization period to continue to pay the existing unfunded liability by June 30, 2029, yet provide some contribution rate stability for future gains and losses
- Held performance evaluations of several vendors and staff

### 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 MCERA for its CAFR for the Fiscal Year Ended June 30, 2016. 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 comprehensive annual financial report, whose contents conform to program standards. The CAFR 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 MCERA's thirteenth 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 MCERA staff and, in particular, MCERA's Bren Horrocks and Mark Harman. I would like to express my great appreciation for their hard work. I would also like to thank MCERA's professional consultants; our actuary, our investment consultants, and our auditor for their generous and invaluable assistance. Finally, I would like to acknowledge the Board of Retirement for its leadership and commitment to the highest fiduciary standards.

Respectfully submitted,



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 Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2016**

A handwritten signature in black ink, reading "Jeffrey R. Emer". The signature is written in a cursive, flowing style.

Executive Director/CEO

# Merced County Employees' Retirement Association

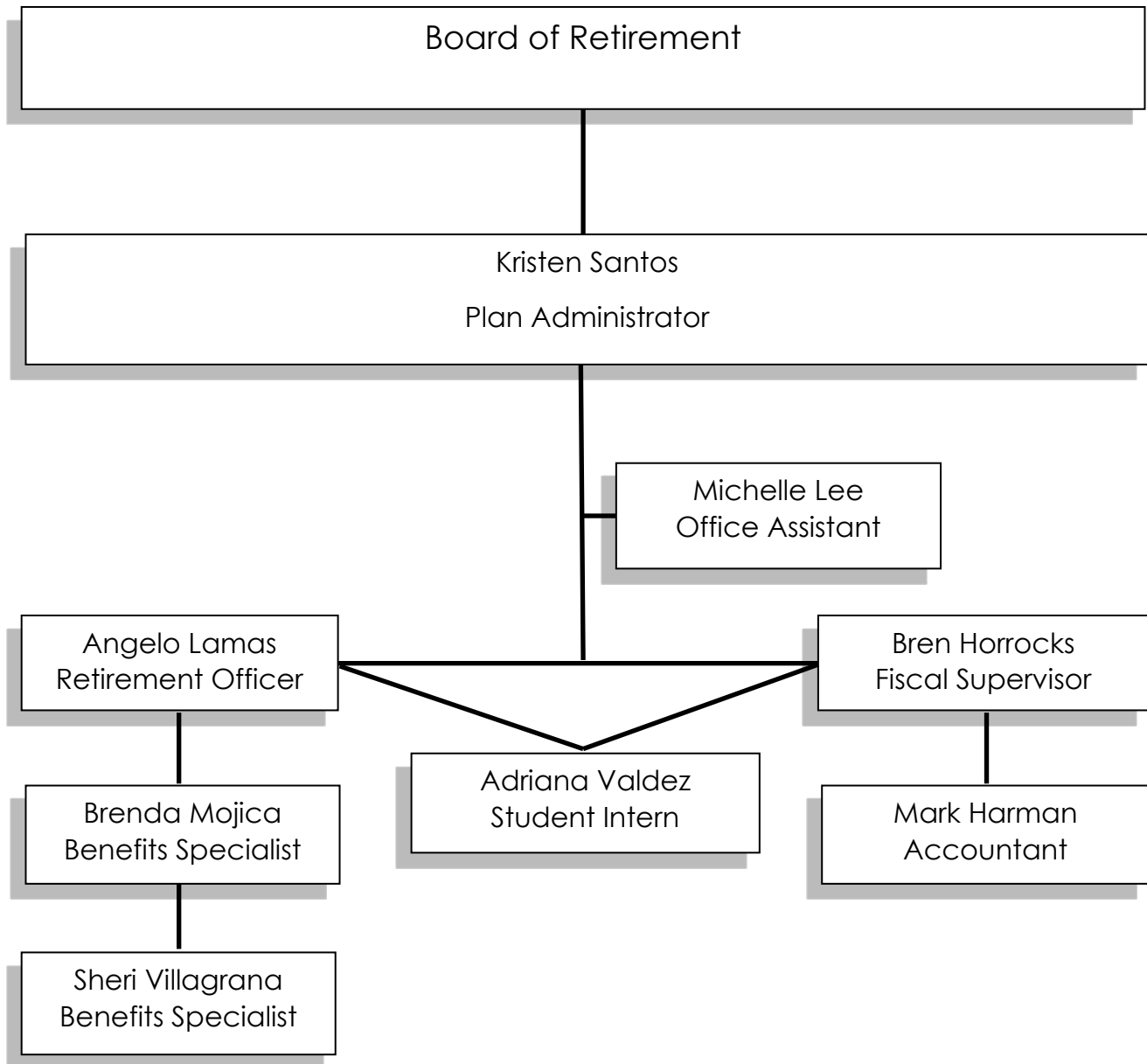
## Members of the Board of Retirement As of June 30, 2017

<u>Trustees</u>	<u>Term Expiration</u>	<u>Appointed/Elected by</u>
Darlene Ingersoll, Chair	December 31, 2017	General Members
Michael Rhodes, Vice Chair	December 31, 2019	General Members
Alfonse Peterson, Secretary	December 31, 2018	Board of Supervisors
Karen Adams, County Treasurer	Permanent by office	Ex-officio Member
David Ness	December 31, 2019	Board of Supervisors
Jerry O'Banion	December 31, 2018	Board of Supervisors
Ryan Paskin	December 31, 2019	Board of Supervisors
Jason Goins	December 31, 2019	Safety Members
Sam Spangler, Alternate	December 31, 2019	Safety Members
Ronald Kinchloe	December 31, 2017	Retired Members
Scott Johnston, Alternate	December 31, 2017	Retired Members

# Merced County Employees' Retirement Association

## Administrative Organization Chart

As of June 30, 2017





# Merced County Employees' Retirement Association

## List of Professional Consultants

As of June 30, 2017

### Consulting Services

#### Investment Consultant

Verus Investments

Cliffwater, LLC

#### Actuary

Cheiron, Inc.

Segal Consulting

#### Auditor

Brown Armstrong Accountancy Corporation

#### Master Custodian

BNY Mellon Asset Servicing

#### Electronic Systems Services

Merced County Information Systems

#### Legal Counsel

Merced County Counsel

Michael Mason

Nossaman LLP

Public Pension Consultants, Inc.

Hanson Bridgett LLP

#### Medical Advisor

Nation Disability Evaluations, Inc.

#### Commission Recapture Brokers

ConvergEx Group

Capital Institutional Services, Inc.

# Merced County Employees' Retirement Association

## List of Professional Consultants Continued

As of June 30, 2017

### Investment Services

#### **Fixed Income/Bank Loan**

Barrow, Hanley, Mewhinney & Strauss, Inc.  
Guggenheim

#### **Domestic Equity**

Mellon Capital Management  
Dimensional Fund Advisors  
PanAgora Asset Management, Inc.

#### **International Equity**

Wells Capital Management  
Copper Rock Capital Partners, LLC  
Mellon Capital Management

#### **Real Estate**

UBS Global Asset Management  
Greenfield Partners  
Patron Capital

#### **Real Asset Proxy**

SSgA

#### **Private Equity**

Adams Street Partners, LLC  
Pantheon Ventures, Inc.  
Invesco Private Capital  
Ocean Avenue Capital Partners  
Raven Capital Management

#### **Hedge Fund**

Och-Ziff Capital Management

#### **Infrastructure**

KKR & Co. L.P.  
Morgan Stanley

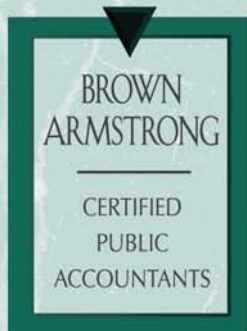
#### **Natural Resources**

Taurus Funds Management  
GSO Energy Select Opportunities Assc, LLC

Note: Fees to investment professionals are reported in the investment section on page 72.

# Financial Section





# BROWN ARMSTRONG

*Certified Public Accountants*

## INDEPENDENT AUDITOR'S REPORT

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

### Report on the Financial Statements and Other Information

We have audited the accompanying Statement of Fiduciary Net Position of the Merced County Employees' Retirement Association (MCERA), as of June 30, 2017, the related Statement of Changes in Fiduciary Net Position for the fiscal year then ended, and the related notes to the financial statements, which collectively comprise MCERA'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 total 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, 2017, listed as other information in the table of contents.

### Management's Responsibility for the Financial Statements and Other Information

MCERA's management is responsible for the preparation and fair presentation of these financial statements and other information in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements and other information based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and other information are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to MCERA's preparation and fair presentation of the financial statements and other information in order to design audit procedures that are appropriate in the circumstances, but not for the

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SUITE 150  
STOCKTON, CA 95207  
TEL 209.451.4833

purpose of expressing an opinion on the effectiveness of MCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements and other information.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

## **Opinion**

In our opinion, the financial statements and other information referred to above present fairly, in all material respects, the fiduciary net position of MCERA as of June 30, 2017; its changes in fiduciary net position for the fiscal year then ended; and the Schedule of Cost Sharing Employer Allocations and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total 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, 2017, in conformity with accounting principles generally accepted in the United States of America.

## **Other Matters**

### *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. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board (GASB), who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Supplemental Schedules*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise MCERA's basic financial statements. The other supplemental schedules and the introductory, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplemental schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

### *Additional Information*

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

## **Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated December 28, 2017, on our consideration of MCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the 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 MCERA's internal control over financial reporting and compliance.

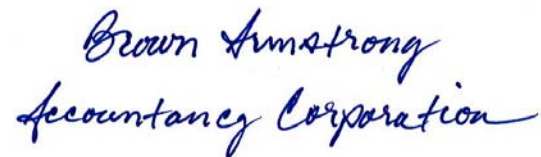
## **Report on Prior Year Financial Statements**

The financial statements of MCERA as of June 30, 2016, were audited by other auditors. Those auditors expressed an unmodified opinion on those audited financial statements in their report dated December 29, 2016.

## **Restrictions on Use**

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

BROWN ARMSTRONG  
ACCOUNTANCY CORPORATION

A handwritten signature in blue ink that reads "Brown Armstrong Accountancy Corporation". The signature is written in a cursive, flowing style.

Bakersfield, California  
December 28, 2017



# 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 (MCERA or Association) for fiscal years ended June 30, 2017 and 2016. 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, 2017, MCERA's fiduciary net position restricted for pensions totaled \$753.8 million. All of the fiduciary net position is available to meet MCERA's ongoing obligations to plan participants and their beneficiaries.
- During fiscal year 2017, MCERA's fiduciary net position restricted for pensions increased by \$83.8 million. This change reflects the increase in fair value of investments.
- MCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. As of June 30, 2016, the date of MCERA's last actuarial funding valuation, MCERA's funded ratio was 55.8%. In general, this indicates that for every one dollar of benefits due, MCERA has approximately \$0.56 of assets available for payment.
- Additions, as reflected in the Statement of Changes in Fiduciary Net Position, were \$152.8 million in the fiscal year ended June 30, 2017. These additions include employer and employee contributions of \$69.7 million, investment income of \$6.5 million, along with the fair value of investments increasing \$79.2 million and investment expenses of \$2.6 million.
- Deductions, as reflected in the Statement of Changes in Fiduciary Net Position, increased from \$67.6 million to \$69.1 million in the current fiscal year (an increase of approximately 2.2%). 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*** and the ***Statements of Changes in Fiduciary Net Position***.

The ***Statements of Fiduciary Net Position*** is a snapshot of account balances as of the fiscal year end. It indicates the assets available for future payment to retirees and any current liabilities. The difference between assets and liabilities represent the fiduciary net position restricted for pensions. The statement also presents prior year-end balances for comparative purposes.

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

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

These financial statements report information about MCERA'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 is received or paid. Investment gains or losses are shown at the trade date, not the settlement date. In addition,

# Merced County Employees' Retirement Association

## Management's Discussion and Analysis

both realized and unrealized gains and losses are reported. All capital assets are depreciated over their useful lives.

The information reported regarding MCERA's fiduciary net position restricted for pensions is generally considered to be a good measure of MCERA'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 retirement 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 presents the changes in the employers' net pension liability. The Schedules of Employer contributions provides historical information about actuarial determined contributions of the employer and the actual contributions made. The Schedules of Investment Returns represents 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 MCERA'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 inflow of resources, and deferred outflows of resources.

### Financial Analysis

As previously noted, the Net Position may serve over time as a useful indication of MCERA's financial position. At the close of the fiscal year June 30, 2017 MCERA's net position exceeded its liabilities by \$753.8 million. All of the Net Position is available to meet MCERA's ongoing obligations to plan participants and their beneficiaries. As of June 30, 2017 the Net Position totaled \$753.8 million which is \$83.8 million more than the prior year. This result essentially reflects the increase in net investment income at fair value regardless of the increase in benefits and administrative expenses.

The 2016-2017 fiscal year recorded continued positive growth for developed and emerging economies for the first time in this recovery. Absolute growth remains subdued relative to history. Despite a healthy economy and longer than average expansion there is little indication of overheating in the U.S. This suggests the current expansion may have more room to run.

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

# Merced County Employees' Retirement Association

## Management's Discussion and Analysis

### MCERA's Fiduciary Net Position

For Fiscal Years Ended June 30, 2017 and 2016

	2017	2016	Increase/ (Decrease) Amount	% Change
Current and Other Assets	\$13,651,586	\$21,418,134	\$(7,766,548)	-36.3%
Investments at Fair Value	738,615,821	656,742,890	81,872,931	12.5%
Capital Assets/Prepaid Insurance	2,208,948	2,336,218	(127,270)	-5.4%
Total Assets	754,476,355	680,497,242	73,979,113	10.9%
Total Liabilities	707,027	10,481,418	(9,774,391)	-93.3%
Fiduciary Net Position Restricted for Pensions	\$753,769,328	\$670,015,824	\$83,753,504	12.5%

For Fiscal Years Ended June 30, 2016 and 2015

	2016	2015	Increase/ (Decrease)	% Change
Current and Other Assets	\$21,418,134	\$20,014,086	\$1,404,048	7.0%
Investments at Fair Value	656,742,890	656,008,621	734,269	0.1%
Capital Assets/Prepaid Insurance	2,336,218	2,288,508	47,710	2.1%
Total Assets	680,497,242	678,311,215	2,186,027	0.3%
Total Liabilities	10,481,418	5,991,846	4,489,572	74.9%
Fiduciary Net Position Restricted for Pensions	\$670,015,824	\$672,319,369	\$(2,303,545)	-0.3%

The decrease in current and other assets during the June 30, 2017 fiscal year is due to securities lending collateral, cash on hand with the Association's custodial bank and receivables from investments. The decrease in total liabilities during the June 30, 2017 fiscal year is mostly due to securities lending activities.

### 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 MCERA's operations. MCERA'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 Market Value Fluctuation Reserve. The Market Value Fluctuation Reserve increased by \$88.2 million in the current fiscal year as a result of the financial markets and investment decisions.

