

Marin County Employees' Retirement Association

GASB 67/68 Report as of June 30, 2017

Produced by Cheiron

October 2017

TABLE OF CONTENTS

<u>Section</u>	\underline{P}	<u>age</u>
Letter of Tran	smittal	. i
Section I	Board Summary	1
Section II	Certification	3
Section III	Determination of Discount Rate	.4
Section IV	Projection of Total Pension Liability	5
Section V	GASB 67 Reporting Information	.6
Section VI	GASB 68 Collective Amounts	10
Section VII	GASB 68 Reporting Information for Participating Employers	14
<u>Appendices</u>		
Appendix A	Membership Information	24
Appendix B	Actuarial Assumptions and Methods	27
Appendix C	Summary of Plan Provisions	29
Appendix D	Glossary of Terms	30





October 30, 2017

Board of Retirement Marin County Employees' Retirement Association 1 McInnis Parkway, Suite 100 San Rafael, California 94903-2764

Dear Members of the Board:

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the Marin County Employees' Retirement Association (MCERA) and under GASB 68 for the County of Marin and the other participating employers. This information includes:

- Determination of the discount rate as of June 30, 2017,
- Projection of MCERA's Total Pension Liability from the valuation date to the measurement date.
- Note disclosures and required supplementary information under GASB 67 for MCERA,
- Determination of collective amounts under GASB 68, and
- Schedules for the financial reporting of participating employers under GASB 68.

If you have any questions about the report or would like additional information, please let us know.

Sincerely, Cheiron

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

William R. Hallmark, ASA, EA, FCA, MAAA Consulting Actuary

William R. Hall whe

SECTION I – BOARD SUMMARY

The purpose of this report is to provide accounting and financial disclosure information under the Government Accounting Standards Board Statements 67 and 68 for the Marin County Employees' Retirement Association (MCERA) and participating employers. This information includes:

- Determination of the discount rate as of June 30, 2017,
- Projection of MCERA's Total Pension Liability from the valuation date to the measurement date,
- Note disclosures and required supplementary information under GASB 67 for MCERA,
- Determination of collective amounts under GASB 68, and
- Schedules for the financial reporting of participating employers under GASB 68.

Highlights

The measurement date for the Marin County Employees' Retirement Association is June 30, 2017. Measurements 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, updated to June 30, 2017. To the best of our knowledge, there were no significant events between the valuation date and the measurement date so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

The table below provides a summary of the key collective results during this measurement period.

Ta Summary of C	ble I-1 Collec			
		Measurer	ne n	t Date
		6/30/2017		6/30/2016
Net Pension Liability	\$	368,756,305	\$	477,930,440
Deferred Outflows		(36,188,412)		(115,510,119)
Deferred Inflows		38,436,190		15,686,622
Net Impact on Statement of Net Position	\$	371,004,083	\$	378,106,943
Pension Expense (\$ Amount)*	\$	70,400,085	\$	82,501,777
Pension Expense (% of Payroll)		29.09%		34.64%

^{*} Prior year numbers changed as a result of GASB 82 guidance.

The Net Pension Liability (NPL) decreased approximately \$109 million since the prior measurement date, primarily due to the return on investments being greater than expected. The combination of the investment income plus the employer and employee contributions less



SECTION I – BOARD SUMMARY

administrative expenses exceeded the increase in the Total Pension Liability (TPL) due to interest and service cost.

The gains due to investment earnings being significantly greater than expected are recognized over five years. The losses due to prior assumption changes and small gains due to liability experience are recognized over the average remaining service life, which is four years. Unrecognized amounts are reported as deferred inflows and deferred outflows.

The GASB has recently issued additional guidance (GASB 82) that addresses several topics, including the treatment of employer-paid member contributions. As a result of this guidance, some amounts previously shown as employer contributions in the financial statements have been reclassified as member contributions. These reclassifications do not affect the current or prior Net Pension Liability calculations, but we have revised the historical information shown in the Schedule of Changes in Collective Net Pension Liability and the Schedule of Collective Employer Contributions (Tables V-3 and V-4) to reflect the updated guidance. We have also revised some of the schedules related to the individual employer deferred inflow and outflow calculations, as described later in this report.

As of the end of the reporting year, MCERA and its participating employers would report a Net Pension Liability of \$368,756,305, Collective Deferred Inflows of \$38,436,190, and Collective Deferred Outflows of \$36,188,412. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to MCERA would be \$371,004,083 (\$368,756,305 + \$38,436,190 - \$36,188,412) at the end of the measurement year. In addition, any contributions between the measurement date and each individual employer's reporting date would be reported as deferred outflows to offset the cash outflow reported.

For the measurement year ending June 30, 2017, the collective annual pension expense is \$70,400,085 or 29.09% of covered-employee payroll. This amount is not related to participating employers' contributions to MCERA (\$77,502,945), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions (\$371,004,083 – \$378,106,943 + \$77,502,945). The collective pension expense is smaller than the collective expense for the prior year. Volatility in pension expense from year to year is to be expected. For the measurement year ending June 30, 2017, the volatility was largely driven by investment returns, but other changes can also have a significant impact. A breakdown of the components of the net pension expense is shown in the report.



SECTION II - CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the Marin County Employees' Retirement Association (MCERA) and under GASB 68 for the employers that participate in MCERA. This report is for the use of MCERA, the participating employers, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. This report is not appropriate for other purposes, including the measurement of funding requirements for MCERA.

In preparing our report, we relied on information (some oral and some written) supplied by MCERA. 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.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This report was prepared for MCERA for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

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

William R. Hallmark, ASA, EA, FCA, MAAA Consulting Actuary



SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.25%.

We have assumed that the employees will continue to contribute to MCERA at the current rates and the employers will continue the historical and legally required practice of contributing to the Plan based on an Actuarially Determined Contribution, reflecting a payment equal to annual Normal Cost, a portion of the expected administrative expenses, and an amount necessary to amortize the remaining Unfunded Actuarial Liability (UAL) as a level percent of payroll over a closed period.

Effective with the June 30, 2013 valuation, the UAL as of June 30, 2013 is amortized over a closed 17-year period (14 years remaining as of June 30, 2016), except for the additional UAL attributable to the outstanding unfunded actuarial loss from 2009, which is being amortized over a separate closed period (currently 22 years).

At a Board meeting held on December 10, 2014, the Board of Retirement adopted a new funding policy for any subsequent unexpected change in the UAL after June 30, 2013. Effective with the June 30, 2014 valuation, any new sources of UAL due to actuarial gains and losses or method changes are amortized over a closed 24-year period, with 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. This new amortization method for gains and losses is similar to a 20-year amortization period with level payments as a percentage of payroll, in conjunction with traditional five-year asset smoothing.

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.