# Merced County Employees' Retirement Association

## Management's Discussion and Analysis

### MCERA's Reserves

For Fiscal Years Ended June 30, 2017, 2016 and 2015

### MCERA's Activities

	2017	2016	2015
Active Members' Reserve	\$102,857,990	\$99,056,799	\$94,371,079
Employer Advance Reserve	137,193,734	97,418,803	54,991,997
Retired Members' Reserve	290,581,132	327,318,139	363,943,635
Interest Fluctuation Reserve	96,564,849	107,807,790	71,025,234
Market Value Fluctuation Reserve	126,571,623	38,414,293	87,987,424
Total Reserves at Fair Value	\$ 753,769,328	\$670,015,824	\$672,319,369

A surging market resulted in the June 30, 2017 fiscal year increase of \$83.8 million in MCERA's Net Position (an increase of 12.5% from the previous year). The key elements of this increase was the substantial rise in the fair value of investment.

### 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 2016-2017 totaled \$152.8 million. Overall, additions for the fiscal year increased \$87.6 million from the fiscal year ended June 30, 2016 primarily due to increases in the appreciation in fair value of investments. In fiscal year 2015-2016 additions totaled \$65.3 million which was a decrease of \$15 million from fiscal year 2014-2015. The employer contribution rate has increased due to changes in actuarial assumptions being phased in due to MCERA's experience study. The increased contribution rate resulted in increased employer contributions of approximately \$3.7 million or 6.6% in fiscal year 2016-2017. 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, 2017 and 2016

	2017	2016	Increase/ (Decrease) Amount	% Change
Member Contributions	\$9,384,621	\$9,042,663	\$341,958	3.8%
Employer Contributions	60,349,189	56,617,088	3,732,101	6.6%
Net Investment Income	83,097,416	(388,209)	83,485,625	21,505.3%
Total Additions	\$152,831,226	\$65,271,542	\$87,559,684	134.1%

# Merced County Employees' Retirement Association

## Management's Discussion and Analysis

For Fiscal Years Ended June 30, 2016 and 2015

	2016	2015	Increase/ (Decrease) Amount	% Change
Member Contributions	\$9,042,663	\$8,945,316	\$97,347	1.1%
Employer Contributions	56,617,088	52,005,656	4,611,432	8.9%
Net Investment Income	(388,209)	19,318,849	(19,707,058)	-102.0%
Total Additions	\$65,271,542	\$80,269,821	\$(14,998,279)	-18.7%

### Deductions from Fiduciary Net Position

MCERA was created to provide lifetime retirement annuities, survivor benefits, and permanent disability benefits to qualified members and their beneficiaries. The cost of such programs include 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 cost 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. The 1937 Act also allows for some expenses (such as computer related expenses and actuarial costs) to be excluded from the calculation. Deductions for the current fiscal year totaled \$69.1 million while in fiscal year 2015-2016 totaled \$67.6 million, an increase of 2.2% from the previous year. The increase in deductions can be primarily attributed to the retiree payroll increase of 3.4%.

For Fiscal Years Ended June 30, 2017 and 2016

	2017	2016	Increase/ (Decrease) Amount	% Change
Benefits Paid	\$66,116,108	\$63,928,672	\$2,187,436	3.4%
Refunds of Contributions	788,207	1,153,731	(365,524)	-31.7%
Administrative Expense	1,966,898	2,416,563	(449,665)	-18.6%
Actuarial Expense	206,509	76,121	130,388	171.3%
Total Deduction	\$69,077,722	\$67,575,087	\$1,502,635	2.2%

# Merced County Employees' Retirement Association

## Management's Discussion and Analysis

For Fiscal Years Ended June 30, 2016 and 2015

	2016	2015	Increase/ (Decrease) Amount	% Change
Benefits Paid	\$63,928,672	\$61,780,089	\$2,148,583	3.5%
Refunds of Contributions	1,153,731	1,171,835	(18,104)	-1.5%
Administrative Expense	2,416,563	2,197,281	219,282	10.0%
Actuarial Expense	76,121	126,165	(50,044)	-39.7%
Total Deduction	\$67,575,087	\$65,275,370	\$2,299,717	3.5%

### Change in Fiduciary Net Position

As of June 30, 2017, Fiduciary Net Position increased \$83.8 million resulting in a 12.5% increase in Fiduciary Net Position over the previous fiscal year. This increase is due primarily to the increase in the fair value of investments. As of June 30, 2016, Fiduciary Net Position decreased \$2.3 million resulting in a 0.3% decrease in the Fiduciary Net Position from the previous fiscal year.

### MCERA's Fiduciary Responsibilities

MCERA's Board 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 the retirement board, the MCERA membership, taxpayers, investment managers, and creditors with an overview of MCERA's financial condition and to demonstrate accountability for the funds MCERA 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, 3199 M Street, Merced, CA 95348.**

Respectfully Submitted,



Kristen Santos  
Plan Administrator  
December 29, 2017



# Merced County Employees' Retirement Association

## Statements of Fiduciary Net Position

As of June 30, 2017 and 2016

<u>Assets</u>	2017	2016
Cash and short-term investments		
Cash invested with Merced County Treasurer	\$3,854,727	\$1,293,296
Cash invested with BNY Mellon	5,292,717	5,960,492
Other cash and cash equivalents with BNY Mellon	1,741,959	3,576,091
Securities lending collateral	-	4,972,033
Total cash and short-term investments	10,889,403	15,801,912
Receivables		
Bond interest	704,271	640,636
Dividends	108,303	235,304
Contributions	1,512,670	3,557,195
Distributions	431,815	255,139
Securities sold	-	921,498
Other	5,124	6,450
Total receivables	2,762,183	5,616,222
Investments, at fair value		
U.S. government and agency obligations	67,194,200	63,790,914
Domestic fixed income	90,688,858	108,687,312
Common stock (domestic)	40,925,272	39,432,005
Common stock (index funds)	189,256,179	160,011,327
Common stock (international)	82,898,638	138,263,801
Common stock (international index funds)	107,338,378	18,259,912
Real estate	54,991,688	58,116,070
Alternative investments	105,322,608	70,181,549
Total investments at fair value	738,615,821	656,742,890
Prepaid expenses	113,692	-
Capital assets: Net of accumulated depreciation of \$855,247 and \$610,802	2,095,256	2,336,218
<b>Total Assets</b>	<b>754,476,355</b>	<b>680,497,242</b>
<u>Liabilities</u>		
Accounts payable	621,624	606,906
Securities lending obligation	-	4,972,033
Securities purchased	-	4,817,076
Unclaimed contributions	85,403	85,403
<b>Total Liabilities</b>	<b>707,027</b>	<b>10,481,418</b>
<b>Fiduciary Net Position Restricted for Pensions</b>	<b>\$753,769,328</b>	<b>\$670,015,824</b>

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

# Merced County Employees' Retirement Association

## Statements of Changes in Fiduciary Net Position

As of June 30, 2017 and 2016

<b><u>Additions</u></b>	<b>2017</b>	<b>2016</b>
Contributions		
Plan members	\$9,384,621	\$9,042,663
Employer	60,349,189	56,617,088
Total contributions	<u>69,733,810</u>	<u>65,659,751</u>
Investment income/(loss) from investment activities		
Net appreciation/(depreciation) in fair value of		
Investments	79,215,882	(7,297,000)
Investment income	6,482,887	9,240,309
Other income	22,244	12,834
Less investment expenses	<u>(2,631,692)</u>	<u>(2,361,966)</u>
Net investment income/(loss)	83,089,321	(405,823)
Securities lending activities		
Securities lending income	13,003	26,467
Securities lending fees	<u>(4,908)</u>	<u>(8,853)</u>
Net securities lending activities	<u>8,095</u>	<u>17,614</u>
Total net investment income/(loss)	<u>83,097,416</u>	<u>(388,209)</u>
<b>Total Additions</b>	<b><u>152,831,226</u></b>	<b><u>65,271,542</u></b>
<b><u>Deductions</u></b>		
Benefits paid	66,116,108	63,928,672
Refunds of contributions	788,207	1,153,731
Administrative expenses	1,966,898	2,416,563
Actuarial expenses	<u>206,509</u>	<u>76,121</u>
<b>Total Deductions</b>	<b><u>69,077,722</u></b>	<b><u>67,575,087</u></b>
Net increase/decrease	83,753,504	(2,303,545)
<b>Fiduciary Net Position Restricted for Pensions</b>		
Beginning of year	<u>670,015,824</u>	<u>672,319,369</u>
End of year	<b><u>\$753,769,328</u></b>	<b><u>\$670,015,824</u></b>

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

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements

June 30, 2017 and 2016

### NOTE 1 - PLAN DESCRIPTION

#### A. General Information

The Merced County Employees' Retirement Association (MCERA 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. MCERA administers a cost sharing, multiple-employer defined benefit pension plan (the Plan). MCERA's employers are the County, the Merced Superior Courts, Regional Waste Management Authority, and Merced Cemetery District. MCERA'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 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 MCERA is vested in a Plan Administrator who is appointed by and serves at the direction of the Board of Retirement.

MCERA, 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 the County, Merced Superior Courts, Regional Waste Management Authority and the Merced Cemetery District. 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 12/31/2012 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.

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 cost of living ad-

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

justments. 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 2012 and December 2012 are Tier III. Tier IV was adopted after the State of California approved 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 cost of living adjustments. 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 20 years of service credit. For Tier IV, the minimum age to retire is 52 for General members with 5 years of service credit and 50 for Safety members with 5 years of service credit.

Membership Structure on June 30, 2017 was as follows:

	General				Safety				
Active Members	Tier I	Tier II	Tier III	Tier IV	Tier I	Tier II	Tier III	Tier IV	Total
Vested	131	920	30	6	28	188	1	3	1,307
Non-vested	-	28	21	663	-	4	4	92	812
Inactive Members									
Deferred vested	63	173	8	2	1	35	-	-	282
Deferred non-vested	5	79	8	108	1	7	2	29	239
Reciprocity	41	136	-	-	9	33	-	1	220
Unclaimed members	3	15	-	-	-	-	-	-	18
<b>Total active and inactive members</b>	<b>243</b>	<b>1,351</b>	<b>67</b>	<b>779</b>	<b>39</b>	<b>267</b>	<b>7</b>	<b>125</b>	<b>2,878</b>
Retired Members									
Service retirements	1,248	317	2	-	175	15	-	-	1,757
Beneficiaries	197	14	-	-	47	-	-	-	258
Service connected disability	37	14	-	-	69	16	-	-	136
Non-service connected disability	32	13	-	-	1	1	-	-	47
Survivors	15	6	-	-	4	2	-	-	27
<b>Total retired members</b>	<b>1,529</b>	<b>364</b>	<b>2</b>	<b>-</b>	<b>296</b>	<b>34</b>	<b>-</b>	<b>-</b>	<b>2,225</b>

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

Membership Structure on June 30, 2016 was as follows:

	General				Safety				
Active Members	Tier I	Tier II	Tier III	Tier IV	Tier I	Tier II	Tier III	Tier IV	Total
Vested	141	934	22	3	32	191	2	3	1,328
Non-vested	1	81	27	522	-	8	2	73	714
Inactive Members									
Deferred vested	73	166	8	2	1	29	-	-	279
Deferred non-vested	4	78	8	58	1	7	2	20	178
Reciprocity	52	138	-	-	12	34	-	1	237
Unclaimed members	3	15	-	-	-	-	-	-	18
<b>Total active and inactive members</b>	<b>274</b>	<b>1,412</b>	<b>65</b>	<b>585</b>	<b>46</b>	<b>269</b>	<b>6</b>	<b>97</b>	<b>2,754</b>
Retired Members									
Service retirements	1,243	284	1	-	172	13	-	-	1,713
Beneficiaries	201	12	-	-	45	-	-	-	258
Service connected disability	41	11	-	-	68	14	-	-	134
Non-service connected disability	34	14	-	-	1	1	-	-	50
Survivors	16	6	-	-	4	2	-	-	28
<b>Total retired members</b>	<b>1,535</b>	<b>327</b>	<b>1</b>	<b>-</b>	<b>290</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>2,183</b>

### C. Benefit Provisions

Members with ten years of service and who have attained the minimum age of 50 (age 55 for General Tier II, III) are eligible to receive a lifetime monthly retirement benefit. A member with 30 years of service (20 years for Safety), regardless of age is eligible for lifetime monthly retirement benefits for Tier I, II and III. Members who are at least 70 years of age are eligible to retire, regardless of years of service. Tier IV members are eligible for retirement with 5 years of service and a minimum age of 50 (Safety) and 52 (General). 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 monthly final average salary, per year of service credited after January 1, 1956 (not applicable to Tier IV 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 County Employees Retirement Law of 1937 ("37 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.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

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

Percentage of Final Average Salary for Each Year of Service (Rounded) Current Employees				
Tier I			Tier 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			Tier 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 Average Salary for Each Year of Service (Rounded) for Merced Cemetery District, Deferred, and Inactive Reciprocal Members Prior to Enhanced benefit adoption dates				
Tier I			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%
65+	2.61%	2.62%	2.43%	2.62%

### (1) Retirement Options

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 if 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.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

**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 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 MCERA's actuary and the cost is paid by the member.

### *(2) Cost of Living Adjustment*

Annual cost-of-living adjustments (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 Retirement Board's discretion, when the cost-of-living change is less than the maximum 3%. Tier 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, MCERA 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.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

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 one-half of the member's final compensation.

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 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 MCERA agency may wish to arrange for reciprocal benefits. Under a reciprocal arrangement the member funds are kept on deposit with MCERA.

### *(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, age fifty-five for Tier II and Tier III General members, and age fifty-two for Tier IV 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



# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

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 County Employees Retirement Law of 1937 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 of Retirement.

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

#### *a. Member*

MCERA 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 year (s) 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. 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 3.72% and 17.96% for the fiscal years ended June 30, 2017 and June 30, 2016. 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 participating special districts are required by statute to contribute the amounts necessary to finance the estimated benefits accruing to MCERA members not otherwise funded by employee contributions or investment earnings. Pursuant to provisions of the 1937 Act, the Retirement 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. MCERA's actuarially determined contribution rates for the years ended June 30, 2017 and June 30, 2016 were 50.02% and 49.93%, respectively, of annual payroll.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

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. MCERA's Schedule of Employer Contributions for the pension benefit plan is presented on page 54 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 of Retirement 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*.

### **B. Basis of Accounting**

MCERA'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 terms of the plan. The net appreciation (depreciation) in fair value of investments consists of realized and unrealized gains and losses on those investments.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### C. Investment Expenses

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 "37 Act".

### D. General Administrative Expense

MCERA's administrative costs for fiscal years ending 2016/2017 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 cost of living adjustment 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 allows MCERA \$2.5 million (\$1,201.2 million x .21%) of administrative costs. For the fiscal years ending June 30, 2017 and 2016, total administrative costs were \$1,966,898 and \$2,416,563, respectively. Included in these figures are computer technology related activities of \$338,375 and \$599,371, respectively. The costs of administering the plan are financed by the earnings of the retirement fund.

### E. Required Supplementary Information

A schedules of the changes in net pension liability and employer contributions that provides information about the employer's annual contribution to the plan as well as the annual investment returns are presented on pages 53 and 54.

### F. Administrative Budget and Professional Service Budget

MCERA's Budget consists of two components, an administrative budget and a professional services budget authorized by Government Code Section 31596.1. MCERA's budgets are on a fiscal year basis starting July 1<sup>st</sup> and ending June 30<sup>th</sup>.

### 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. Equipment and furniture are depreciated over eight years. MCERA's pension administration system (intangible assets) is amortized over ten years.

MCERA reported \$2,095,256 and \$2,336,218 in capital assets as of June 30, 2017 and 2016, net of accumulated depreciation of \$855,247 and \$610,802, respectively. Of this amount \$146,513 of land held by the association is not being depreciated.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### 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 government 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 ending June 30. The majority of MCERA'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 MCERA'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

Security 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, the net appreciation 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.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### K. Current Accounting Pronouncement

In April 2016, GASB issued Statement No. 82, *Pension Issues – an amendment of GASB Statements No. 67, No. 68, and No. 73*, to address a few concerns raised under Statements No. 67, No. 68, and No. 73 regarding the financial reporting for local governmental employers and pension plans.

The statement provides additional guidance for the following: (1) the presentation of payroll-related measures in the Required Supplementary Information section, (2) the treatment of deviations from the actuarial standards of practice when selecting actuarial assumptions, and (3) the classification of member contributions (i.e., "pick-up" contributions) for reporting purposes.

MCERA has implemented GASB Statement No. 82 in an effort to present consistency throughout the reporting of GASB Statement No. 67 within this CAFR and GASB Statement No. 68 which is provided to the employers for reporting in their own CAFR. As it pertains to MCERA, GASB Statement No. 82 amends GASB Statement No. 67 and requires the presentation of covered payroll, defined as the payroll on which contributions are based, as well as ratios that utilize this measure.

### L. Reclassifications

Certain reclassifications have been made to the June 30, 2016 basic financial statements to conform to the presentation as of June 30, 2017. Such reclassifications have no effect on the previously reported fiduciary net position.

## Note 3 – CASH AND INVESTMENTS

### A. Investment Stewardship

The Board of Retirement 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 Retirement Board is authorized to invest in any investment the Board deems prudent.

#### (1) Investment Policy

The Board of Retirement has adopted an Investment Policy, which provides the framework or the management of MCERA's investments. The Investment Policy establishes MCERA's investment objectives and defines the principal duties of the Retirement Board, the custodian bank, and the investment managers. The assets 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 risk exposure. MCERA currently employs external investment managers to manage its assets subject to the provisions of the Investment Policy. On the following page MCERA's adopted asset allocation policy as of June 30, 2017 and June 30, 2016.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

Asset Class	Target Allocation June 30, 2017	Target Allocation June 30, 2016
US Equity	27%	28%
International Equity	16%	18%
Emerging Markets Equity	7%	6%
Private Equity	9%	7%
Real Estate	8%	8%
Domestic Fixed Income	17%	15%
High Yield Fixed Income	0%	5%
Hedge Funds	5%	4%
Infrastructure	3%	3%
Natural Resources	3%	3%
Bank Loans	5%	3%
	100%	100%

### (2) Rate of Return

For the fiscal years ended June 30, 2017 and June 30, 2016, the annual money-weighted rate of return on MCERA's investments was 9.5% and -0.3%, 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 County Treasurer and MCERA's custodian bank, BNY Mellon. 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) County Treasury

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

Interest on funds in the 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 County Treasurer totaled \$3,854,727 and \$1,293,296 at June 30, 2017 and 2016, respectively. Cash and investments included within the County Treasurer's pool are described in the County's Comprehensive Annual Financial Report.

#### (2) Short-Term Investment Funds and Funds Pooled with BNY Mellon

The short-term investment funds that are in the custody of BNY Mellon are liquidity funds. The cash is invested in short-term obligations and deposits, including U.S. treasury and agency obligations, corporate bonds,

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

commercial paper, repurchase agreements, certificates of deposit, bankers acceptances, time deposits and floating rate notes.

All participants in the BNY Mellon pool proportionately share earnings and losses. Balances in the pooled accounts approximate fair value. At June 30, 2017 and 2016, short-term investments totaled \$7,034,676 and \$9,536,583, respectively, which is the total of cash invested with BNY Mellon and other cash and cash equivalents with BNY Mellon.

MCERA's cash and short-term investments stated at fair value as of June 30, 2017 and 2016 are as follows:

Cash and Short-term Investments	Fair Value	
	2017	2016
Cash invested with Merced County Treasury	\$3,854,727	\$1,293,296
Cash invested with BNY Mellon	5,292,717	5,960,492
Other cash and cash equivalents with BNY Mellon	1,741,959	3,576,091
Securities lending collateral	-	4,972,033
Total cash and short-term investments	10,889,403	15,801,912

### 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. MCERA holds significant amounts of investments that are measured at fair value on a recurring basis. Because investing is a key part of the plan'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 are 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. 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.

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

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

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 this criteria are categorized in Level 3.

Investments in real estate, other than collective investment funds which are categorized in Level 3, have been valued based on the NAV per share (or its equivalent), as provided by the general partner. This type includes three funds structured as 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.

Hedge funds includes one fund structured as a limited partnership and one fund organized as an open-end exempted investment company that pursue investments in event driven, global macro, long/short equity, multi-strategy, merger arbitrage, capital structure arbitrage, and structured credit strategies. 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. For the open-end fund, redemptions may be subject to 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 two funds structured as limited partnerships that invest primarily in global infrastructure investments. 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.

Natural resources includes two 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.

Private equity includes fourteen funds structured as limited partnerships participating in diverse strategies including venture capital and special equity partnerships (buy-outs, mezzanine funds, and secondary funds). 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. These funds have a finite term. Distributions will be received as the underlying investments are sold, which is expected to occur over the next 5 to 17 years.



# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

The plan has the following recurring fair value measurements as of June 30, 2017:

Investments by Fair Value Level	June 30, 2017	Quoted Prices in		
		Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Common Stock				
Domestic	\$40,925,272	\$ -	\$ -	\$40,925,272
Domestic Index Funds	189,256,179	-	-	189,256,179
International	82,898,638	-	-	82,898,638
International Index Fund	107,338,378	-	-	107,338,378
US Government and Agency Obligations				
US Treasury and TIPS	32,272,101	-	32,272,101	-
US Government Agency Obligations	34,922,099	-	34,922,099	-
Domestic Fixed Income				
Asset Backed Securities	3,763,383	-	3,763,383	-
Bank Loans	35,418,493	-	-	35,418,493
Collateralized Mortgage Obligations	503,852	-	503,852	-
Commercial Mortgage Backed Securities	2,031,253	-	2,031,253	-
Corporate and Other Credit	48,971,877	-	48,971,877	-
<b>Total Investment by Fair Value Level</b>	<b>\$578,301,525</b>	<b>\$ -</b>	<b>\$122,464,565</b>	<b>\$455,836,960</b>
<b>Investments Measured at the Net Asset Value (NAV)</b>				
Real Estate	\$54,991,688			
Alternative Investments				
Hedge Funds	16,472,769			
Infrastructure	8,355,506			
Natural Resources	3,861,318			
Private Equity	36,384,809			
Proxy Fund	40,248,206			
Total Alternative Investments	105,322,608			
Total Investments Measured at NAV	160,314,296			
Total Investments Measured at Fair Value and NAV	\$738,615,821			
<b>Investments Measured at the NAV</b>	<b>Fair Value</b>	<b>Unfunded Commitments</b>	<b>Redemption Frequency</b>	<b>Redemption Notice Period</b>
Real Estate*	\$54,991,688	\$14,804,756	Quarterly	Indefinite
Alternative Investments				
Hedge Funds**	16,472,769	-	Annual	90 day
Infrastructure	8,355,506	12,256,694	N/A	N/A
Natural Resources	3,861,318	15,242,299	N/A	N/A
Private Equity	36,384,809	10,283,632	N/A	N/A
Proxy Fund	40,248,206	-	Monthly	T-2
Total Investments Measured at the NAV	\$160,314,296	\$52,587,381		

\*Liquidity varies by fund. Redemption is given by a pro rata share of funds available for disbursement.

\*\*One fund has a two year initial lock up period with quarterly redemption, 60 day notice period, and subject to available capital.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

The plan has the following recurring fair value measurements as of June 30, 2016:

Investments by Fair Value Level	June 30, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Common Stock				
Domestic	\$39,432,005	\$ -	\$ -	\$39,432,005
Domestic Index Funds	160,011,327	-	-	160,011,327
International	138,263,801	34,718,212	-	103,545,589
International Index Fund	18,259,912	-	-	18,259,912
US Government and Agency Obligations				
US Treasury and TIPS	23,407,122	-	23,407,122	-
US Government Agency Obligations	40,383,792	-	40,383,792	-
Domestic Fixed Income				
Asset Backed Securities	6,586,012	-	6,586,012	-
Bank Loans	21,088,831	-	-	21,088,831
Collateralized Mortgage Obligations	595,997	-	595,997	-
Commercial Mortgage Backed Securities	2,089,323	-	2,089,323	-
Corporate and Other Credit	43,943,503	-	43,943,503	-
High Yield	34,383,646	-	-	34,383,646
Real Estate	7,847,167	-	-	7,847,167
<b>Total Investment by Fair Value Level</b>	<b>\$536,292,438</b>	<b>\$34,718,212</b>	<b>\$117,005,749</b>	<b>\$384,568,477</b>
<b>Investments Measured at the Net Asset Value (NAV)</b>				
Real Estate	\$50,268,903			
Alternative Investments				
Hedge Funds	27,573,646			
Infrastructure	3,592,536			
Natural Resources	1,647,335			
Private Equity	37,368,032			
Total Alternative Investments	70,181,549			
Total Investments Measured at NAV	120,450,452			
Total Investments Measured at Fair Value and NAV	\$656,742,890			
<b>Investments Measured at the NAV</b>	<b>Fair Value</b>	<b>Unfunded Commitments</b>	<b>Redemption Frequency</b>	<b>Redemption Notice Period</b>
Real Estate*	\$50,268,903	\$18,112,780	Quarterly	Indefinite
Alternative Investments				
Hedge Funds**	27,573,646	-	Annual	90 day
Infrastructure	3,592,536	16,348,037	N/A	N/A
Natural Resources	1,647,335	10,984,224	N/A	N/A
Private Equity	37,368,032	13,421,935	N/A	N/A
Total Investments Measured at the NAV	\$120,450,452	\$58,866,976		

\*Liquidity varies by fund. Redemption is given by a pro rata share of funds available for disbursement.

\*\*One fund has a two year initial lock up period with quarterly redemption, 60 day notice period, and subject to available capital.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### D. Securities Lending Program

State statutes and the Board of Retirement policies permit MCERA to participate in a securities lending program. MCERA's custodian, BNY Mellon and the lending agent Mellon Global Securities Lending administer its securities lending program. Securities lending is an investment management activity that mirrors the fundamentals of a loan transaction. Securities are lent to brokers and dealers (borrower) and in turn, MCERA receives collateral.

Collateral received may include cash, letters of credit or securities. The lending agent invests cash collateral received in short-term investment funds, money market funds and other similar investments the custodian may select. If securities or letters of credit are received as collateral, MCERA cannot pledge or sell the securities collateral unless the borrower defaults. The contract with the security lending agent requires them to indemnify MCERA if the borrower fails to return the securities (or if the collateral is not sufficient to replace the securities lent) or if the borrower fails to pay MCERA for income distributions by the securities' issuers while the securities are on loan.

The maturities of investments made with collateral do not match the maturities of loaned securities. BNY Mellon continually monitors the traders booking the loans and the reinvestment team using the collateral.

Mellon Global Securities Lending short-term investment pools' ratings represent the ratings of the underlying pooled investments as of June 30, 2017 and 2016:

Date	Weighted Average Maturity	Average Duration	Mis-Match
June 30, 2017	0 day	0 days	0 days
June 30, 2016	1 day	49 days	0 days

Under this borrowing arrangement, the lending agent is responsible for maintaining an adequate level of collateral in an amount equal to approximately 102% of the fair value of domestic loaned securities and 105% with respect to foreign securities except in the case of loans of foreign securities which are denominated and payable in U.S. dollars, in which event the required percentage shall be 102%. If the fair value of the loaned securities falls below the required percentage, the lending agent shall require that the borrower deliver an amount of additional collateral by the close of the next business day. As of June 30, 2017 and 2016, MCERA has no credit risk exposure to borrowers because the amounts MCERA owes the borrower exceed the amounts the borrower owes to MCERA.

MCERA may, in its sole and absolute discretion, direct the lending agent to terminate any loan at any time and for any reason.

As of June 30, 2017 the fair value of securities on loan and the total cash and non-cash collateral received for those securities on loan were at zero dollars. MCERA was in the process of switching custodial banks. MCERA's income net of expenses from securities lending was \$8,095 for the year ended June 30, 2017.

As of June 30, 2016 the fair value of securities on loan and the collateral received for those securities on loan were \$6,599,851 and \$6,752,200. MCERA's income net of expenses from securities lending was \$17,614 for the year ended June 30, 2016. The breakdown as of June 30, 2016 is on the following page.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

Security Type	Fair Value of Securities on Loan	Cash Collateral	Non-Cash Collateral
Corporate	\$529,125	\$39,880	\$500,139
Equity	5,280,110	4,932,153	473,219
U.S T-Notes/T-Bonds	790,616	-	806,809
Total	\$6,599,851	\$4,972,033	\$1,780,167

### E. Commission Recapture Policy

In order to minimize the net cost of trading, MCERA 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. MCERA'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 MCERA's commission recapture brokerage firms while not incurring any incremental commission or market impact costs, then MCERA would like the manager to do so. This program should not interfere with or reduce an investment manager's incentive to reduce trading costs.

### F. Real Estate and Alternative Investments

The balance of the unfunded capital to MCERA's real estate and alternative investments as of June 30, 2017 was \$52,587,381 and as of June 30, 2016 was \$58,866,976. 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. MCERA 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 5-8% 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.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### G. 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. MCERA does not have a formal policy for custodial credit risk. At June 30, 2017 and 2016, MCERA had no investments that were exposed to custodial credit risk.

### H. 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, 2017 and 2016, 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. MCERA'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.

### I. 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 Investor Service, and Standard & Poor's. MCERA'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 MCERA's workout portfolio that is managed by MCERA's core fixed income manager. As of June 30, 2017 MCERA's workout portfolio has a fair value of \$837 thousand. These securities are being liquidated or held for longer time frames by comparing their individual fundamental values against executable market prices. Mid-way through fiscal year 2016-2017 the board redeemed their high-yield portfolio. It previously held an allocation up to 20% in CCC rated securities.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

The table below presents the Moody's credit quality ratings of fixed income securities at June 30, 2017 and 2016:

Quality	Aaa	Aa	A	Baa	Ba	B	Caa	Ca	NR*	NA**
Percent of Fixed Income as of June 30, 2017	3.18%	2.65%	13.92%	13.66%	.00%	.05%	.11%	.25%	38.45%	27.73%
Percent of Fixed Income as of June 30, 2016	3.37%	1.96%	11.44%	11.46%	.02%	19.97%	.11%	.24%	32.14%	19.29%

\*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.

\*\*NA represents those securities that are not applicable to the rating disclosure requirements.

### J. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. MCERA'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, MCERA's bond portfolios are managed duration neutral to their benchmarks, the Barclays U.S. Aggregate Bond Index, and the Merrill Lynch High Yield Master II.