We have not performed a formal cash flow projection as described under Paragraph 41 of GASB Statement 67. However, Paragraph 43 allows for alternative methods to confirm the sufficiency of the Net Position if the evaluations "can be made with sufficient reliability without a separate projection of cash flows into and out of the pension plan..." In our professional judgment, adherence to the actuarial funding policy described above will result in the pension plan's projected Fiduciary Net Position being greater than or equal to the benefit payments projected for each future period.

Therefore, the long-term expected rate of return on MCERA investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.



SECTION IV - PROJECTION OF TOTAL PENSION LIABILITY

The Total Pension Liability (TPL) at the end of the measurement year, June 30, 2017 is measured as of a valuation date of June 30, 2016 and projected to June 30, 2017. There were no significant events during the projection period of which we are aware. Because the TPL shown in the prior report was measured as of June 30, 2015 and projected to June 30, 2016, it will not match the amounts measured as of June 30, 2016 that are shown in this exhibit.

The table below shows the projection of the TPL at discount rates equal to the rate used for disclosure and plus and minus one percent from the rate used for disclosure.

Projection of Collective Total Pension		ble IV-1 iability from \	/alı	iation to Meas	ure	ement Date
Discount Rate		6.25%		7.25%		8.25%
Valuation Collective Total Pension Liability,	6/30/2	2016				
Actives	\$	980,199,652	\$	831,622,032	\$	711,778,113
Deferred Vested		119,288,938		99,928,829		84,929,003
Retirees		1,818,270,698		1,644,233,299		1,497,962,607
Total	\$	2,917,759,288	\$	2,575,784,160	\$	2,294,669,723
Service Cost		72,106,765		57,090,773		45,734,467
Benefit Payments		131,937,062		131,937,062		131,937,062
Interest		180,518,594		184,078,644		185,824,857
Collective Total Pension Liability, 6/30/2017	\$	3,038,447,585	\$	2,685,016,515	\$	2,394,291,985



SECTION V – GASB 67 REPORTING INFORMATION

Note Disclosures

The table below shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of System assets), and the Net Pension Liability during the measurement year.

			Inc	rease (Decrease)	
	1	Fotal Pension Liability (a)		lan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/2016	\$	2,576,627,682	\$	2,098,697,242	\$ 477,930,440
Changes for the year:					
Service cost		57,090,773			57,090,773
Interest		184,139,800			184,139,800
Changes of benefits		0			0
Differences between expected and actual experience		(904,678)			(904,678
Changes of assumptions		0			0
Contributions - employer				77,502,945	(77,502,945
Contributions - member				28,053,775	(28,053,775
Net investment income				248,347,501	(248,347,501
Benefit payments		(131,937,062)		(131,937,062)	0
Administrative expense				(4,404,191)	 4,404,191
Net changes		108,388,833		217,562,968	 (109,174,135
Balances at 6/30/2017	\$	2,685,016,515	\$	2,316,260,210	\$ 368,756,305

During the measurement year, the collective NPL decreased by approximately \$109 million. The service cost and interest cost increased the collective NPL by approximately \$241 million while contributions and investment earnings offset by administrative expenses decreased the collective NPL by approximately \$350 million.

There were no changes in benefits or assumptions during the year. There were actuarial experience gains during the year of approximately \$0.9 million.

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table on the following page shows the sensitivity of the collective NPL to the discount rate.



SECTION V – GASB 67 REPORTING INFORMATION

Table V-2 Sensitivity of Collective Net Pension Liability to Changes in Discount Rate											
		1% Decrease 6.25%		Discount Rate 7.25%		1% Increase 8.25%					
Total Pension Liability	\$	3,038,447,585	\$	2,685,016,515	\$	2,394,291,985					
Plan Fiduciary Net Position Collective Net Pension Liability	\$	2,316,260,210 722,187,375	\$	2,316,260,210 368,756,305	\$	2,316,260,210 78,031,775					
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability		76.2%		86.3%		96.7%					

A one percent decrease in the discount rate increases the TPL by approximately 13% and increases the collective NPL by approximately 96%. A one percent increase in the discount rate decreases the TPL by approximately 11% and decreases the collective NPL by approximately 79%.

Required Supplementary Information

The schedules of Required Supplementary Information generally start with information as of the implementation of GASB 67, and eventually will build up to 10 years of information. The schedule on the next page shows the changes in collective NPL and related ratios required by GASB for the four years since implementation.



SECTION V – GASB 67 REPORTING INFORMATION

Schedule of Changes in Col	lect	Table V-3 ive Net Pensio	on i	Liability and l	Rel	lated Ratios	
		FYE 2017		FYE 2016		FYE 2015	FYE 2014
Total Pension Liability							
Service cost (MOY)	\$	57,090,773	\$	55,208,834	\$	49,064,492	\$ 49,014,858
Interest (includes interest on service cost)		184,139,800		176,564,792		166,718,783	159,521,975
Changes of benefit terms		0		0		0	0
Differences between expected and actual experience		(904,678)		(212,631)		(31,054,299)	0
Changes of assumptions		0		0		144,753,646	0
Benefit payments, including refunds of member contributions		(131,937,062)		(124,203,519)		(115,984,752)	 (109,342,861)
Net change in total pension liability	\$	108,388,833	\$	107,357,476	\$	213,497,871	\$ 99,193,972
Total pension liability - beginning		2,576,627,682		2,469,270,206		2,255,772,335	 2,156,578,363
Total pension liability - ending	\$	2,685,016,515	\$	2,576,627,682	\$	2,469,270,206	\$ 2,255,772,335
Plan fiduciary net position							
Contributions - employer*	\$	77,502,945	\$	75,260,980	\$	68,915,072	\$ 69,980,201
Contributions - member*		28,053,775		27,207,157		24,920,493	22,952,689
Net investment income		248,347,501		42,927,728		100,055,573	309,002,468
Benefit payments, including refunds of member contributions		(131,937,062)		(124,203,519)		(115,984,752)	(109,342,861)
Administrative expense		(4,404,191)		(4,379,760)		(4,654,623)	 (4,503,845)
Net change in plan fiduciary net position	\$	217,562,968	\$	16,812,586	\$	73,251,763	\$ 288,088,652
Plan fiduciary net position - beginning		2,098,697,242		2,081,884,656		2,008,632,893	 1,720,544,241
Plan fiduciary net position - ending	\$	2,316,260,210	\$	2,098,697,242	\$	2,081,884,656	\$ 2,008,632,893
Net pension liability - ending	\$	368,756,305	\$	477,930,440	\$	387,385,550	\$ 247,139,442
Plan fiduciary net position as a percentage of the total pension liability		86.27%		81.45%		84.31%	89.04%
Covered payroll	\$	242,045,311	\$	238,185,040	\$	223,825,880	\$ 218,340,721
Net pension liability as a percentage of covered payroll		152.35%	•	200.66%		173.07%	113.19%

^{*} Prior years' member and employer contributions changed as a result of GASB 82 guidance.



SECTION V – GASB 67 REPORTING INFORMATION

Because an Actuarially Determined Contribution (ADC) has been calculated historically, the full 10 years of information in the following schedule is required.