As of June 30, 2017 and 2016 the County's pool has a fair value of \$861,396,645 and \$773,174,140, respectively, and a weighted average maturity of 527 and 468 days, respectively.

As of June 30, 2017 and 2016 the weighted average maturity of the short-term investment pooled funds with BNY Mellon was 37 and 48 days, respectively.

The following table presents the fair value, weighted percentage of each sector, and the effective duration of MCERA's fixed income investments as of June 30, 2017:

Investment Type	Fair Value 2017	Core Bond Portfolio	
		Weight of Fixed Income 2017	Modified Duration (years) 2017
U.S. Government agency obligations	\$32,272,101	20.44%	4.38
Commercial mortgage backed securities	2,031,253	1.29%	2.45
Asset backed securities	3,763,383	2.38%	2.54
U.S. Treasury and TIPS	34,922,099	22.12%	8.96
Corporate and other credit	48,971,877	31.02%	6.70
Collateralized mortgage obligations	503,852	0.32%	5.39
Commingled fund	35,418,493	22.43%	0.10
Total Fair Value	\$157,883,058	100.00%	
Portfolio Effective Duration			5.84

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

The following table presents the fair value, weighted percentage of each sector, and the effective duration of MCERA's fixed income investments as of June 30, 2016:

Investment Type	Core Bond Portfolio			High Yield Portfolio		
	Fair Value 2016	Weight of Fixed Income 2016	Modified Duration (years) 2016	Fair Value 2016	Weight of Fixed Income 2016	Effective Duration (years) 2016
U.S. government agency obligations	\$40,383,792	29.25%	3.00			
Commercial mortgage backed securities	2,089,323	1.51%	3.34			
Asset backed securities	6,586,012	4.77%	1.97			
U.S. Treasury and TIPS	23,407,122	16.95%	7.51			
Corporate and other credit	43,943,503	31.82%	7.07			
Collateralized mortgage obligations	595,997	0.43%	5.39			
Commingled fund	21,088,831	15.27%	0.19	\$34,383,646	100.00%	3.53
Total Fair Value	\$138,094,580	100.00%		\$34,383,646	100.00%	
Portfolio Effective Duration			5.42			3.53

### K. 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 (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.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

The following table represents securities and dividends receivable held in a foreign currency as of June 30, 2017 and 2016:

Currency	Fair Value (U.S. Dollars)	
	2017	2016
Brazil real	\$ -	\$440,889
Czech koruna	23,168	390,945
Canadian dollar	-	555,360
Euro	2,934,904	8,298,790
Hong Kong dollar	-	838,904
Japanese yen	30,720	2,411,475
Mexican peso	-	597,796
Norwegian krone	14,022	1,284,306
United Kingdom pound sterling	-	3,770,654
Singapore dollar	-	585,482
South Korean won	-	1,167,646
Swedish krona	-	737,929
Swiss franc	12,211	1,096,394
Turkish lira	-	615,637
Total foreign currency	\$3,015,025	\$22,792,207

### L. Derivatives

MCERA'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 MCERA'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. MCERA does not have any derivative instruments as defined by GASB Statement No. 53 as of June 30, 2017 and 2016.

### Note 4 – RESERVES

As required by the "37 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. MCERA maintains the following reserves at June 30, 2017 and 2016.

#### 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.



# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### 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 "37 Act."

### D. Interest Fluctuation Reserve

The Interest Fluctuation 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 MCERA's interest crediting policy.

### E. Market Value Fluctuation Reserve

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

The annual change in fair value of MCERA's assets is as follows:

Accumulated Through 2014	2015	2016	2017	Total
\$89,589,154	\$(1,601,763)	\$(49,573,098)	\$88,157,330	\$126,571,623

### F. Contingency Reserve

The Contingency Reserve is comprised of surplus/excess earnings 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 actuarial value of assets only when the Plan's funded ratio is at or above 75%.

A summary of the various reserve accounts, which comprise fiduciary net position restricted for pensions at June 30, 2017 and 2016 is as follows:

Reserve	2017	2016
Active Members'	\$102,857,990	\$99,056,799
Employer Advance	137,193,734	97,418,803
Retired Members'	290,581,132	327,318,139
Interest Fluctuation	96,564,849	107,807,790
Market Value Fluctuation	126,571,623	38,414,293
Total Reserves	\$753,769,328	\$670,015,824

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### Note 5 – NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

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

#### A. Actuarial Assumptions

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2013 through June 30, 2016. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2017 and the Total Pension Liability as of the valuation date June 30, 2016, using update procedures to roll forward to MCERA's fiscal year end of June 30, 2017. 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, 2017	FYE June 30, 2016
Total Pension Liability	\$1,241,024,880	\$1,171,412,304
Plan Fiduciary Net Position	(753,769,328)	(670,015,824)
Net Pension Liability	\$487,255,522	\$501,396,480
Fiduciary Net Position as a Percentage of the Total Pension Liability	60.74%	57.19%

The Total Pension Liabilities as of June 30, 2017 and June 30, 2016 were was determined based on the June 30, 2016 and June 30, 2015 actuarial valuations, rolled forward to June 30, 2017 and June 30, 2016, respectively, using the following actuarial assumptions applied to all periods included in the measurement:

ACTUARIAL VALUATION ASSUMPTIONS	
Valuation Date	June 30, 2016 and June 30, 2015
Investment Rate of Return	7.25% and 7.75%
Projected Salary Increases	2.75% and 3.00%, plus service-based rates
Attributed to Inflation	2.75% and 3.00%
Cost-of-Living Adjustments	For Tier 1, 100% of CPI up to 3.0% annually with banking, assumed to be 2.40 % and 2.60% annually

Post-retirement mortality rates for June 30, 2017 and June 30, 2016 were based on the CalPERS RP2009 tables, projected with MP-2016 and RP2000 Combined tables projected to the year 2027 with adjustments for mortality improvements based on the Society of Actuaries Scale BB, respectively.

Pre-retirement mortality, withdrawal, disability, and service retirement rates vary by age, service, gender, and classification.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### B. Long-Term Expected Rate of Return

The long-term defined benefit pension plan return expectations were determined using a building-block approach. An inflation forecast is the baseline and various real return premiums (e.g. bonds, equities, etc.) are added to create nominal return expectations for each asset class. These expectations are combined to produce the long-term expected rate of return by weighting the expected nominal rates of return by the target asset allocation percentages and including an expected return from rebalancing uncorrelated asset classes. Best estimates of geometric real rates of return for each major asset class included in the target asset allocation as of June 30, 2017 and June 30, 2016 are summarized in the table below:

Long-Term Expected Real Rate of Return		
Asset Class	FYE June 30, 2017	FYE June 30, 2016
US Equity		
US Large Cap	2.6%	5.1%
US Small Cap	2.7%	5.6%
International Equity	7.6%	5.8%
Emerging Markets Equity	6.5%	6.8%
Private Equity	7.9%	7.5%
Real Estate	7.3%	3.7%
Domestic Fixed Income	1.2%	0.8%
High Yield Fixed Income	2.4%	3.6%
Hedge Funds	4.2%	2.8%
Infrastructure	4.5%	3.6%
Natural Resources	7.9%	5.6%
Bank Loans	2.4%	2.5%
Cash	0.1%	0.4%

### C. Discount Rate

The discount rate used to measure the Total Pension Liability was 7.25% and 7.75% for June 30, 2017 and 2016, respectively. 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.

# Merced County Employees' Retirement Association

## Notes to Basic Financial Statements (continued)

June 30, 2017 and 2016

### D. Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of MCERA calculated using the discount rate of 7.25% for 2017 and 7.75% for 2016, 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 6.25% for 2017 and 6.75% for 2016 or one percentage point higher 8.25% for 2017 and 8.75% for 2016 than the current rate.

	<b>1% Decrease (6.25%)</b>	<b>Current Rate (7.25%)</b>	<b>1% Increase (8.25%)</b>
2017 Net Pension Liability	\$641,795,361	\$487,255,552	\$359,075,981
	<b>1% Decrease (6.75%)</b>	<b>Current Rate (7.75%)</b>	<b>1% Increase (8.75%)</b>
2016 Net Pension Liability	\$641,199,128	\$501,396,480	\$384,666,846

### Note 6 – LITIGATION

MCERA is a defendant in various lawsuits and claims arising in the ordinary course of its operations. MCERA is a respondent in litigation challenging the constitutionality of legislation (Assembly Bill 197) that took effect on January 1, 2013, which resulted in MCERA excluding certain pay items from retirement allowance calculations that MCERA previously had included, primarily, as the result of a settlement agreement and prior litigation over the settlement agreement. The State of California intervened in the case to defend the constitutionality of AB 197. The State moved to consolidate the case with other similar cases pending in other jurisdictions and to transfer the consolidated cases to Contra Costa County Superior Court. The Contra Costa Superior Court issued a decision granting some of the requested equitable relief and denying other requested relief. The State appealed the Superior Court's decision as to the case against MCERA, and the petitioners in the case cross-appealed. A decision is expected during 2018. MCERA's management and legal counsel estimate that the ultimate outcome of such litigation will not have a material effect on MCERA's financial statements.

### Note 7—SUBSEQUENT EVENTS

The potential for subsequent events were evaluated from the year-end report date of June 30, 2017 through December 28, 2017, which is the date the financial statements were available to be issued. Management did not identify any subsequent events that would require disclosure.

# Merced County Employees' Retirement Association

## Required Supplementary Information

### Schedules of Changes in Net Pension Liability and Related Ratios For the Years Ending June 30, 2017, 2016, 2015, and 2014\*

Total Pension Liability	2017	2016	2015	2014
Service cost (MOY)	\$19,512,609	\$19,384,855	\$19,672,490	\$19,384,434
Interest (includes interest on service cost)	88,982,290	86,323,551	84,203,356	81,090,569
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	(8,886,191)	(5,488,413)	(12,380,077)	-
Changes of assumptions	36,908,183	-	-	-
Benefit payments, including refunds of member contributions	(66,904,315)	(65,082,403)	(62,951,924)	(58,042,021)
Net changes in total pension liability	69,612,576	35,137,590	28,543,845	42,432,982
Total pension liability—beginning	1,171,412,304	1,136,274,714	1,107,730,869	1,065,298,068
Total pension liability—ending	\$1,241,024,880	\$1,171,412,304	\$1,136,274,714	\$1,107,731,050

#### Fiduciary net position

Contributions—member	\$9,384,621	\$9,042,663	\$8,945,316	\$9,642,819
Contributions—employers	60,349,189	56,617,088	52,005,656	48,032,338
Net investment income	83,097,416	(388,209)	19,318,849	96,219,056
Benefit payments, including refunds of member contributions	(66,904,315)	(65,082,403)	(62,951,924)	(58,042,021)
Administrative expense	(2,173,407)	(2,492,684)	(2,323,446)	(1,547,347)
Net change in fiduciary net position	\$83,753,504	\$(2,303,545)	\$14,994,451	\$94,304,845
Fiduciary net position—beginning	670,015,824	672,319,369	657,324,918	563,020,073
Fiduciary net position—ending	\$753,769,328	\$670,015,824	\$672,319,369	\$657,324,918
Net pension liability—ending	\$487,255,552	\$501,396,480	\$463,955,345	\$450,406,132
Fiduciary net position as a percentage of the total pension liability	60.74%	57.19%	59.17%	59.34%
Covered—employee payroll	\$119,621,964	\$114,397,644	\$110,111,994	\$110,259,316
Net pension liability as a percentage of covered—employee payroll	407.33%	438.29%	421.35%	408.50%

\*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. Information for this table was provided by Cheiron, Inc.

# Merced County Employees' Retirement Association

## Required Supplementary Information (continued)

### Schedules of Employer Contributions

The schedules of employer contributions shows 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 Ending June 30

Dollar Amounts in Thousands

	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-Employee Payroll	\$119,622	\$114,398	\$110,112	\$110,259	\$109,401
Contributions as a Percentage of Covered-Employee Payroll	50.45%	49.49%	47.23%	43.56%	40.02%
	2012	2011	2010	2009	2008
Actuarially Determined Contribution	\$40,263	\$36,662	\$29,137	\$27,883	\$23,751
Contributions in Relation to the Actuarially Determined Contribution	40,263	36,662	29,137	27,883	23,751
Contribution Deficiency/(Excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered-Employee Payroll	\$111,567	\$117,296	\$119,166	\$119,043	\$111,764
Contributions as a Percentage of Covered-Employee Payroll	36.09%	31.26%	24.45%	23.42%	21.25%

### 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 ending June 30\*

	2017	2016	2015	2014	2013
Annual money-weighted rate of return, net of investment expense	9.5%	-0.3%	1.1%	17.0%	11.8%

\*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available

# Merced County Employees' Retirement Association

## Notes to Required Supplementary Information

### Note 1 – CHANGES OF BENEFIT TERMS

There were no changes in benefit terms for the fiscal year ended June 30, 2017.

### Note 2 – CHANGES OF ASSUMPTIONS AND METHODS

Assumptions were adopted by the Board at their November 17, 2016 meeting. Rate of return was updated to 7.25%, price inflation assumption decreased to 2.50%, post retirement COLA decrease to 2.40%, and the mortality to CalPERS 2009 with future improvements would apply SOA MP-2016 projection scale on a generational basis.

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

#### A. Actuarial Valuation Methods and Assumptions

	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	Market Value	Market Value	Market 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
	2012	2011	2010	2009	2008
Valuation Date	June 30, 2010	June 30, 2009	June 30, 2008	June 30, 2007	June 30, 2006
Effective Date	June 30, 2011	June 30, 2010	June 30, 2009	June 30, 2008	June 30, 2007
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method	Actuarial Value	Actuarial Value	Actuarial Value	Actuarial Value	Actuarial Value
Amortization Years Remaining*	18	18	16	17	18
Discount Rate	8.16%	8.16%	8.00%	8.00%	8.00%
Price Inflation	3.75%	4.50%	4.50%	4.50%	4.50%
Salary Increases**	3.75%	4.50%	4.50%	4.50%	4.50%
Cost-of-living adjustments	2.70%	3.00%	3.00%	3.00%	3.00%
Mortality***	See Notes	See Notes	See Notes	See Notes	See Notes

\* Closed Period as a level percentage of payroll method used for all years shown .

\*\* Includes merit component based on years of service.

\*\*\* Gender distinct RP-2000 Combined Mortality used for all years shown.

# Merced County Employees' Retirement Association

## Notes to Required Supplementary Information (continued)

### B. Changes to the Assumptions

An actuarial valuation performed by MCERA's then actuary, Buck Consultants, in 2007 highlighted key assumptions to remain unchanged; the assumed discount rate was 8.0%, inflation rate was 4.5%, and salary increase rate was 4.5%. The next valuation of the fund performed by EFI Actuaries in 2011, based upon the experience of the fund from 2007 to 2010, suggested that a number of these assumptions be changed. The discount rate was lowered to 7.75% and the earnings and inflation rates were changed to 3.75%.