		Scl	nedule of Co	Table V		tributions				
	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010	FYE 2009	FYE 2008
Actuarially Determined Contribution Contributions in Relation to the	\$ 77,502,945	\$ 75,260,980	\$ 68,915,072	\$ 69,660,201	\$ 69,853,000	\$ 64,690,000	\$ 64,757,000	\$ 56,271,000	\$ 54,555,000	\$ 58,090,000
Actuarially Determined Contribution*	77,502,945	75,260,980	68,915,072	69,660,201	69,853,000	64,690,000	64,757,000	56,271,000	54,555,000	58,090,000
Contribution Deficiency/(Excess) Covered Payroll	\$ 0 \$ 242.045.311	\$ 0 \$ 238,185,040	\$ 0 \$ 223.825.880	\$ 0 \$ 218.340.721	\$ 0 \$211,001,594	\$ 0 \$216,515,000	\$ 0 \$ 215,969,000	\$ 0 \$ 219,556,000	\$ 0 \$ 214,449,000	\$ 0 \$ 107 238 000
Contributions as a Percentage of Covered Payroll	32.02%	31.60%	30.79%	31.90%	33.11%	29.88%	29.98%	25.63%	25.44%	\$ 197,238,000 29.45%

^{*} Prior years' employer contributions changed as a result of GASB 82 guidance.

The notes below summarize the key methods and assumptions used to determine the ADC for FYE 2017.

Notes to Schedule

Valuation Date 6/30/2015 (to determine FY2016-17 contribution)

Timing Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the plan year.

Key Methods and Assumptions Used to Determine Contribution Rates (for FY 2016-17):

Actuarial cost method Entry Age
Asset valuation method Market value

Amortization method Level percentage of payroll with separate periods for Extraordinary Actuarial Gains or Losses (23 years remaining as of 6/30/15), the remaining UAL as of June 30,

2013 (15 years as of 6/30/15), and additional layers for unexpected changes in UAL after 6/30/13 (24 years for gains and losses with a 5-year phase-in/out and 22

years for assumption changes with a 3-year phase-in/out).

Discount rate 7.25% Amortization growth rate 3.00% Price inflation 2.75%

Salary increases 3.00% plus merit component based on employee classification and years of service.

Healthy Mortality Sex distinct CalPERS 2014 Pre-Retirement Non-Industrial Death rates (plus Duty-Related death rates for Safety members), with generational improvements

from a base year of 2009 using Scale MP2014 for active Members.

Sex distinct CalPERS 2014 Post-Retirement Healthy Mortality rates, adjusted by 110% for Safety Males and 95% for Miscellaneous and Safety Females, with

generational improvements from a base year of 2009 using Scale MP2014 for retired Members and their beneficiaries.

Disabled Mortality Sex distinct CalPERS 2014 Disability Death rates (Non-Industrial rates for Miscellaneous members and Industrial rates for Safety members), adjusted by 90%

for Males and Females (Miscellaneous and Safety), with generational improvements from a base year of 2009 using Scale MP2014.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2017 can be found in the June 30, 2015 actuarial valuation report.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

We understand that MCERA's participating employers elected to use the 2014 measurement date for their initial reporting under GASB 68 on their June 30, 2015 reporting date. As a result, the schedules in this section will be used by the employers for their FYE 2018 reporting, and the schedules from our prior report will be used for the employers' FYE 2017 financial reporting.

Because MCERA is a cost-sharing multiple-employer pension plan, each employer participating in MCERA must reflect a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows in their financial statements. This section develops the collective amounts that are allocated to participating employers.

The impact of experience gains or losses and assumption changes on the TPL are recognized in expense over the average expected remaining service life of all active and inactive members of MCERA. As of the measurement date, this recognition period was four years.

During the year, there was an experience gain of approximately \$0.9 million. Approximately \$226,000 of that gain was recognized as a decrease in collective pension expense in the current year and an identical amount will be recognized in each of the next three years. Unrecognized experience gains from prior experience were approximately \$15.7 million, of which \$7.8 million was recognized as a decrease in collective pension expense, resulting in a collective deferred inflow of resources as of June 30, 2017 of approximately \$8.5 million.

Unrecognized increases in the TPL due to assumption changes from prior periods were approximately \$72.4 million, of which \$36.2 million was recognized as an increase in collective pension expense, resulting in a collective deferred outflow of resources as of June 30, 2017 of approximately \$36.2 million.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment gain of approximately \$97.3 million. Approximately \$19.5 million of that gain was recognized as a decrease in collective pension expense in the current year and an identical amount will be recognized in each of the next four years. Unrecognized net investment losses from prior periods were approximately \$43.1 million of which \$4.8 million was recognized as a reduction in collective pension expense in the current year. The combination of unrecognized investment gains this year and unrecognized net investment losses from prior periods results in a collective deferred inflow of resources as of June 30, 2017 of approximately \$29.9 million.

The table on the following page summarizes the current balances of collective deferred outflows and deferred inflows of resources along with the net recognition over the next five years.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

Schedule of Collective Deferred Inflo		Deferred]	Deferred		
		Outflows of Resources	Inflows o Resource			
Differences between expected and actual experience	\$	0	\$	8,548,398		
Changes in assumptions		36,188,412		0		
Net difference between projected and actual earnings						
on pension plan investments		0		20 007 702		
F F		0		29,887,792		
Total	\$	36,188,412	\$	38,436,190		
•	flows	36,188,412		38,436,190		
Total Amounts reported as deferred outflows and deferred in pension expense as follows:	flows	36,188,412		38,436,190		
Total Amounts reported as deferred outflows and deferred in pension expense as follows: Measurement year ended June 30:	flows	36,188,412 s of resources will		38,436,190		
Total Amounts reported as deferred outflows and deferred in pension expense as follows: Measurement year ended June 30: 2018	flows	36,188,412 s of resources will 3,878,232		38,436,190		
Total Amounts reported as deferred outflows and deferred in pension expense as follows: Measurement year ended June 30: 2018 2019	flows	36,188,412 s of resources will 3,878,232 11,599,745		38,436,190		
Total Amounts reported as deferred outflows and deferred in pension expense as follows: Measurement year ended June 30: 2018 2019 2020	flows	36,188,412 3 of resources will 3,878,232 11,599,745 1,731,918		38,436,190		

The collective annual pension expense recognized by the participating employers can be calculated two different ways. First, it is the change in the amounts reported on the participating employers' Statements of Net Position that relate to MCERA and are not attributable to employer contributions. That is, it is the change in collective NPL plus the changes in collective deferred outflows and inflows plus participating employer contributions.