# Merced County Employees' Retirement Association

## Other Supplemental Schedules

### Schedules of Administrative Expenses For the Years Ended June 30, 2017 and 2016

Personnel Services:	2017	2016
Salaries, wages and benefits	\$899,384	\$875,652
<b>Office Expenses:</b>		
Communications	3,972	2,993
Requested maintenance / utilities / cost allocation	122,499	131,584
Office supplies	16,903	20,097
Postage	12,491	19,979
<b>Total Office Expense</b>	<b>155,865</b>	<b>174,653</b>
<b>Professional Services:</b>		
Audit Fees	80,754	78,242
Attorney fees	37,674	62,805
Disability stenographic fees / investigations	1,922	350
Publications / legal notices	3,307	34,281
Disability medical reviews / services	50,628	60,096
Merced Dept. of Information Technology / software	338,375	599,371
<b>Total Professional Services</b>	<b>512,660</b>	<b>835,145</b>
<b>Miscellaneous:</b>		
Memberships	5,633	5,900
Fiduciary meeting	11,100	11,100
Fiduciary and staff travel / training	44,920	33,808
Insurance	83,726	76,142
Depreciation expense	253,610	404,163
<b>Total Miscellaneous Expenses</b>	<b>398,989</b>	<b>531,113</b>
<b>Total Administrative Expenses</b>	<b>\$1,966,898</b>	<b>\$2,416,563</b>

# Merced County Employees' Retirement Association

## Other Supplemental Schedules (continued)

### Schedules of Investment Expenses For the Years Ended June 30, 2017 and 2016

#### Investment managers' fees

	2017	2016
Domestic equities		
Dimensional Fund Advisors	\$75,276	\$67,405
Mellon Capital Management	247,391	233,939
PanAgora Asset Management	161,736	152,153
Total domestic equities	484,403	453,497
International equities		
Mellon Capital Management	35,058	2,800
Earnest Partners, LLC	58,433	271,016
Copper Rock International	215,509	215,028
Wells Capital Management	398,818	238,612
Total international equities	707,818	727,456
Alternative investments		
Invesco Private Capital	52,069	56,762
KKR	31,995	96,730
North Haven Infrastructure	-	(215,063)
SSgA	26,809	-
Total alternative investments	110,873	(61,571)
Real estate		
BlackRock	4,119	9,103
UBS Global –Trumbull Property Management	423,433	439,190
Total real estate	427,552	448,293
Fixed income		
AXA Investment Managers	68,275	66,173
Barrow Hanley	277,090	274,597
Total fixed income	345,365	340,770
Total investment managers' fees	2,076,011	1,908,445
<b>Other investment expenses</b>		
Custodian	216,970	228,070
Investment counsel	79,072	64,366
Investment consultant	257,171	173,250
Miscellaneous investment expense	2,468	(12,165)
Total other investment expense	555,681	453,521
Total fees and other investment expenses	\$2,631,692	\$2,361,966

# Merced County Employees' Retirement Association

## Other Supplemental Schedules (continued)

### Schedules of Payments to Consultants For the Years Ended June 30, 2017 and 2016

<b>Investment professional service fees</b>	<b>2017</b>	<b>2016</b>
Custodial services - BNY Mellon Asset Servicing	\$216,970	\$228,070
Investment consultant - Verus Investments, Cliffwater LLC., and Others	257,171	173,755
Investment counsel - Nossaman LLP	79,072	64,366
Actuarial services - Cheiron Inc. and Segal Consulting	206,509	76,121
Total investment professional service fees	<u>\$759,722</u>	<u>\$542,312</u>
<b>Administrative professional service fees</b>		
Audit services - Macias Gini & O'Connell, LLP and Brown Armstrong Accountancy Corporation	\$80,754	\$78,242
Legal services	37,674	62,805
Disability stenographic fees/investigations	1,922	350
Other specialized services	3,307	34,281
Disability medical reviews/services	50,628	60,096
Software and Information Systems	338,375	599,371
Total administrative professional service fees	<u>\$512,660</u>	<u>\$835,145</u>

# Merced County Employees' Retirement Association

## Other Information

### Schedule of Cost Sharing Employer Allocations

For the Fiscal Year Ended June 30, 2017

Employer	2016-2017 Amortization Share of Pensionable Payroll	Employer Proportionate Share Percentage
Merced County	45,100,304	94.9445%
Merced Superior Court	2,375,470	5.0008%
Regional Waste Management	-	-
Cemetery District	26,006	0.0547%
<b>Total</b>	<b>47,501,780</b>	<b>100.0000%</b>

The accompanying notes are an integral part of this schedule.

# Merced County Employees' Retirement Association

## Other Information

### Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan As of and for the Fiscal Year Ended June 30, 2017

Employer	Net Pension Liability	Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense Excluding that Attributable to Employer-Paid Member Contributions			
		Differences Between Expected and Actual Experience	Net Differences Between Projected and Actual Investment Earnings	Changes of Assumption	Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Changes of Assumptions	Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate and Allocable Pension Expense	Share of Proportionate Contributions	Net Amortization of Deferred amounts from Changes in Proportion and Differences Between Employer Contributions and Total Pension Expense Excluding That Attributable to Employer -paid Member Contributions
County of Merced	\$462,622,348	\$ -	\$8,153,150	\$26,281,717	\$809,576	\$35,244,443	\$11,871,737	\$ -	\$302,360	\$12,174,097	\$49,262,886	\$269,547	\$49,532,433
Merced County Superior Court	24,366,675	-	429,433	1,384,278	978,889	2,792,600	625,293	-	98,334	723,627	2,594,714	453,297	3,048,011
Regional Waste Management Cemetery District	-	-	-	-	125	125	-	-	1,389,787	1,389,787	-	(754,035)	(754,035)
	266,529	-	4,697	15,142	6,904	26,743	6,840	-	5,013	11,853	28,382	31,191	59,573
Total	\$487,255,552	\$ -	\$8,587,280	\$27,681,137	\$1,795,494	\$38,063,911	\$12,503,870	\$ -	\$1,795,494	\$14,299,364	\$51,885,982	\$0	\$51,885,982

Note: Information compiled from GASB 67/68 Report Prepared by Cheiron, Inc. dated June 30, 2017

The accompanying notes are an integral part of this schedule.

# Merced County Employees' Retirement Association

## Notes to Other Information

### A. Basis of Presentation and Basis of Accounting

Employers participating in MCERA 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*.

MCERA's actuary prepares the GASB Statement No. 67 and No. 68 Actuarial Valuation based on June 30, 2017 Measurement date for Employer Reporting as of June 30, 2018; in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations based on information provided by MCERA. This document provides the required information for financial reporting related to MCERA 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, 2017 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:

Year ended June 30, 2017 – 4 years

Year ended June 30, 2016 – 4 years

Year ended June 30, 2015 – 4 years

Year ended June 30, 2014 – 4 years

The Schedule of Pension Amounts by Employer does 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.

# Investment Section



September 25, 2017

Board of Trustees  
Merced County Employees' Retirement Association  
3199 "M" Street  
Merced, CA 95348

Dear Trustees:

Verus Advisory is pleased to provide the Board of Trustees of Merced County Employees' Retirement Association ("MCERA") with an overview of the market environment for the fiscal year ended June 30, 2017 as well as an update on performance and a summary of recent developments.

### Investment Landscape

To begin the fiscal year, debate surrounding the potential implementation of Brexit led to the first rate cut by the Bank of England since 2009 and a significant drawdown in the Pound Sterling. The currency hit a new 31-year low relative to the U.S. dollar. Global interest rates remained near all-time lows, and negative yielding sovereign and corporate debt totaled \$11.6 trillion by the end of the third quarter. U.S. equity markets rallied with small cap stocks leading the way; the Russell 2000 Index finished up 9.0%. Information technology, up 12.9%, was the best performing sector in the S&P 500 by a large margin. Emerging market equities experienced a rebound, returning 9.0% for the quarter.

In the fourth quarter of 2016, economies around the globe experienced a pickup in headline inflation as energy prices increased. Strong performance from companies in the energy and financial sectors led to value equities outperforming growth. The Russell 1000 Value Index and Russell 1000 Growth Index returned 6.7% and 1.0%, respectively. The Federal Reserve raised interest rates at its December meeting, increasing the target federal funds rate to a range of 0.50%-0.75%. The U.S. dollar rose 6.4% on a trade-weighted basis, creating a large return gap between hedged and unhedged international exposures. The MSCI EAFE Index returned -0.7% on an unhedged basis and 7.3% hedged.

During the first quarter of 2017, the global economy exhibited a coordinated pickup in economic activity. In March, the Federal Reserve increased the target federal funds rate by 0.25%. The move resulted in the U.S. Treasury curve flattening moderately as short-term interest rates increased and long-term rates remained materially unchanged. Growth equities rebounded relative to value. The Russell 1000 Growth Index returned 8.9%, while the Russell 1000 Value Index returned 3.3%. The U.S. dollar fell 3.6% on a trade weighted basis providing a boost to unhedged international equity exposures. The MSCI EAFE Index was up 7.2% for the quarter. In emerging markets, investors benefited from stabilizing currencies and commodity prices as well as higher growth outlooks. The MSCI EM Index finished the quarter up 11.4%.

Risk assets continued to move higher over the second quarter of 2017, finishing broadly up for the fiscal year. U.S. equities benefited from strong earnings growth; the blended year-over-year growth rate for Q1 earnings of S&P 500 companies was 9.3%. In June, the Federal Reserve raised the target federal funds rate to a range of 1.00%-1.25%, and FOMC minutes revealed the committee could start unwinding the \$4.5 trillion balance sheet by the end of the calendar year. In Europe, ECB President Mario Draghi surprised markets with comments perceived as relatively hawkish. Subsequently, the Euro appreciated 2.3% against the U.S. dollar, and developed global rates moved upward. International equities outperformed domestic equities over the quarter, with the MSCI ACWI ex U.S. Index returning 5.8% relative to 3.1% for the S&P 500 Index.

### Plan Performance

The MCERA investment portfolio ("the Portfolio") earned a 12.7% percent return gross of fees for the fiscal year ending June 30, 2017. This return trailed the policy index return by 1.1%.

As previously discussed, the largest driver of returns during the fiscal year was appreciation in global public equities. Within domestic equities, active management had mixed results with large cap manager Mellon Dynamic outperforming its benchmark while both small cap active managers trailing their respective benchmarks. The US Equity composite ended the fiscal year in line with the policy index at 19.3% vs 19.4%, gross of fees. International equities were up strong during the fiscal year with active management slightly underperforming the policy benchmark, 20.7% vs 21.0%, gross of fees.



The Portfolio's investments in hedge funds portfolio significantly outperformed the benchmark at 12.0% for the Fiscal YTD vs 6.7% for the policy index. The real estate allocation returned 5.4% but lagged the benchmark by 1.5%. Private equity failed to keep up with the strong public market return, trailing its policy index by 14.9% for the Fiscal YTD.

On a longer-term basis, the portfolio has generated 5.4% gross of fees annually for the last three years, underperforming the policy index by 0.3% but ranking in the top 37% of its peer group. The Plan gained 9.2% gross of fees over the 5-year period, ranking in the top 38% of its peer group, but lagging the policy by 0.1%.

## Investment Results

PERIODS ENDED 6/30/17	ONE YEAR	THREE YEARS	FIVE YEARS
<b>Domestic Equity (gross)</b>	<b>+19.3%</b>	<b>+10.5%</b>	<b>+15.9%</b>
<i>80% Russell 1000 / 20% Russell 2000 Index</i>	<i>+19.4%</i>	<i>+9.0%</i>	<i>+14.5%</i>
Rank*	40	3	4
<b>Non-US Equity (gross)</b>	<b>+20.7%</b>	<b>+1.2%</b>	<b>+8.4%</b>
<i>MSCI ACWI ex-US Index</i>	<i>+21.0%</i>	<i>+1.3%</i>	<i>+8.1%</i>
Rank	55	79	58
<b>Fixed Income (gross)</b>	<b>+2.8%</b>	<b>+3.0%</b>	<b>+3.4%</b>
<i>78% Barclays Cap US Aggregate / 22% CS Lev. Loan</i>	<i>+2.2%</i>	<i>+2.8%</i>	<i>+2.6%</i>
Rank	31	53	52
<b>Real Estate (net)</b>	<b>+5.4%</b>	<b>+7.2%</b>	<b>+8.2%</b>
<i>NCREIF ODCE</i>	<i>+6.9%</i>	<i>+9.7%</i>	<i>+11.1%</i>
Rank	81	93	93
<b>Hedge Funds (net)</b>	<b>+12.0%</b>	<b>+3.3%</b>	<b>NA</b>
<i>50% HFRI Funds of Funds Composite/50% HFRI Multi-Strategy</i>	<i>+6.7%</i>	<i>+2.5%</i>	<i>NA</i>
Rank	11	24	NA
<b>Private Equity (net)</b>	<b>+6.2%</b>	<b>+6.3%</b>	<b>+6.4%</b>
<i>Russell 3000 + 300 bps (1-quarter lagged)</i>	<i>+21.1%</i>	<i>+12.8%</i>	<i>+19.6%</i>
Rank	85	77	88
<b>Total Fund (gross)</b>	<b>+12.7%</b>	<b>+5.4%</b>	<b>+9.2%</b>
<i>Policy Benchmark</i>	<i>+13.8%</i>	<i>+5.7%</i>	<i>+9.3%</i>
<i>Public Fund Median</i>	<i>+12.8%</i>	<i>+5.2%</i>	<i>+8.9%</i>
Rank**	51	37	38

\* Ranking 1 is best, 100 is worst.

\*\* Rankings source – Investor Force Universe

### Plan Activity

During the 2017 fiscal year, Verus worked with MCERA to hire a specialist consultant in private equity and hedge funds. Verus assisted with two terminations of active managers, one in hedge funds and the other in high yield fixed income. Lastly, we implemented the Asset/Liability plan with MCERA which began in 2016.

All of us here at Verus appreciate the opportunity to assist the MCERA Board in meeting the Plan's investment objectives. We are confident in the direction of the portfolio given the System's demographics and fiscal strength. We look forward to continuing our partnership as we navigate ever-changing capital markets.

Sincerely,

John Nicolini  
Managing Director

# Merced County Employees' Retirement Association

## Total Fund Returns vs. Universe Period Ending June 30, 2017

	3 Mo	Fiscal YTD	3Yrs	5Yrs	7Yrs	10Yrs	Inception Return	Since
<b>Total Fund</b>	3.4%	12.7%	5.4%	9.2%	9.6%	4.8%	8.2%	Jan-94
Fund Benchmark	6.4%	13.8%	5.7%	9.3%	10.0%	5.4%	5.9%	Jan-94
IF Public Defined Benefit Gross Rank	30	51	37	38	42	76		Jan-94
IF Public Defined Benefit Gross Median	3.1%	12.8%	5.2%	8.9%	9.5%	5.2%	8.2%	Jan-94

### Outline of Investment Policies

The Board of Retirement has exclusive control of all investments of the Association and is responsible for establishing investment objectives, strategies, and policies.

Pursuant to the California Constitution and the "37 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 MCERA 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 of Retirement has adopted an Investment Policy, adopted June 22, 2017, which provides the framework for the management of MCERA's investments. The Investment Policy establishes the investment program goals, asset allocation policies, performance objectives, investment management policies and risk controls. The Investment Policy also defines the principal duties of the Board, MCERA's custodian bank, consultant, and MCERA's investment managers. The Board makes revisions to the Investment Policy as necessary.

Pursuant to the Investment Policy, the basic goal of MCERA'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 MCERA'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 MCERA's proxy voting ballots shall be in accordance with MCERA'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 MCERA, investment managers shall vote according to the best interests of the MCERA membership. On a quarterly basis, the investment managers are required to provide a report to MCERA detailing their proxy votes.

# Merced County Employees' Retirement Association

## Asset Allocation Information For the Year Ending June 30, 2017

Allocation Ranges	Allocation June 30, 2017	Target	Allocation Minimum	Allocation Maximum
Total Domestic Equity				
Large Cap	25.3%	22.0%	18.0%	26.0%
Small Cap	5.5%	5.0%	4.0%	6.0%
International Equity	18.0%	16.0%	14.0%	18.0%
Emerging Markets	7.3%	7.0%	5.0%	9.0%
Private Equity	4.9%	9.0%	7.0%	11.0%
Real Estate	7.3%	8.0%	6.5%	9.5%
Domestic Fixed Income	16.3%	17.0%	15.0%	19.0%
Bank Loan	4.7%	5.0%	4.0%	6.0%
Hedge Fund	2.2%	5.0%	4.0%	6.0%
Real Assets	7.0%	6.0%	4.5%	7.5%
Cash	1.5%	0.0%	0.0%	0.0%
	100.0%	100.0%		

## Asset Allocation Information For the Year Ending June 30, 2016

Allocation Ranges	Allocation June 30, 2016	Target	Allocation Minimum	Allocation Maximum
Total Domestic Equity				
Large Cap	24.1%	22.9%	18.0%	26.5%
Small Cap	5.9%	5.5%	4.0%	6.5%
International Equity	19.8%	17.5%	14.0%	20.0%
Emerging Markets	4.0%	6.1%	5.0%	7.5%
Private Equity	5.6%	7.0%	5.0%	8.0%
Real Estate	8.7%	8.0%	7.0%	9.0%
Domestic Fixed Income	17.5%	14.5%	12.0%	18.0%
High Yield Fixed Income	5.2%	5.0%	4.0%	6.0%
Bank Loan	3.2%	3.0%	2.5%	3.5%
Hedge Fund	4.1%	4.5%	4.0%	5.0%
Infrastructure	0.5%	3.0%	2.0%	4.0%
Natural Resources	0.2%	3.0%	2.0%	4.0%
Cash	1.2%	0.0%	0.0%	0.0%
	100.0%	100.0%		

# Merced County Employees' Retirement Association

## Investment Summary For the Year Ending June 30, 2017

	Fair Value	Percent of Total
<b>Domestic Equity</b>		
Large Cap	\$115,310,302	15.4%
Large Cap Active	73,945,877	9.9%
Small Cap	40,925,272	5.5%
Total	230,181,451	30.8%
<b>International Equity</b>		
Large Cap	107,338,378	14.3%
Small Cap	27,877,167	3.7%
Emerging Market	55,021,471	7.3%
Total	190,237,016	25.3%
<b>Fixed Income</b>		
Domestic Core	122,464,565	16.3%
Bank Loans	35,418,493	4.7%
Total	157,883,058	21.0%
<b>Alternative Investments</b>		
Private Equity	36,384,809	4.9%
Hedge Funds	16,472,769	2.2%
Real Assets	52,465,030	7.0%
Total	105,322,608	14.1%
<b>Real Estate</b>		
Domestic Property Fund	41,547,921	5.5%
Value added	11,933,142	1.6%
International Property Fund	1,510,625	0.2%
Total	54,991,688	7.3%
Cash and Short-Term Investments	10,889,403	1.5%
Total Investments, Cash and Short-Term Investments	\$749,505,224	100.0%

# Merced County Employees' Retirement Association

## Schedule of Investment Results (Gross of Fees)

For the Year Ended June 30, 2017

	Current	Annualized				
	Year	3Yrs	5Yrs	7Yrs	10Yrs	Inception
<b>Domestic Equity</b>						
Large Cap:						
Mellon Large Cap Index	18.1%	-	-	-	-	16.5%
Mellon Dynamic	18.6%	12.4%	-	-	-	18.7%
Small Cap:						
DFA	23.0%	8.5%	-	-	-	8.5%
PanAgora	20.8%	8.0%	-	-	-	10.5%
Total Domestic Equity	19.3%	10.5%	15.9%	15.8%	7.6%	9.9%
<b>Index; 80% R1000/20% R2000</b>	19.4%	9.0%	14.5%	15.3%	7.2%	9.8%
<b>International Equity</b>						
Copper Rock	15.3%	4.6%	-	-	-	5.5%
Mellon International	20.6%	-	-	-	-	4.3%
Wells Capital	23.1%	3.4%	5.4%	-	-	3.4%
Total International Equity	20.7%	1.2%	8.4%	8.3%	2.3%	5.5%
<b>Index: MSCI ASCI ex US</b>	21.0%	1.3%	8.1%	7.6%	1.0%	4.3%
<b>Fixed Income</b>						
Barrow Hanley	-0.1%	2.8%	2.5%	3.6%	-	4.0%
Guggenheim Loan	5.6%	-	-	-	-	3.7%
Total Fixed Income	2.8%	3.0%	3.4%	4.5%	4.1%	5.7%
<b>Index: US Fixed Custom</b>	2.2%	2.8%	2.6%	3.4%	1.7%	5.8%
<b>Real Estate</b>						
UBS Trumbull	4.5%	8.5%	8.8%	9.9%	4.1%	7.5%
Greenfield GAP VII	11.1%	-	-	-	-	12.0%
Patron V	0.5%	-	-	-	-	0.4%
Total Real Estate	5.4%	7.2%	8.2%	-	-	-
<b>Index: NCREIF ODCE</b>	6.9%	9.7%	11.1%	11.5%	6.4%	8.9%

# Merced County Employees' Retirement Association

## Schedule of Investment Results (Gross of Fees) (Continued)

	Current	Annualized				
Hedge Funds	Year	3Yrs	5Yrs	7Yrs	10Yrs	Inception
Oz Domestic II	15.1%	5.6%	-	-	-	5.6%
Total Hedge Funds	12.0%	3.3%	-	-	-	3.3%
<b>Index: Hedge Fund Custom</b>	6.7%	2.5%	-	-	-	2.5%
<b>Real Assets</b>						
SSgA	*	-	-	-	-	-0.4%
Infrastructure:	15.9%					6.6%
KKR Global II	28.0%	-	-	-	-	16.7%
North Haven Infrastructure II	-1.3%	-	-	-	-	-2.6%
Natural Resources:	29.1%					26.0%
GSO Energy Opportunities	29.9%	-	-	-	-	24.3%
Taurus Mining	23.7%	-	-	-	-	26.7%
Taurus Mining Annex	*	-	-	-	-	39.8%
Total Real Assets	*	-	-	-	-	-
<b>Index: Real Asset Custom</b>	-	-	-	-	-	-
<b>Alternative Investments</b>						
Adams St	12.6%	10.7%	12.3%	12.4%	7.7%	5.9%
Invesco IV	16.5%	10.2%	7.8%	11.6%	9.5%	9.2%
Invesco Vi	9.3%	25.2%	-	-	-	10.3%
Ocean Ave	12.2%	2.8%	-	-	-	2.8%
Pantheon I	7.0%	3.0%	6.4%	7.0%	5.0%	3.0%
Pantheon II	11.5%	9.0%	12.7%	-	-	10.2%
Pantheon Secondary	1.2%	-0.5%	-0.1%	2.2%	2.8%	2.8%
Raven Asset Fund II	-15.8%	-	-	-	-	-8.1%
Total Alternative Investments**	6.2%	6.3%	6.4%	8.6%	7.1%	6.9%
<b>Index: Russell 3000 + 3%</b>	21.1%	12.8%	19.6%	20.6%	12.2%	13.5%
<b>Total Fund***</b>	12.7%	5.4%	9.2%	9.6%	4.8%	8.2%
<b>Total Fund Custom Index***</b>	13.8%	5.7%	9.3%	10.0%	5.4%	5.9%

\*There is no fiscal year data available; the fund doesn't have a year.

\*\*Performance results lag by a quarter due to financial reporting constraints.

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

# Merced County Employees' Retirement Association

## Top 10 Largest Holdings by Fair Value

June 30, 2017

PAR	Bonds		Fair Value
7,405,000	U S TREASURY NOTE	2.000% 02/15/2022 DD 02/15/12	\$7,460,538
6,855,000	U S TREASURY NOTE	2.375% 08/15/2024 DD 08/15/14	6,959,402
6,515,000	U S TREASURY NOTE	2.000% 11/15/2021 DD 11/15/11	6,569,987
4,820,000	U S TREASURY BOND	3.125% 11/15/2041 DD 11/15/11	5,103,946
4,555,000	U S TREASURY NOTE	0.750% 07/15/2019 DD 07/15/16	4,496,104
3,535,000	U S TREASURY BOND	2.500% 05/15/2046 DD 05/15/16	3,288,787
2,014,702	FNMA POOL #0AT2720	3.000% 05/01/2043 DD 05/01/13	2,024,413
1,755,615	FNMA POOL #0BE5068	4.000% 07/01/2046 DD 12/01/16	1,846,398
1,298,056	GNMA II POOL #0AL9364	3.500% 03/20/2045 DD 03/01/15	1,348,110
1,252,307	GNMA II POOL #0MA4453	4.500% 05/20/2047 DD 05/01/17	1,333,207
			<hr/>
			\$40,430,892
			<hr/>

A complete list of portfolio holdings are available upon request.

## Schedules of Investment Management Fees

June 30, 2017 and 2016

Investment Managers' Fees	2017	2016
Equity Managers		
Domestic	\$484,403	\$453,497
International	707,818	727,456
Fixed Income Fees	345,365	340,770
Alternative Investment Managers	110,873	(61,571)
Real Estate Fees	427,552	448,293
Total Investment Manager Fees	<hr/>	<hr/>
	\$2,076,011	\$1,908,445
Other Investment Service Fees		
Investment Consultant Fees	\$256,666	\$173,250
Investment Custodial Fees	216,970	228,070
Investment Counsel Fees	79,072	64,366
Other Investment Service Fees	2,973	(12,165)
Total Other Investment Service Fees	<hr/>	<hr/>
	555,681	453,521
Total Investment Managers' Fees and Other Investment Service Fees	<hr/>	<hr/>
	\$2,631,692	\$2,361,966
	<hr/>	<hr/>



# Merced County Employees' Retirement Association

## List of Investment Service Providers

June 30, 2017

### **Fixed Income/Bank Loan**

Barrow, Hanley, Mewhinney & Strauss, Inc.

Guggenheim

### **Real Estate**

UBS Global Asset Management

Greenfield Partners

Patron Capital

### **Domestic Equity**

Mellon Capital Management

Dimensional Fund Advisors

PanAgora Asset Management, Inc.

### **International Equity**

Mellon Capital Management

Wells Capital Management

Copper Rock Capital Partners, LLC

### **Real Asset Proxy**

SSgA

### **Private Equity**

Adams Street Partners, LLC

Pantheon Ventures, Inc.

Invesco Private Capital

Ocean Avenue Capital Partners

Raven Capital Management

### **Hedge Fund**

Och-Ziff Capital Management

### **Infrastructure**

KKR& Co. L.P.

Morgan Stanley

### **Natural Resources**

GSO Energy Select Opportunities Assc, LLC

Taurus Funds Management

### **Commission Recapture Brokers**

ConvergEx Group

Capital Institutional Services, Inc.



# Actuarial Section



***Via Electronic Mail***

December 6, 2017

**Actuarial Certification**

This is the Actuary's Certification Letter for the Actuarial Section of the Comprehensive Annual Financial Report (CAFR) for the Merced County Employees' Retirement Association (the Plan) as of June 30, 2017. This letter includes references to two documents produced by Cheiron for the Plan: the Actuarial Valuation Report as of June 30, 2016 (transmitted February 15, 2017) and the GASB 67/68 Report as of June 30, 2017 (transmitted December 6, 2017).

**Actuarial Valuation Report as of June 30, 2016**

The purpose of the annual Actuarial Valuation Report as of June 30, 2016 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 2017-2018. The prior review was conducted as of June 30, 2015, and included recommended contribution rates for the Fiscal Year 2016-2017.

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). As of the valuation date (June 30, 2016), the amortization period for the June 30, 2013 UAL is 13 years. 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. 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 CAFR, based on the June 30, 2016 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 2016 Experience Gain/(Loss) (Analysis of Financial Experience)
- Solvency Test
- Summary of Plan Provisions

We reviewed the actuarial assumptions shown in the schedules and found them to be reasonably appropriate for use under the Plan. The assumptions used in this report reflect the results of an Experience Study performed by Cheiron covering the period from July 1, 2013 through June 30, 2016, and approved by the Board. 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 2019.

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, 2017**

The purpose of the GASB 67/68 Report as of June 30, 2017, 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, 2016, actuarial valuation updated to the measurement date of June 30, 2017. The beginning of year Total Pension Liability was based on the actuarial valuation as of June 30, 2015, updated to June 30, 2016. The Total Pension Liability measurements as of June 30, 2017 and June 30, 2016 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, 2016 and June 30, 2015, respectively.

Please refer to our GASB 67 report as of June 30, 2017, for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the CAFR based on the June 30, 2017, 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. 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.

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. 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



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December 26, 2017

Ms. Kristie Santos  
Plan Administrator  
Merced County Employees Retirement Association  
3199 'M' Street  
Merced, CA 95348

**Re: Audit of June 30, 2016 Actuarial Valuation**

Dear Ms. Santos:

We are pleased to present the results of this audit of the June 30, 2016 Actuarial Valuation for the Merced County Employees' Retirement Association (MCERA). The purpose of this audit was to verify the calculations completed by Cheiron and to offer comments on the methodology and the results of their actuarial valuation.

***Our audit confirms that the results of the actuarial calculations as of June 30, 2016 are reasonable, and that those calculations are based on generally accepted actuarial principles and practices.***

This review was conducted by Paul Angelo, a Fellow of the Society of Actuaries, Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA, and John Monroe, an Associate of the Society of Actuaries, Member of the American Academy of Actuaries, and an Enrolled Actuary under ERISA. This review was conducted in accordance with the standards of practice prescribed by the Actuarial Standards Board.

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

The assistance of Cheiron and MCERA is gratefully acknowledged. We appreciate the opportunity to be of service to MCERA's Audit Committee and Board of Investments, and we are available to answer any questions you may have on this report.

Sincerely,

A handwritten signature in cursive script, reading "Paul Angelo".

---

Paul Angelo, FSA, MAAA, FCA, EA  
Senior Vice President and Actuary

A handwritten signature in cursive script, reading "John Monroe".