Alternatively, annual pension expense can be calculated by its individual components. While GASB does not require or suggest the organization of the individual components shown in the table on the next page, we believe it helps to understand the level and volatility of the collective pension expense.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

Table VI Calculation of Collectiv	ension Expe	nse	
	Measurement 2017	t Ye :	ar Ending 2016*
Change in Net Pension Liability	\$ (109,174,135)	\$	90,544,890
Change in Deferred Outflows	79,321,708		(6,944,885)
Change in Deferred Inflows	22,749,568		(76,359,208)
Employer Contributions	77,502,945		75,260,980
Pension Expense	\$ 70,400,085	\$	82,501,777
Pension Expense as % of Payroll	29.09%		34.64%
Operating Expenses			
Service cost	\$ 57,090,773	\$	55,208,834
Employee contributions	(28,053,775)		(27,207,157)
Administrative expenses	 4,404,191		4,379,760
Total	\$ 33,441,189	\$	32,381,437
Financing Expenses			
Interest cost	\$ 184,139,800	\$	176,564,792
Expected return on assets	 (151,059,136)		(150,006,527)
Total	\$ 33,080,664	\$	26,558,265
Changes			
Benefit changes	\$ 0	\$	0
Recognition of assumption changes	36,188,412		36,188,412
Recognition of liability gains and losses	(8,042,903)		(7,816,733)
Recognition of investment gains and losses	 (24,267,277)		(4,809,604)
Total	\$ 3,878,232	\$	23,562,075
Pension Expense	\$ 70,400,085	\$	82,501,777

^{*} Prior year numbers changed as a result of GASB 82 guidance.

First, there are components referred to as operating expenses. These are items directly attributable to the operation of the plan during the measurement year. Service cost less employee contributions represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating MCERA for the year.

Second, there are the financing expenses: the interest on the Total Pension Liability and other items, less the expected return on assets. Since the discount rate is equal to the long-term expected return on assets, the financing expense is approximately the interest on the Net Pension Liability, adjusted for cash flows.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

The final category is changes. This category will drive most of the volatility in pension expense from year to year. It includes any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses.

The total collective pension expense decreased from the prior year. In the current year pension expense, the recognition of changes decreased by approximately \$19.7 million compared to last year, and was offset by increases in financing expenses of approximately \$6.5 million, compared to the prior year.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

Proportionate Shares

Because MCERA is a cost-sharing multiple-employer pension plan, each employer participating in MCERA must report a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows in their financial statements. GASB 68 requires that the proportionate share for each employer be determined based on the "employer's projected long-term contribution effort to the pension ... as compared to the total projected long-term contribution effort of all employers" Although not required as part of MCERA's GASB 67 reporting requirements, MCERA is following the advice of the AICPA¹ and making a determination of each employer's proportionate share, which we understand will be reviewed by MCERA's auditor.

Proportionate shares for each employer are determined based on the employer's share of the Unfunded Actuarial Liability (UAL) determined in the most recent actuarial valuation. In Table VII-1, the determination is shown based on the June 30, 2015 and June 30, 2016 Actuarial Valuations.

	Determinat		le VII-1 oyers' Proportio	nate	e Share	
Employer	J	June 30, 2017 UAL (from the June 30, 2016 Actuarial Proportionate Valuation)* June 30, 20 UAL (from the June 30, 2015 Actuarial Proportionate Valuation)				0, 2016 Proportionate Share
County	\$	268,899,150	56.3628%	\$	219,178,258	54.4105%
LAFCO		41,850	0.0088%		8,609	0.0021%
Marin City		40,021	0.0084%		308,646	0.0766%
Mosquito District		5,849,282	1.2260%		4,722,061	1.1722%
South Marin Fire		8,190,306	1.7167%		5,904,554	1.4658%
Tamalpais CSD		2,646,063	0.5546%		2,136,544	0.5304%
Courts		11,454,376	2.4009%		11,376,755	2.8242%
City of San Rafael		156,093,325	32.7180%		140,802,328	34.9538%
Novato Fire		23,872,550	5.0038%		18,386,657	4.5644%
Total	\$	477,086,922	100.0000%	\$	402,824,411	100.0000%

^{*} Numbers may not sum to total due to rounding

As discussed earlier, the GASB has recently issued additional guidance (GASB 82) that addresses several topics, including the treatment of employer-paid member contributions. This guidance does not affect the calculation of proportionate shares for MCERA, but it does affect the calculations of pension expense and deferred inflows and outflows for individual employers related to the actual versus proportionate share of contributions for the current and prior years. Therefore, a prior period adjustment has been made to the appropriate schedule (Table VII-5) to adjust for these changes.

¹http://www.aicpa.org/interestareas/governmentalauditquality/resources/gasbmatters/downloadabledocuments/aicpas lgep cs er reporting whitepaper.pdf



-

SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the proportionate share of the collective NPL (under three discount rates), the collective deferred outflows, the collective deferred inflows, and the collective pension expense allocated to each participating employer as of June 30, 2017.

	Table VII-2 Schedule of Employers' Proportionate Share of Collective Amounts at June 30, 2017*													
Employer	Proportionate Share				hare of NPL @ 7.25%	Sh	nare of NPL @ 8.25%		Share of Deferred Outflows	, —	Share of Deferred Inflows		Pension Expense	
County	56.3628%	\$	407,045,026	\$	207,841,379	\$	43,980,893	\$	20,396,802	\$	21,663,713	\$	39,679,459	
LAFCO	0.0088%		63,552		32,451		6,867		3,185		3,382		6,195	
Marin City	0.0084%		60,664		30,976		6,555		3,040		3,229		5,914	
Mosquito District	1.2260%		8,854,017		4,520,952		956,670		443,670		471,228		863,105	
South Marin Fire	1.7167%		12,397,791		6,330,439		1,339,571		621,246		659,834		1,208,558	
Tamalpais CSD	0.5546%		4,005,251		2,045,122		432,764		200,701		213,167		390,439	
Courts	2.4009%		17,338,997		8,853,470		1,873,465		868,848		922,814		1,690,236	
City of San Rafael	32.7180%		236,285,266		120,649,688		25,530,436		11,840,124		12,575,553		23,033,500	
Novato Fire	5.0038%		36,136,812		18,451,828		3,904,554		1,810,796		1,923,270		3,522,679	
Total	100.0000%	\$	722,187,375	\$	368,756,305	\$	78,031,775	\$	36,188,412	\$	38,436,190	\$	70,400,085	

^{*} Numbers may not sum to total due to rounding

The proportionate share allocated to each individual employer will change on each measurement date. The net effect of the change in proportion on the share of the collective NPL, collective deferred outflows, and collective deferred inflows allocated to each employer becomes a deferred outflow or inflow for that employer and is recognized over the average future working life of MCERA's active and inactive members (four years).

Similarly, the difference between each employer's actual contributions and the employer's proportionate share of collective employer contributions becomes a deferred outflow or inflow for that employer and is recognized over the average future working life of MCERA's active and inactive members (four years).



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the change in proportion and the impact of that change in proportion on the proportionate share of the collective NPL, collective deferred outflows, and collective deferred inflows. It also shows any contribution differences.

	Schedu	lle of Emplo	yers' Change	Table VII- s in Propor		ntribution D	iffe	rences*				
	Proportion	Contributions										
Employer	6/30/2016	6/30/2017	Net Pension Liability	Deferred Outflows	Deferred Inflows	Net Effect		Actual	Pr	oportionate Share		oifference
County	54.4105%	56.3628%	\$ 9,330,636	\$ 2,255,104	\$ (306,250)	\$ 7,381,782	\$	47,485,605	\$	43,682,830	\$	3,802,775
LAFCO	0.0021%	0.0088%	32,021	7,739	(1,051)	25,333		46,997		6,820		40,177
Marin City	0.0766%	0.0084%	(325,949)	(78,778)	10,698	(257,869)		57,842		6,510		51,332
Mosquito District	1.1722%	1.2260%	257,127	62,144	(8,439)	203,422		994,927		950,186		44,740
South Marin Fire	1.4658%	1.7167%	1,199,127	289,815	(39,358)	948,670		2,132,367		1,330,493		801,874
Tamalpais CSD	0.5304%	0.5546%	115,659	27,953	(3,796)	91,502		341,283		429,831		(88,549)
Courts	2.8242%	2.4009%	(2,023,080)	(488,954)	66,401	(1,600,527)		1,989,103		1,860,768		128,335
City of San Rafael	34.9538%	32.7180%	(10,685,569)	(2,582,575)	350,721	(8,453,715)		20,003,002		25,357,414		(5,354,412)
Novato Fire	4.5644%	5.0038%	2,100,026	507,551	(68,927)	1,661,402		4,451,820		3,878,092		573,727
Total	100.0000%	100.0000%	\$ 0	\$ 0	\$ 0	\$ 0	\$	77,502,945	\$	77,502,945	\$	0

^{*} Numbers may not sum to total due to rounding



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the reconciliation of deferred outflows and inflows due to proportion changes for each participating employer from the prior measurement date to the current measurement date.

	Reconciliation	on of Deferre		VII-4 nd Inflows Du	ie to Proportio	n Change*		
		Deferred	l Outflows			Deferre	d Inflows	
Employer	6/30/2016	Current Year Net Effect	Recognition	6/30/2017	6/30/2016	Current Year Net Effect	Recognition	6/30/2017
County	\$ 5,090,694	\$ 7,381,782	\$ 3,542,344	\$ 8,930,132	\$ (12,212,521)	\$ 0	\$ (7,430,932)	\$ (4,781,589)
LAFCO	14,998	25,333	17,437	22,894	(146,897)	0	(73,448)	(73,448)
Marin City	47,167	0	18,723	28,444	0	(257,869)	(64,467)	(193,402)
Mosquito District	659,453	203,422	516,160	346,715	(586,608)	0	(293,304)	(293,304)
South Marin Fire	73,248	948,670	308,947	712,972	(254,785)	0	(84,928)	(169,857)
Tamalpais CSD	352,119	91,502	195,770	247,851	0	0	0	0
Courts	404,292	0	307,830	96,462	(601,081)	(1,600,527)	(600,492)	(1,601,116)
City of San Rafael	14,629,279	0	8,073,666	6,555,613	(4,966,639)	(8,453,715)	(3,768,975)	(9,651,379)
Novato Fire	583,681	1,661,402	878,871	1,366,212	(3,086,400)	0	(1,543,200)	(1,543,200)
Total	\$ 21,854,932	\$ 10,312,111	\$ 13,859,747	\$ 18,307,295	\$ (21,854,932)	\$ (10,312,111)	\$ (13,859,747)	\$ (18,307,295)

^{*} Numbers may not sum to total due to rounding



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the reconciliation of deferred outflows and inflows due to contribution differences for each participating employer from the prior measurement date to the current measurement date.

		Rec	conciliation	of Deferred	l O			VII-5 Inflows Du	ie to	Contribu	tion]	Differe	nces	S*				
		Deferred Inflows																
Employer	6	5/30/2016	Prior Period Adjustment	Current Year Difference		ecognition		6/30/2017		5/30/2016		Period		ent Year ference	Reco	gnition		5/30/2017
County	\$	8,919,529	\$ (1,495,132)			4,504,042	\$	6,723,130	\$	0		0	\$	0	· ·	0	\$	0
LAFCO	_	74,091	(3,377)	40,177	-	37,493	-	73,398	_	(3,121)	_	(171)		0	-	(3,293)	-	0
Marin City		33,807	3,496	51,332		27,571		61,063		0		0		0		0		0
Mosquito District		39,362	25,902	44,740		43,016		66,989		(57,680)		34,805		0		(22,875)		0
South Marin Fire		1,322,650	16,948	801,874		808,655		1,332,818		0		0		0		0		0
Tamalpais CSD		26,354	(26,354)	0		0		0		(23,308)		(51,368)		(88,549)		(51,566)		(111,658)
Courts		0	0	128,335		32,084		96,251		(272,364)		(80,522)		0	(168,980)		(183,907)
City of San Rafael		0	0	0		0		0		(11,646,403)	1	,785,822	(:	5,354,412)	(5,	834,350)		(9,380,643)
Novato Fire		1,630,742	(140,405)	573,727		741,506		1,322,558		(43,660)		(69,644)		0	(113,304)		0
Total	\$ 1	12,046,535	\$(1,618,921)	\$ 5,442,960	\$	6,194,367	\$	9,676,208	\$ (12,046,536)	\$ 1,6	18,921	\$ (5,	,442,961)	\$ (6,1	94,367)	\$	(9,676,208)

^{*} Numbers may not sum to total due to rounding. Prior period adjustment is a result of GASB 82 guidance, where some past employer contributions were reclassified as member contributions.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below summarizes the deferred outflows allocated to each employer for experience, assumption changes, investment returns, proportion changes, and contribution differences.

	Table VII-6 Schedule of Employers' Deferred Outflows at June 30, 2017*													
Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference								
County	56.3628%	\$ 0	\$ 20,396,802	\$ 0	\$ 8,930,132	\$ 6,723,130								
LAFCO	0.0088%	0	3,185	0	22,894	73,398								
Marin City	0.0084%	0	3,040	0	28,444	61,063								
Mosquito District	1.2260%	0	443,670	0	346,715	66,989								
South Marin Fire	1.7167%	0	621,246	0	712,972	1,332,818								
Tamalpais CSD	0.5546%	0	200,701	0	247,851	0								
Courts	2.4009%	0	868,848	0	96,462	96,251								
City of San Rafael	32.7180%	0	11,840,124	0	6,555,613	0								
Novato Fire	5.0038%	0	1,810,796	0	1,366,212	1,322,558								
Total	100.0000%	\$ 0	\$ 36,188,412	\$ 0	\$18,307,295	\$ 9,676,208								

^{*} Numbers may not sum to total due to rounding



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below summarizes the deferred inflows allocated to each employer for experience, assumption changes, investment returns, proportion changes, and contribution differences.