---

John Monroe, ASA, MAAA, EA  
Vice President and Actuary

EZY/gxk

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# Merced County Employees' Retirement Association

## Summary of Actuarial Review

In 2017, MCERA engaged Segal Consulting to perform a "full scope" independent replication of MCERA's June 30, 2016 actuarial valuation and actuarial experience study for July 1, 2013 through June 30, 2016. The purpose of a "full scope" actuarial audit is to determine if results and conclusions determined by the valuation actuary are valid, appropriate, and reasonable. The audit of MCERA included:

- Review of 2013-2016 experience study
- Reasonableness review of actuarial assumptions
- Determination of validity of the data
- Independent replication of liabilities valued in the 2016 actuarial valuation
- Comparison of testlives
- Peer review of June 30, 2016 actuarial valuation report for clarity and completeness

## **Key Findings and Recommendations**

As presented in Segal's Actuarial Review of the June 30, 2016 Actuarial Valuation and Actuarial Experience Study, Segal has:

- Confirmed that the liabilities and costs computed by Cheiron, Inc. in the MCERA valuation as of June 30, 2016 are reasonably accurate and were computed in accordance with generally accepted actuarial principles.
- Reviewed the economic and demographic assumptions recommended in MCERA's most recent Actuarial Experience Study prepared by Cheiron, Inc. and have found them to be reasonable and in accordance with generally accepted actuarial principles and practices.



# Merced County Employees' Retirement Association

## Statement of Current Actuarial Assumptions and Methods

### 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, 2016):

Investment Rate of Return	7.25%, net investment and administrative expenses
Inflation	2.75% per annum
Cost of Living Adjustments	For Tier 1, 100% of CPI up to 3% annually with banking, assumed to be 2.4% annually
Asset Valuation Method	Market value of assets
Interest Credited to Active Member's Reserves	Pursuant to MCERA Interest Crediting Policy, adopted September 14, 2017, interest will fall within a range from 0% - 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, 2016. 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 Use

##### 1. *Service*

General Member Males	CalPERS 2009 Healthy Annuitant Mortality Table; projected using MP-2016 from 2009-2037
General Member Females	CalPERS 2009 Healthy Annuitant Mortality Table; projected using MP-2016 from 2009-2037
Safety Members	CalPERS 2009 Industrial Employees Mortality Table; projected using MP-2016 from 2009-2037

##### 2. *Disability*

General Member Males	CalPERS 2009 Industrial Disability Mortality Table; projected using MP-2016 from 2009-2037
General Member Females	CalPERS 2009 Industrial Disability Mortality Table; projected using MP-2016 from 2009-2037
Safety Members	CalPERS 2009 Industrial Employees Mortality Table; projected using MP-2016 from 2009-2037

##### 3. *For Employee Contributions Rate Purposes*

General Members	CalPERS 2009 projected using MP-2016 from 2009-2037
Safety Members	CalPERS 2009 projected using MP-2016 from 2009-2037

# Merced County Employees' Retirement Association

## Statement of Current Actuarial Assumptions and Methods (Continued)

<b>Active Member Mortality</b>	CalPERS 2009 Healthy Annuitant Mortality Table; projected using MP-2016 from 2009-2037
<b>Withdrawal Rates</b>	Based upon the Experience Analysis as of 6/30/2016 (see Appendix B — Statement of Current Actuarial Assumptions.)
<b>Disability Rates</b>	Based upon the Experience Analysis as of 6/30/2016 (see Appendix B — Statement of Current Actuarial Assumptions.)
<b>Service Retirement Rates</b>	Based upon the Experience Analysis as of 6/30/2016 (see Appendix B — Statement of Current Actuarial Assumptions.)
<b>Vested Termination</b>	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 59; terminated Safety Members are assumed to begin receiving benefits at age 53. Assumed rates of reciprocity at termination depend on participant type and years of service, and are based on the Experience Analysis as of 6/30/2016.
<b>Family Composition</b>	50% of female General Members, 80% of male General Members, and 90% of Safety Members are assumed to be married at retirement. Male spouses are assumed to be three years older than their wives.
<b>Final Average Compensation Load</b>	The final average compensation (FAC) for members projected to receive a service retirement benefit has been increased based on the assumption that members will have elements of pay included in their FAC which are not included in the annual pay provided to the Actuary (Ventura decision pays). The FAC for Tier 1 members has been increased by 6.92% and the FAC for Tier 2 and Tier 3 members by 2.31%.

### **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 is the difference between the actuarial liability and the actuarial value of assets.

The unfunded actuarial liability is amortized by annual payments. The payments are determined so that they will be a level percentage of pay, assuming payroll increases of 3% per year. The UAL as of June 30, 2013 is being amortized over a closed period of 16 years. Effective with the June 30, 2014 valuation, any new sources of UAL due to actuarial gains and losses or method changes is amortized over a closed 24-year period, with a 5-year ramp up period at the beginning of the period, a 4-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 3-year ramp up period, 2-year ramp down period, and 17 years of level payments as a percentage of payroll.

### **D. Plan Description**

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

# Merced County Employees' Retirement Association

## Probabilities of Separation from Active Service

### GENERAL MEMBERS

Service Retirement – Male (by Service)			
Age	10-19 Yrs	20-29 Yrs	30+ Yrs
50	2.50%	5.00%	7.50%
55	9.00%	18.00%	27.00%
60	25.00%	25.00%	37.50%
65	40.00%	40.00%	40.00%
70	100.00%	100.00%	100.00%

			Vested
Service	Withdrawals	Transfers	Terminations
0-4	90.0%	10.0%	0.0%
5-14	40.0%	12.0%	48.0%
15+	10.0%	10.0%	80.0%

Service Retirement – Female (by Service)			
Age	10-19 Yrs	20-29 Yrs	30+ Yrs
50	2.50%	10.00%	10.00%
55	9.00%	35.00%	35.00%
60	25.00%	30.00%	35.00%
65	40.00%	50.00%	50.00%
70	100.00%	100.00%	100.00%

	Service-Connected		Non-Service Connect- ed	
	Disability		Disability	
Age	Female	Male	Female	Male
20	0.0040%	0.0027%	0.0000%	0.0000%
30	0.0115%	0.0133%	0.0067%	0.0533%
40	0.0190%	0.0320%	0.0133%	0.0867%
50	0.0600%	0.0640%	0.0600%	0.1600%
60	0.1575%	0.1120%	0.1533%	0.2800%
65	0.0000%	0.0000%	0.0000%	0.0000%

### SAFETY MEMBERS

	Service Retirement (by Service)	
Age	10-19 Yrs	20+ Yrs
40-44	0.00%	3.10%
45-49	0.00%	7.60%
50-59	12.75%	32.90%
60+	100.00%	100.00%

Age	Active Member Mortality
20	0.0300%
30	0.0600%
40	0.1700%
50	0.2700%
60	0.0000%

	Service	Non-Service
	Connected	Connected
	Disability	Disability
Age	(All)	(All)
20	0.0000%	0.0000%
30	0.4190%	0.0300%
40	0.6375%	0.0600%
50	0.9940%	0.1200%
60	0.0000%	0.0000%
65	0.0000%	0.0000%

Service	Withdrawals	Transfers	Vested Terminations
0-4	90.0%	10.0%	0.0%
5+	15.0%	42.5%	42.5%

### RATES OF TERMINATION

Years of Service	General Male	General Female	Safety
0	25.0%	12.0%	20.8%
5	4.8%	7.5%	4.6%
10	4.8%	3.6%	4.6%
15	4.8%	3.0%	2.5%

Years of Service	General Male	General Female	Safety
20	2.5%	3.0%	0.0%
25	2.5%	3.0%	0.0%
30	0.0%	0.0%	0.0%

Note: Information compiled from Actuarial Report Prepared by Cheiron, Inc. dated June 30, 2016.

# Merced County Employees' Retirement Association

## Schedule of Active Member Valuation Data

Valuation Date	Plan Type	Number	Annual Salary	Average Annual Salary	% Increase in Average Annual Salary
7/1/2007	General	1,917	\$85,308,000	\$44,501	-0.54%
	Safety	318	\$15,281,000	\$48,053	-2.47%
	<b>Total</b>	<b>2,235</b>	<b>\$100,589,000</b>	<b>\$45,006</b>	<b>-0.81%</b>
7/1/2008	General	1,921	\$92,116,000	\$47,952	7.75%
	Safety	339	\$17,137,000	\$50,552	5.20%
	<b>Total</b>	<b>2,260</b>	<b>\$109,253,000</b>	<b>\$48,342</b>	<b>7.41%</b>
7/1/2009	General	1,848	\$99,266,589	\$53,716	12.02%
	Safety	342	\$19,363,697	\$56,619	12.00%
	<b>Total</b>	<b>2,190</b>	<b>\$118,630,286</b>	<b>\$54,169</b>	<b>12.05%</b>
7/1/2010	General	1,708	\$94,915,436	\$55,571	3.45%
	Safety	330	\$19,692,515	\$59,674	5.40%
	<b>Total</b>	<b>2,038</b>	<b>\$114,607,951</b>	<b>\$56,236</b>	<b>3.81%</b>
7/1/2011	General	1,659	\$94,976,978	\$57,250	3.02%
	Safety	321	\$19,768,859	\$61,585	3.20%
	<b>Total</b>	<b>1,980</b>	<b>\$114,745,837</b>	<b>\$57,952</b>	<b>3.05%</b>
7/1/2012	General	1,596	\$90,706,280	\$56,834	-0.73%
	Safety	305	\$19,145,091	\$62,771	1.93%
	<b>Total</b>	<b>1,901</b>	<b>\$109,851,371</b>	<b>\$57,786</b>	<b>-0.29%</b>
7/1/2013	General	1,604	\$91,737,348	\$57,193	0.63%
	Safety	295	\$18,699,145	\$63,387	0.98%
	<b>Total</b>	<b>1,899</b>	<b>\$110,436,493</b>	<b>\$58,155</b>	<b>0.64%</b>
7/1/2014	General	1,624	\$91,704,083	\$56,468	-1.27%
	Safety	300	\$18,620,870	\$62,070	-2.08%
	<b>Total</b>	<b>1,924</b>	<b>\$110,324,953</b>	<b>\$57,341</b>	<b>-1.40%</b>
7/1/2015	General	1,664	\$93,938,857	\$56,454	-0.03%
	Safety	298	\$18,397,233	\$61,736	-0.54%
	<b>Total</b>	<b>1,962</b>	<b>\$112,336,090</b>	<b>\$57,256</b>	<b>-0.15%</b>
7/1/2016	General	1,729	\$97,337,917	\$56,297	-0.28%
	Safety	311	\$19,394,922	\$62,363	1.02%
	<b>Total</b>	<b>2,040</b>	<b>\$116,732,839</b>	<b>\$57,222</b>	<b>-0.06%</b>

Note: Information compiled from Actuarial Report prepared by Cheiron, Inc. dated June 30, 2016. 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.

# Merced County Employees' Retirement Association

## Schedule of Retirements and Beneficiaries Added to and Removed from Retiree Payroll For 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
2007	1,521	136	\$4,419	38	\$560	1,620	\$31,823	16.58%	\$19,644
2008	1,620	105	\$2,757	67	\$902	1,658	\$34,603	8.74%	\$20,870
2009	1,658	105	\$3,403	52	\$813	1,711	\$37,748	9.09%	\$22,062
2010	1,711	171	\$6,098	56	\$981	1,826	\$43,653	15.65%	\$23,907
2011	1,826	103	\$2,627	44	\$781	1,885	\$46,177	5.78%	\$24,465
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

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

## Solvency Test For Years Ended June 30 (Dollar Amounts in Thousands)

Actuarial Accrued Liabilities (AAL) For								
1		2		3		Portion of Accrued Liabilities Covered by Reported Assets		
Valuation Date	Active Member Contributions	Retirees and Beneficiaries	Active Members Employer Portion	Actuarial Accrued Liabilities	Valuation Assets	1	2	3
2007	\$59,299	\$358,644	\$234,539	\$652,482	\$480,517	100%	100%	28%
2008	\$66,865	\$370,764	\$254,623	\$692,252	\$488,347	100%	100%	20%
2009	\$65,126	\$448,231	\$296,324	\$809,681	\$483,145	100%	93%	0%
2010	\$64,917	\$532,695	\$333,220	\$930,832	\$509,561	100%	83%	0%
2011	\$65,723	\$558,483	\$309,711	\$933,917	\$523,980	100%	82%	0%
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%

Note: Information compiled from Actuarial Report prepared by Cheiron, Inc. dated June 30, 2016.

# Merced County Employees' Retirement Association

## Actuarial Analysis of Financial Experience

For Years Ended June 30

(Dollar Amounts in Thousands)

Plan Year Ending	Actuarial (Gains)/Losses			Changes in Plan Provisions	Changes in Assumptions/Methods	Total (Gains)/Loss
	Asset Sources	Liability Sources	Total			
2007	\$(3,586)	\$(3,693)	\$(7,279)	N/A	\$625	\$(6,654)
2008	\$48,840	\$(14,186)	\$34,654	N/A	N/A	\$34,654
2009	\$66,987	\$23,892	\$90,879	N/A	N/A	\$90,879
2010	\$16,151	\$8,100	\$24,251	N/A	\$63,410	\$87,661
2011	\$30,955	\$(13,824)	\$17,131	N/A	\$(12,918)	\$4,213
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

## Schedule of Funding Progress

For 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 AL as a % of Covered Payroll
2007	\$480,517	\$652,482	\$171,965	73.6%	\$100,589	171.0%
2008	\$488,347	\$692,252	\$203,905	70.5%	\$109,253	186.6%
2009	\$483,145	\$809,681	\$326,536	59.7%	\$114,984	284.0%
2010	\$509,561	\$930,832	\$421,271	54.7%	\$115,384	365.1%
2011	\$523,980	\$933,917	\$409,936	56.1%	\$111,342	368.2%
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%

\*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, 2016.