Table VII-7 Schedule of Employers' Deferred Inflows at June 30, 2017*													
Employer	Proportionate Shares				imption anges	Investment Return		Proportion Change		n Contributi Differenc			
County	56.3628%	\$ 4,8	318,116	\$	0	\$	16,845,597	\$	4,781,589	\$	0		
LAFCO	0.0088%		752		0		2,630		73,448		0		
Marin City	0.0084%		718		0		2,511		193,402		0		
Mosquito District	1.2260%	1	104,803		0		366,424		293,304		0		
South Marin Fire	1.7167%	1	46,750		0		513,084		169,857		0		
Tamalpais CSD	0.5546%		47,409		0		165,758		0		111,658		
Courts	2.4009%	2	205,238		0		717,576		1,601,116		183,907		
City of San Rafael	32.7180%	2,7	796,865		0		9,778,688		9,651,379		9,380,643		
Novato Fire	5.0038%	2	127,745		0		1,495,525		1,543,200		0		
Total	100.0000%	\$ 8,54	18,398	\$	0	\$2	29,887,792	\$1	8,307,295	\$	9,676,208		

^{*} Numbers may not sum to total due to rounding



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the net amount of deferred outflows and inflows to be recognized by each participating employer in each of the next five years and the total thereafter.

Schedule of Emp	loyers' F	Recogniti		able VI eferre		Outflow	s a	nd Inflows	at	June 3	30 ,	, 2017*			
	Recognition for Measurement Year Ending														
Employer		2018	2019		2	020		2021		2022		Thereafter	•		
County	\$	4,529,908	\$ 12,269	9,447	\$ 3	3,772,297	\$	(10,966,889)	\$		0	\$	0		
LAFCO		(27,333)	35	5,161		16,530		(1,712)			0		0		
Marin City		(23,900)	(27	7,059)		(51,489)		(1,634)			0		0		
Mosquito District		(54,811)	302	2,930		83,274		(238,551)			0		0		
South Marin Fire		889,991	814	1,016		467,368		(334,030)			0		0		
Tamalpais CSD		107,270	114	1,025		10,343		(107,912)			0		0		
Courts		(504,287)	(348	3,364)		(326,466)		(467,159)			0		0		
City of San Rafael		(906,402)	(3,053	3,891)	(2	,885,383)		(6,366,161)			0		0		
Novato Fire		(132,204)	1,493	3,479		645,444		(973,623)			0		0		
Total	\$	3,878,232	\$11,599	,745	\$ 1,	731,918	\$ ((19,457,673)	\$		0	\$	0		

^{*} Numbers may not sum to total due to rounding



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the calculation of the pension expense for each participating employer. The calculation is shown first as the sum of the proportionate share of the collective pension expense and the amounts recognized for proportion changes and contribution differences. The right side of the table shows the calculation as the sum of the changes in NPL and deferred amounts not attributable to contributions.

Those employers who are using a June 30, 2017 measurement date for their June 30, 2018 financial statements can use this schedule for their annual pension expense.

	Table VII-9 Schedule of Employers' Pension Expense for the Measurement Year Ending June 30, 2017*															
Employer		Collective Pension Expense	Change in Proportion	Prior Period Adjustment		ontribution difference		Employer Pension Expense		Cha et Pension Liability		ge in Employe Deferred Outflows		Deferred Inflows	Employer ontributions	Employer Pension Expense
County	\$	39,679,459	\$ (3,888,589)	\$ (1,495,132)	\$	5,999,174	\$	40,294,912	\$	(52,202,963)	\$	39,314,660	\$	5,697,611	\$ 47,485,605	\$ 40,294,912
LAFCO		6,195	(56,011)	(3,548)		37,749		(15,615)		22,414		(11,338)		(73,688)	46,997	(15,615)
Marin City		5,914	(45,744)	3,496		24,075		(12,259)		(335,119)		80,404		184,614	57,842	(12,259)
Mosquito District		863,105	222,856	60,707		(40,566)		1,106,103		(1,081,348)		1,221,354		(28,830)	994,927	1,106,103
South Marin Fire		1,208,558	224,019	16,948		791,706		2,241,231		(675,065)		438,958		344,971	2,132,367	2,241,231
Tamalpais CSD		390,439	195,770	(77,722)		26,156		534,643		(489,821)		516,233		166,948	341,283	534,643
Courts		1,690,236	(292,662)	(80,522)		(56,374)		1,260,677		(4,644,241)		2,604,968		1,310,848	1,989,103	1,260,677
City of San Rafael		23,033,500	4,304,691	1,785,822		(7,620,172)		21,503,840		(46,405,162)		36,608,717		11,297,284	20,003,002	21,503,840
Novato Fire		3,522,679	(664,329)	(210,049)		838,251		3,486,553		(3,362,829)		2,846,796		(449,234)	4,451,820	3,486,553
Total	\$	70,400,085	\$ 0	\$ 0	\$	0	\$	70,400,085	\$ (109,174,135)	\$	83,620,751	\$	18,450,525	\$ 77,502,945	\$ 70,400,085

^{*} Numbers may not sum to total due to rounding. Prior period adjustment is a result of GASB 82 guidance, where some past employer contributions were reclassified as member contributions.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below summarizes the information needed for each employer's schedules of required supplementary information.

		Schedu	le of Employe	Table VII- ers' RSI Info	10 rmation at Jun	e 30, 2017*			
Employer	Proportionate Shares	Proportionate Share of NPL	Covered Payroll	Share of NPL as a % of Payroll	Plan Fiduciary Net Position as % of TPL	Contractually Required Contribution	Actual Contributions	Contribution Deficiency	Contributions as a % of Payroll
County	56.3628%	\$ 207,841,379	\$ 182,952,561	113.6%	86.3%	\$ 47,485,605	\$ 47,485,605	\$ 0	26.0%
LAFCO	0.0088%	32,451	206,613	15.7%	86.3%	46,997	46,997	0	22.7%
Marin City	0.0084%	30,976	299,135	10.4%	86.3%	57,842	57,842	0	19.3%
Mosquito District	1.2260%	4,520,952	2,965,789	152.4%	86.3%	994,927	994,927	0	33.5%
South Marin Fire	1.7167%	6,330,439	5,680,977	111.4%	86.3%	2,132,367	2,132,367	0	37.5%
Tamalpais CSD	0.5546%	2,045,122	946,274	216.1%	86.3%	341,283	341,283	0	36.1%
Courts	2.4009%	8,853,470	6,934,137	127.7%	86.3%	1,989,103	1,989,103	0	28.7%
City of San Rafael	32.7180%	120,649,688	32,876,910	367.0%	86.3%	20,003,002	20,003,002	0	60.8%
Novato Fire	5.0038%	18,451,828	9,182,914	200.9%	86.3%	4,451,820	4,451,820	0	48.5%
Total	100.0000%	\$ 368,756,305	\$ 242,045,311	152.4%	86.3%	\$ 77,502,945	\$ 77,502,945	\$ 0	32.0%

^{*} Numbers may not sum to total due to rounding



APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of Ju	ne 30, 2016: Co	ounty of M	arin											
			Marin Co	unty					Marin Spec	ial Districts			Total Co	ınty and
	Miscellan	eous	Safe	ety	Tot	al	Miscella	aneous	Saf	ety	To	tal	Special I	Districts
	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016
Active Participants														
Number	1,623	1,682	359	357	1,982	2,039	154	153	49	51	203	204	2,185	2,243
Average Age	49.09	48.81	41.26	40.83	47.67	47.41	51.48	50.07	41.92	41.11	49.17	47.83	47.81	47.45
Average Service	10.63	10.44	11.03	10.85	10.70	10.52	13.26	12.48	7.65	7.73	11.90	11.29	10.81	10.59
Average Pay*	\$81,673	\$84,391	\$102,469	\$103,649	\$85,440	\$87,763	\$74,676	\$77,440	\$103,369	\$103,297	\$81,602	\$83,904	\$85,083	\$87,412
Service Retired														
Number	1,399	1,447	219	234	1,618	1,681	102	120	22	24	124	144	1,742	1,825
Average Age	72.25	72.35	63.55	63.78	71.07	71.16	67.08	67.17	61.88	62.25	66.16	66.35	70.72	70.78
Average Total Benefit*	\$34,794	\$35,394	\$66,927	\$68,116	\$39,144	\$39,949	\$36,154	\$36,118	\$73,717	\$74,360	\$42,819	\$42,491	\$39,405	\$40,150
Beneficiaries														
Number	243	254	62	63	305	317	8	12	9	9	17	21	322	338
Average Age	74.93	74.65	69.67	69.37	73.86	73.60	70.76	66.38	64.86	65.86	67.64	66.15	73.53	73.14
Average Total Benefit*	\$22,723	\$23,174	\$38,665	\$38,674	\$25,964	\$26,254	\$18,026	\$14,550	\$40,435	\$41,502	\$29,890	\$26,101	\$26,171	\$26,245
Duty Disabled														
Number	86	85	100	101	186	186	3	3	16	16	19	19	205	205
Average Age	65.68	66.81	61.88	62.30	63.64	64.36	61.83	62.83	64.42	65.42	64.01	65.01	63.67	64.42
Average Total Benefit*	\$35,522	\$36,358	\$49,279	\$50,937	\$42,918	\$44,275	\$21,669	\$22,211	\$51,780	\$53,075	\$47,026	\$48,201	\$43,299	\$44,639
Ordinary Disabled														
Number	29	31	7	7	36	38	3	3	1	1	4	4	40	42
Average Age	68.43	68.50	54.56	54.38	65.74	65.90	64.21	65.21	55.21	56.21	61.96	62.96	65.36	65.62
Average Total Benefit*	\$20,345	\$20,490	\$47,175	\$46,360	\$25,562	\$25,256	\$25,437	\$25,946	\$54,260	\$55,617	\$32,643	\$33,363	\$26,270	\$26,028
Total In Pay														
Number	1,757	1,817	388	405	2,145	2,222	116	138	48	50	164	188	2,309	2,410
Average Age	72.23	72.35	63.94	64.12	70.73	70.85	67.13	66.96	63.15	63.79	65.96	66.12	70.39	70.48
Average Total Benefit*	\$32,922	\$33,477	\$57,506	\$58,876	\$37,369	\$38,106	\$34,252	\$33,719	\$59,759	\$61,259	\$41,718	\$41,043	\$37,678	\$38,335
Terminated Vested														
Number	174	175	20	21	194	196	17	16	3	4	20	20	214	216
Average Age	50.95	49.55	42.88	45.72	50.12	49.14	48.23	45.85	49.85	50.11	48.47	46.70	49.97	48.91
Average Service	7.81	7.57	6.95	7.13	7.72	7.53	8.88	8.52	2.24	2.58	7.88	7.33	7.73	7.51
Transfers														
Number	203	195	62	68	265	263	27	24	16	16	43	40	308	303
Average Age	50.38	49.61	45.39	45.01	49.21	48.42	50.01	49.36	45.53	46.53	48.34	48.23	49.09	48.40
Average Service	4.80	5.03	4.95	4.86	4.83	4.99	5.48	5.29	5.81	4.95	5.60	5.15	4.94	5.01
Total Inactive														
Number	377	370	82	89	459	459	44	40	19	20	63	60	522	519
Average Age	50.65	49.58	44.78	45.18	49.60	48.73	49.32	47.96	46.21	47.24	48.38	47.72	49.45	48.61
Average Service	6.19	6.23	5.44	5.39	6.05	6.07	6.79	6.58	5.25	4.47	6.33	5.88	6.09	6.05

^{*}All payroll and benefit figures shown are annual



APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of J	une 30, 2016:	City of Sa	n Rafael							
	Miscella	neous	Pol	ice	Fi	re	Total S	afety	То	tal
	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016
Active Participants										
Number	221	221	73	83	55	53	128	136	349	357
Average Age	47.62	47.06	39.21	38.19	40.39	41.00	39.72	39.29	44.73	44.10
Average Service	10.95	10.73	10.61	9.56	10.42	10.71	10.53	10.01	10.79	10.46
Average Pay*	\$75,321	\$76,730	\$112,143	\$112,370	\$124,551	\$129,572	\$117,475	\$119,073	\$90,781	\$92,861
Service Retired										
Number	222	234	73	77	82	82	155	159	377	393
Average Age	68.85	69.12	64.61	65.15	66.77	67.01	65.75	66.11	67.58	67.90
Average Total Benefit*	\$33,607	\$35,033	\$64,828	\$65,623	\$86,377	\$89,573	\$76,228	\$77,974	\$51,130	\$52,406
Beneficiaries										
Number	36	35	16	15	20	22	36	37	72	72
Average Age	75.60	75.77	68.41	67.82	69.97	72.15	69.28	70.39	72.44	73.01
Average Total Benefit*	\$15,781	\$16,655	\$31,046	\$31,590	\$36,681	\$37,646	\$34,176	\$35,191	\$24,979	\$26,180
Duty Disabled										
Number	18	17	38	39	21	21	59	60	77	77
Average Age	65.04	65.40	60.75	61.13	65.76	66.71	62.53	63.09	63.12	63.60
Average Total Benefit*	\$26,299	\$27,310	\$51,826	\$53,191	\$79,231	\$81,219	\$61,581	\$63,001	\$53,333	\$55,121
Ordinary Disabled										
Number	2	2	0	0	0	0	0	0	2	2
Average Age	82.45	83.45	0.00	0.00	0.00	0.00	0.00	0.00	82.45	83.45
Average Total Benefit*	\$11,415	\$11,719	\$0	\$0	\$0	\$0	\$0	\$0	\$11,415	\$11,719
Total In Pay										
Number	278	288	127	131	123	125	250	256	528	544
Average Age	69.58	69.81	63.93	64.26	67.12	67.86	65.50	66.02	67.65	68.03
Average Total Benefit*	\$30,665	\$32,181	\$56,682	\$58,025	\$77,077	\$79,030	\$66,716	\$68,281	\$47,735	\$49,170
Terminated Vested										
Number	27	24	7	5	2	2	9	7	36	31
Average Age	49.77	50.24	48.33	48.08	52.33	53.33	49.22	49.58	49.63	50.09
Average Service	6.00	5.95	9.55	8.82	4.99	4.99	8.54	7.72	6.63	6.35
Transfers										
Number	53	66	20	20	7	7	27	27	80	93
Average Age	46.65	45.94	47.88	46.08	45.97	46.97	47.38	46.31	46.90	46.05
Average Service	2.83	3.03	5.65	5.06	5.06	5.06	5.50	5.06	3.73	3.62
Total Inactive										
Number	80	90	27	25	9	9	36	34	116	124
Average Age	47.71	47.09	48.00	46.48	47.38	48.38	47.84	46.98	47.75	47.06
Average Service	3.90	3.81	6.66	5.81	5.04	5.04	6.26	5.61	4.63	4.30