# Statistical Section



## Merced County Employees' Retirement Association

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

### Additions by Source

Fiscal Year Ending	Employee Contributions	Employer Contributions	Employer % of Covered Pay-roll	Net Investment Income and Other Income	Total
6/30/2008	\$ 9,357,702	\$ 23,751,437	21.34%	\$ (33,797,400)	\$ (688,261)
6/30/2009	\$ 9,916,305	\$ 27,882,650	23.42%	\$ (105,689,276)	\$ (67,890,321)
6/30/2010	\$ 9,864,161	\$ 29,136,704	24.46%	\$ 48,772,246	\$ 87,773,111
6/30/2011	\$ 9,754,849	\$ 36,662,121	31.26%	\$ 96,031,519	\$ 142,448,489
6/30/2012	\$ 10,416,301	\$ 40,262,881	36.09%	\$ (7,039,276)	\$ 43,639,906
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

### Deductions by Type

Fiscal Year Ending	Benefits	Administrative Expenses	Actuarial Expense	Separation Refunds	Death Refunds	401(d) Distribution to County	Total
6/30/08	\$33,394,363	\$1,029,916	\$ 53,500	\$ 553,705	\$99,438	\$ 850,000	\$35,980,922
6/30/09	\$36,478,886	\$1,005,060	\$ 61,795	\$ 683,528	\$77,275	\$ 850,000	\$39,156,544
6/30/10	\$40,929,109	\$1,170,605	\$ 66,549	\$ 673,160	\$ -	\$ 850,000	\$43,689,423
6/30/11	\$45,022,104	\$1,189,030	\$ 138,200	\$ 766,692	\$ -	\$ 650,000	\$47,766,026
6/30/12	\$49,839,653	\$1,180,083	\$ 63,312	\$ 1,051,526	\$ -	\$ 733,590	\$52,868,164
6/30/13	\$54,257,547	\$1,496,338	\$ 71,402	\$ 1,082,050	\$ -	\$ -	\$56,907,337
6/30/14	\$57,338,930	\$1,434,671	\$ 112,676	\$ 703,091	\$ -	\$ -	\$59,589,368
6/30/15	\$61,780,089	\$2,197,281	\$ 126,165	\$ 1,171,835	\$ -	\$ -	\$65,275,370
6/30/16	\$63,928,672	\$2,416,563	\$ 76,121	\$ 1,153,731	\$ -	\$ -	\$67,575,087
6/30/17	\$66,116,108	\$1,966,898	\$ 206,509	\$ 788,207	\$ -	\$ -	\$69,077,722



# Merced County Employees' Retirement Association

## Schedules of Changes in Fiduciary Net Position (Dollar Amount in Thousands)

<b>Additions</b>	<b>6/30/2017</b>	<b>6/30/2016</b>	<b>6/30/2015</b>	<b>6/30/2014</b>	<b>6/30/2013</b>
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
<b>Deductions</b>					
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
401(h) distribution	-	-	-	-	-
Total deductions	69,077	67,576	65,275	59,589	56,907
<b>Change in fiduciary net position</b>	83,754	(2,304)	14,994	94,305	57,888
<b>Net position restricted for pensions at beginning of the year</b>	670,015	672,319	657,325	563,020	505,132
<b>Net position restricted for pensions at end of the year</b>	\$763,769	\$670,015	\$672,319	\$657,325	\$563,020
<b>Additions</b>	<b>6/30/2012</b>	<b>6/30/2011</b>	<b>6/30/2010</b>	<b>6/30/2009</b>	<b>6/30/2008</b>
Plan members contributions	\$10,416	\$9,754	\$9,864	\$9,916	\$9,358
Employer contributions	40,263	36,662	29,137	27,883	23,751
Net investment income/(loss)	(7,039)	96,032	48,772	(105,689)	(33,797)
Total additions	43,640	142,448	87,773	(67,890)	(688)
<b>Deductions</b>					
Benefits paid	49,839	45,022	40,929	36,479	33,394
Administrative expenses	1,180	767	673	761	653
Actuarial expenses	63	138	67	62	54
Refunds	1,052	1,189	1,171	1,005	1,030
401(h) distribution	734	650	850	850	850
Total deductions	52,868	47,766	43,690	39,157	35,981
<b>Change in fiduciary net position</b>	(9,228)	94,682	44,083	(107,047)	(36,669)
<b>Net position restricted for pensions at beginning of the year</b>	514,361	419,678	375,595	482,642	519,311
<b>Net position restricted for pensions at end of the year</b>	\$505,132	\$514,361	\$419,678	\$375,595	\$482,642

# Merced County Employees' Retirement Association

## Schedules of Benefit Expenses by Type

(Total amount in Thousands)

	2017**	2016**	2015**	2014*	2013*	2012*	2011*	2010*	2009*	2008
<b>Service Retirement</b>										
General	\$47,522	\$46,126	\$44,722	\$41,442	\$39,447	\$35,897	\$31,770	\$28,665	\$25,086	\$22,868
Safety	8,059	7,761	7,854	7,196	6,679	6,209	5,845	5,404	4,720	4,139
Total	\$55,581	\$53,887	\$52,576	\$48,638	\$46,126	\$42,106	\$37,615	\$34,069	\$29,806	\$27,007
<b>Disability Retirement</b>										
General	\$2,117	\$1,953	\$1,842	\$2,600	\$2,489	\$2,230	\$2,159	\$2,154	\$2,103	\$1,975
Safety	2,759	2,604	2,623	3,005	2,898	2,738	2,522	2,424	2,396	2,312
Total	\$4,876	\$4,557	\$4,465	\$5,605	\$5,387	\$4,968	\$4,681	\$4,578	\$4,499	\$4,287
<b>Beneficiary/Survivor</b>										
General	\$3,767	\$3,667	\$3,327	\$2,346	\$2,030	\$2,035	\$2,049	\$1,762	\$1,574	\$1,686
Safety	1,729	1,650	1,258	610	562	579	521	412	380	414
Total	\$5,496	\$5,317	\$4,585	\$2,956	\$2,592	\$2,614	\$2,570	\$2,174	\$1,954	\$2,100
<b>Total payroll expense</b>										
General	\$53,406	\$51,746	\$49,891	\$46,387	\$43,966	\$40,162	\$35,978	\$32,580	\$28,763	\$26,529
Safety	12,547	12,015	11,735	10,811	10,139	9,526	8,887	8,240	7,496	6,865
Total	\$65,953	\$63,761	\$61,626	\$57,198	\$54,105	\$49,688	\$44,865	\$40,820	\$36,259	\$33,394
<b>Death Benefits</b>										
General	\$111	\$129	\$84	\$96	\$96	\$117	\$81	\$99	\$179	\$ -
Safety	12	15	18	18	12	9	-	9	41	-
Total	\$123	\$144	\$102	\$114	\$108	\$126	\$81	\$108	\$220	\$ -
<b>Separation Refund Expense</b>										
General	\$674	\$978	\$1,033	\$582	\$985	\$861	\$729	\$599	\$562	\$ -
Safety	114	176	139	121	97	190	37	74	122	-
Total	\$788	\$1,154	\$1,172	\$703	\$1,082	\$1,051	\$766	\$673	\$684	\$ -
<b>Active Death Expense</b>										
General	\$40	\$24	\$51	\$29	\$44	\$26	\$82	\$ -	\$77	\$ -
Safety	-	-	-	-	-	-	-	-	-	-
Total	\$40	\$24	\$51	\$29	\$44	\$26	\$82	\$ -	\$77	\$ -

\*In 2009 MCERA added separation refunds, death refunds and death benefits. Prior to 2009 this information was not separately identified. The information was compiled from County of Merced Information Systems and CPAS. In 2011, MCERA changed death refund expense to active death expense to better identify expense for active member death.

\*\*During the 2015 fiscal year, MCERA converted to the CPAS System. Because of differences in handling data, beneficiaries of disability

# Merced County Employees' Retirement Association

## Schedule of Retired Members by Type of Benefit

(Summary of Monthly Allowances Being Paid-As of June 30, 2017)

Type of Benefit	General Members		Safety Members		Total	
	Number	Average Monthly Allowance	Number	Average Monthly Allowance	Number	Average Monthly Allowance
Service Retirement	1,567	\$2,618	190	\$3,632	1,757	\$2,728
Disability	96	\$1,768	87	\$2,730	183	\$2,225
Beneficiary/Survivor	232	\$1,336	53	\$2,347	285	\$1,524
<b>Total Retired Members</b>	<b>1,895</b>	<b>\$2,418</b>	<b>330</b>	<b>\$3,188</b>	<b>2,225</b>	<b>\$2,532</b>

This schedule excludes separation refunds and death refunds.

## Ten Year Structure of Retiree Membership History



	2017*	2016*	2015*	2014	2013	2012	2011	2010	2009	2008
<b>Service Retirements</b>	1,757	1,713	1,706	1,685	1,613	1,570	1,463	1,411	1,307	1,258
<b>Disability Retirements</b>	183	184	180	260	257	236	233	230	234	233
<b>Beneficiaries and Survivors</b>	285	286	276	187	176	192	187	185	172	172
<b>Total</b>	<b>2,225</b>	<b>2,183</b>	<b>2,162</b>	<b>2,132</b>	<b>2,046</b>	<b>1,998</b>	<b>1,883</b>	<b>1,826</b>	<b>1,713</b>	<b>1,663</b>

\*During the 2014-2015 fiscal year, MCERA 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.

# Merced County Employees' Retirement Association

## Summary of Retired Membership

For Years Ended June 30

(Basic Annual and Total Annual Allowance Dollars in Thousands)

	2017*	2016*	2015*	2014	2013	2012	2011	2010	2009	2008
<b>General</b>										
Number	1,895	1,860	1,848	1,810	1,730	1,693	1,590	1,545	1,454	1,412
Basic annual allowance	\$41,930	\$41,265	\$40,316	\$37,646	\$35,885	\$32,933	\$29,232	\$26,331	\$22,771	\$22,592
Average basic monthly allowance	\$1,844	\$1,849	\$1,818	\$1,733	\$1,729	\$1,621	\$1,532	\$1,420	\$1,305	\$1,333
Total annual allowance**	\$53,406	\$51,746	\$49,891	\$46,387	\$43,966	\$40,161	\$35,978	\$32,561	\$28,712	\$28,019
Average total monthly allowance	\$2,349	\$2,318	\$2,250	\$2,136	\$2,118	\$1,976	\$1,886	\$1,756	\$1,646	\$1,654
<b>Safety</b>										
Number	330	323	314	322	316	305	293	281	259	251
Basic annual allowance	\$9,347	\$9,086	\$8,996	\$8,279	\$7,791	\$7,379	\$6,863	\$6,401	\$5,746	\$5,262
Average basic monthly allowance	\$2,360	\$2,344	\$2,387	\$2,143	\$2,054	\$2,016	\$1,952	\$1,898	\$1,849	\$1,747
Total annual allowance**	\$12,547	\$12,015	\$11,735	\$10,811	\$10,139	\$9,527	\$8,887	\$8,240	\$7,497	\$6,878
Average total monthly allowance	\$3,168	\$3,100	\$3,114	\$2,798	\$2,674	\$2,603	\$2,528	\$2,444	\$2,412	\$2,284
<b>Total</b>										
Number	2,225	2,183	2,162	2,132	2,046	1,998	1,883	1,826	1,713	1,663
Basic annual allowance	\$51,277	\$50,351	\$49,312	\$45,925	\$43,676	\$40,312	\$36,095	\$32,732	\$28,517	\$27,854
Average basic monthly allowance	\$1,920	\$1,922	\$1,901	\$1,795	\$1,779	\$1,681	\$1,597	\$1,494	\$1,387	\$1,396
Total annual allowance**	\$65,953	\$63,761	\$61,626	\$57,198	\$54,106	\$49,688	\$44,865	\$40,801	\$36,209	\$34,897
Average total monthly allowance	\$2,470	\$2,434	\$2,375	\$2,236	\$2,204	\$2,072	\$1,986	\$1,862	\$1,761	\$1,749

\*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. Excludes death refunds, lump sum death benefits and separation refunds.

# Merced County Employees' Retirement Association

## Retired Members by Type of Retirement

As of June 30, 2017

Amount of Monthly Benefit	Number of Members	Type of Retirement*							Option Selected**					
		1	2	3	4	5	6	7	U	1	2	3	4	SD
1-250	83	20	37	20	-	5	1	-	49	5	21	8	-	-
251-500	139	37	65	22	4	4	2	5	105	4	24	2	-	4
501-750	189	56	94	25	4	3	-	7	147	9	26	3	-	4
751-1,000	181	51	85	28	5	-	7	5	147	7	17	5	-	5
1,001-1,250	181	63	76	28	5	2	7	-	146	4	24	2	-	5
1,251-1,500	171	59	71	13	1	8	17	2	144	2	15	8	1	1
1,501-1,750	133	51	44	15	0	7	9	7	110	2	15	5	1	-
1,751-2,000	119	52	39	10	2	12	1	3	104	-	11	2	-	2
Over-2,000	1,029	481	376	50	6	95	3	18	902	28	67	17	9	6
	2,225	870	887	211	27	136	47	47	1,854	61	220	52	11	27

\*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-Duty disability retirement

6-Non-duty 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 Years

Retirement Effective Dates	Years of Credited Service						
	0-5	5-10	10-15	15-20	20-25	25-30	30+
<b>Period 7/1/2016 to 6/30/2017</b>							
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
<b>Period 7/1/2015 to 6/30/2016</b>							
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
<b>Period 7/1/2014 to 6/30/2015</b>							
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
<b>Period 7/1/2013 to 6/30/2014</b>							
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
<b>Period 7/1/2012 to 6/30/2013</b>							
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
<b>Period 7/1/2011 to 6/30/2012</b>							
Average monthly benefit	\$612	\$899	\$1,359	\$2,476	\$3,958	\$4,683	\$6,166
Average final average salary	\$9,507	\$4,097	\$3,953	\$5,148	\$6,270	\$6,257	\$7,060
Number of retired members	5	9	26	27	36	15	24
<b>Period 7/1/2010 to 6/30/2011</b>							
Average monthly benefit	\$805	\$926	\$1,120	\$2,171	\$3,693	\$4,289	\$8,010
Average final average salary	\$8,545	\$5,111	\$4,042	\$4,657	\$5,715	\$5,687	\$8,180
Number of retired members	8	21	23	8	18	5	5
<b>Period 7/1/2009 to 6/30/2010</b>							
Average monthly benefit	\$359	\$1,247	\$1,354	\$2,831	\$4,149	\$4,563	\$5,294
Average final average salary	\$7,068	\$6,819	\$4,167	\$5,713	\$6,780	\$6,148	\$6,112
Number of retired members	7	14	25	24	31	15	22
<b>Period 7/1/2008 to 6/30/2009</b>							
Average monthly benefit	\$485	\$1,020	\$1,321	\$3,992	\$4,521	\$4,022	\$6,335
Average final average salary	\$7,668	\$4,285	\$4,545	\$7,526	\$7,935	\$5,455	\$7,172
Number of retired members	5	9	21	11	14	10	12
<b>Period 7/1/2007 to 6/30/2008</b>							
Average monthly benefit	\$417	\$959	\$1,496	\$2,380	\$2,828	\$4,078	\$5,214
Average final average salary	\$6,765	\$4,366	\$4,714	\$5,203	\$6,662	\$5,470	\$4,311
Number of retired members	4	15	16	13	13	9	6

**Merced County Employees' Retirement Association**  
**Participating Employers and Active Members**  
Last Ten Years

County of Merced	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
General members	1,665	1,596	1,542	1,490	1,478	1,453	1,521	1,575	1,708	1,852
Safety members	320	311	300	298	294	306	322	331	342	352
Total County of Merced	1,985	1,907	1,842	1,788	1,772	1,759	1,843	1,906	2,050	2,204
Percentage of membership	93.68%	93.39%	93.65%	93.56%	93.21%	92.53%	92.85%	93.07%	93.61%	94.19%

**Participating employers**

<b>Merced Cemetery District</b>	1	1	1	1	1	2	2	2	3	3
Percentage of membership	0.05%	0.05%	0.05%	0.05%	0.05%	0.11%	0.10%	0.09%	0.13%	0.13%

<b>Transit Joint Powers Authority</b>	-	-	-	-	-	1	3	3	-	-
Percentage of membership	-	-	-	-	-	0.05%	0.15%	0.14%	-	-

<b>Merced Superior Court</b>	133	129	118	112	115	126	137	137	137	133
Percentage of membership	6.28%	6.32%	6.00%	5.86%	6.05%	6.63%	6.90%	6.33%	6.01%	5.68%

<b>Regional Waste Mgt Authority</b>	-	5	6	10	13	13	-	-	-	-
Percentage of membership	-	0.24%	0.31%	0.52%	0.68%	0.68%	-	-	-	-

**Total Active Membership**

General	1,799	1,731	1,667	1,613	1,607	1,595	1,663	1,717	1,848	1,988
Safety	320	311	300	298	294	306	322	331	342	352
Total	2,119	2,042	1,967	1,911	1,901	1,901	1,985	2,048	2,190	2,340