APPENDIX A – MEMBERSHIP INFORMATION

	Miscella	neous	Safe	ety	To	tal
	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/201
Active Participants						
Number	8	10	67	67	75	7
Average Age	48.62	46.43	42.57	43.78	43.22	44.1
Average Service	11.21	8.92	13.35	14.07	13.12	13.4
Average Pay*	\$102,163	\$87,532	\$119,915	\$124,345	\$118,021	\$119,56
Service Retired						
Number	3	4	52	52	55	5
Average Age	64.48	65.03	65.55	66.24	65.49	66.1
Average Total Benefit*	\$42,542	\$39,449	\$93,708	\$95,282	\$90,917	\$91,29
Beneficiaries						
Number	1	1	15	15	16	1
Average Age	51.67	52.67	63.91	63.66	63.14	62.9
Average Total Benefit*	\$10,934	\$11,207	\$40,620	\$41,648	\$38,765	\$39,74
Duty Disabled						
Number	0	0	31	31	31	3
Average Age	0.00	0.00	67.47	68.47	67.47	68.4
Average Total Benefit*	\$0	\$0	\$63,841	\$65,437	\$63,841	\$65,43
Ordinary Disabled						
Number	0	0	0	0	0	
Average Age	0.00	0.00	0.00	0.00	0.00	0.0
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$
Total In Pay						
Number	4	5	98	98	102	10
Average Age	61.28	62.56	65.91	66.55	65.73	66.3
Average Total Benefit*	\$34,640	\$33,800	\$76,135	\$77,632	\$74,507	\$75,50
Terminated Vested						
Number	1	1	2	3	3	
Average Age	56.56	57.56	47.21	44.50	50.32	47.7
Average Service	6.16	6.16	4.82	7.18	5.26	6.9
Transfers						
Number	1	1	11	10	12	1
Average Age	52.73	53.73	43.08	42.71	43.88	43.7
Average Service	1.25	1.25	3.14	4.04	2.98	3.7
Total Inactive						
Number	2	2	13	13	15	1
Average Age	54.65	55.65	43.71	43.12	45.17	44.7
Average Service	3.71	3.71	3.39	4.76	3.44	4.6

Please refer to the June 30, 2016 Actuarial Valuation Report for a more complete summary of the data.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2017 is provided below, including any assumptions that differ from those used in the June 30, 2016 actuarial valuation. Please refer to the June 30, 2016 Actuarial Valuation Report for a complete description of all other assumptions. The economic and demographic assumptions were adopted by the Board, based on an Experience Study performed by Cheiron covering the period from July 1, 2011 through June 30, 2014. The Experience Study report contains the rationale for all recommended assumptions.

Key Actuarial Assumptions

Expected Return on 7.25 percent per year, net of investment expenses

Assets

COLA

Discount Rate 7.25 percent per year

Price Inflation 2.75% per year

Salary Increases 3.00% per year plus merit component based on employee classification

and years of service.

Administrative Administrative expenses in the actuarial valuation are assumed to be

Expenses \$4.774 million for FY2016-17, to be split between employees and employers based on their share of the overall contributions.

Administrative expenses shown in this report are based on the actual

FY2016-17 amounts.

Postretirement Post retirement COLAs are assumed at the rate of 2.7% for members

with a 4% COLA cap, 2.6% for members with a 3% COLA cap, and

1.9% for members with a 2% COLA cap.

Mortality Rates for Healthy Members

and Inactives

Rates of mortality for active Members are specified by CalPERS 2014 Pre-Retirement Non-Industrial Death rates (plus Duty-Related Death rates for Safety Members), with the 20-year static projection used by CalPERS replaced by generational improvements from a base year of

2009 using Scale MP-2014.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Methods

1. Actuarial Cost Method

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age). For members who transferred from outside of MCERA, entry age is based on entry into the system. The normal cost for the Plan is based on the sum of the individual normal costs for each member (Individual Entry Age Method).

The UAL (or Surplus Funding) is amortized as a percentage of the projected salaries of present and future members of MCERA. Effective with the June 30, 2013 valuation, the UAL as of June 30, 2013 is amortized over a closed 17-year period (14 years remaining as of June 30, 2016), except for the additional UAL attributable to the extraordinary loss from 2008-2009, which is being amortized over a separate closed period (22 years as of June 30, 2016).

Any subsequent unexpected change in the Unfunded Actuarial Liability after June 30, 2013 is amortized over 24 years (22 years for assumption changes) that includes a five-year phase-in/out (three years for assumption changes) of the payments/credits for each annual layer.

2. Valuation of Assets

As of the June 30, 2014 valuation, assets are valued using the market value. The assets used to compute the UAL are the Market Value of Assets, minus the value of any non-valuation contingency reserves. The assets for each employer are allocated based on a roll-forward of the asset balances from the prior year, adjusted for employee and employer contributions, and are used to calculate the UAL amortizations for each employer. Assets are first allocated to cover the liabilities for inactive members (members in pay status or eligible to receive a deferred benefit), and any remaining assets are allocated to each group's active members based on the employer's share of the rolled-forward balances.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

The plan provisions are the same as those summarized in the June 30, 2016 Actuarial Valuation Report.



APPENDIX D – GLOSSARY OF TERMS

1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

6. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.



APPENDIX D – GLOSSARY OF TERMS

7. Net Pension Liability

The liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position. The Net Pension Liability is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling MCERA's benefit obligations in the event of a plan termination or other similar action. However, it is an appropriate measure for assessing the need for or the amount of future contributions.

8. Plan Fiduciary Net Position

The fair or Market Value of Assets.

9. Reporting Date

The last day of the plan or employer's fiscal year.

10. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

11. Total Pension Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method.



