Classic Values, Innovative Advice

Marin County Employees' Retirement Association

GASB 67/68 Report as of June 30, 2016

Produced by Cheiron

November 2016

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November 28, 2016

Board of Retirement
Marin County Employees' Retirement Association
1 McInnis Parkway, Suite 100
San Rafael, CA 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, 2016,
- 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

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, 2016,
- 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, 2016. Measurements are based on the fair value of assets as of June 30, 2016, and the Total Pension Liability as of the valuation date, June 30, 2015, updated to June 30, 2016. 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.

Table I-1
Summary of Collective Results

	Measurement Date	
	6/30/2016	6/30/2015
Net Pension Liability	$ 477,930,440	$ 387,385,550
Deferred Outflows	(115,510,119)	(108,565,235)
Deferred Inflows	15,686,622	92,045,831
Net Impact on Statement of Net Position	$ 378,106,943	$ 370,866,146
Pension Expense ($ Amount)	$ 85,290,611	$ 52,008,669
Pension Expense (% of Payroll)	35.81%	23.24%

The Net Pension Liability (NPL) increased approximately $91 million since the prior measurement date, primarily due to the return on investments being less than expected. The combination of the investment income plus the employer and employee contributions less administrative expenses were exceeded by the increase in the Total Pension Liability (TPL) due to interest and service cost.

The losses due to investment earnings being less than expected are recognized over five years. The losses due to prior assumption changes and 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.

As of the end of the reporting year, MCERA and its participating employers would report a Net Pension Liability of $477,930,440, Collective Deferred Inflows of $15,686,622, and Collective Deferred Outflows of $115,510,119. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to MCERA would be $378,106,943 ($477,930,440 + $15,686,622 – $115,510,119) 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, 2016, the collective annual pension expense is $85,290,611 or 35.81% of covered-employee payroll. This amount is not related to participating employers' contributions to MCERA ($78,049,814), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions ($378,106,943 – $370,866,146 + $78,049,814). The collective pension expense is larger 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, 2016, 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 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 (15 years remaining as of June 30, 2015), except for the additional UAL attributable to the outstanding unfunded actuarial loss from 2009, which is being amortized over a separate closed period (currently 23 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, 2016 is measured as of a valuation date of June 30, 2015 and projected to June 30, 2016. 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, 2014 and projected to June 30, 2015, it will not match the amounts measured as of June 30, 2015 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.

Table IV-1
Projection of Collective Total Pension Liability from Valuation to Measurement Date

Discount Rate	6.25%	7.25%	8.25%
Valuation Collective Total Pension Liability, 6/30/2015			
Actives	$ 948,612,735	$ 804,356,482	$ 688,038,052
Deferred Vested	118,521,640	99,888,316	85,357,306
Retirees	1,732,066,621	1,564,827,151	1,424,468,317
Total	**$ 2,799,200,996**	**$ 2,469,071,949**	**$ 2,197,863,675**
Service Cost	69,701,526	55,208,834	44,241,991
Benefit Payments	124,203,519	124,203,519	124,203,519
Interest	173,272,687	176,550,418	178,090,701
Collective Total Pension Liability, 6/30/2016	**$ 2,917,971,690**	**$ 2,576,627,682**	**$ 2,295,992,848**

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.

Table V-1
Change in Collective Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/2015	$ 2,469,270,206	$ 2,081,884,656	$ 387,385,550
Changes for the year:			
Service cost	55,208,834		55,208,834
Interest	176,564,792		176,564,792
Changes of benefits	0		0
Differences between expected and actual experience	(212,631)		(212,631)
Changes of assumptions	0		0
Contributions - employer		78,049,814	(78,049,814)
Contributions - member		24,418,323	(24,418,323)
Net investment income		42,927,728	(42,927,728)
Benefit payments	(124,203,519)	(124,203,519)	0
Administrative expense		(4,379,760)	4,379,760
Net changes	107,357,476	16,812,586	90,544,890
Balances at 6/30/2016	$ 2,576,627,682	$ 2,098,697,242	$ 477,930,440

During the measurement year, the collective NPL increased by approximately $91 million. The service cost and interest cost increased the collective NPL by approximately $232 million while contributions and investment earnings offset by administrative expenses decreased the collective NPL by approximately $141 million.

There were no changes in benefits or assumptions during the year. There were actuarial experience gains during the year of approximately $0.2 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	$ 2,917,971,690	$ 2,576,627,682	$ 2,295,992,848
Plan Fiduciary Net Position	2,098,697,242	2,098,697,242	2,098,697,242
Collective Net Pension Liability	$ 819,274,448	$ 477,930,440	$ 197,295,606
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	71.9%	81.5%	91.4%

A one percent decrease in the discount rate increases the TPL by approximately 13% and increases the collective NPL by approximately 71%. A one percent increase in the discount rate decreases the TPL by approximately 11% and decreases the collective NPL by approximately 59%.

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 three years since implementation.

SECTION V – GASB 67 REPORTING INFORMATION

Table V-3
Schedule of Changes in Collective Net Pension Liability and Related Ratios

	FYE 2016	FYE 2015	FYE 2014
Total Pension Liability			
Service cost (MOY)	$ 55,208,834	$ 49,064,492	$ 49,014,858
Interest (includes interest on service cost)	176,564,792	166,718,783	159,521,975
Changes of benefit terms	0	0	0
Differences between expected and actual experience	(212,631)	(31,054,299)	0
Changes of assumptions	0	144,753,646	0
Benefit payments, including refunds of member contributions	(124,203,519)	(115,984,752)	(109,342,861)
Net change in total pension liability	**$ 107,357,476**	**$ 213,497,871**	**$ 99,193,972**
Total pension liability - beginning	**2,469,270,206**	**2,255,772,335**	**2,156,578,363**
Total pension liability - ending	**$ 2,576,627,682**	**$ 2,469,270,206**	**$ 2,255,772,335**
Plan fiduciary net position			
Contributions - employer	$ 78,049,814	$ 72,867,357	$ 74,396,755
Contributions - member	24,418,323	20,968,208	18,536,135
Net investment income	42,927,728	100,055,573	309,002,468
Benefit payments, including refunds of member contributions	(124,203,519)	(115,984,752)	(109,342,861)
Administrative expense	(4,379,760)	(4,654,623)	(4,503,845)
Net change in plan fiduciary net position	**$ 16,812,586**	**$ 73,251,763**	**$ 288,088,652**
Plan fiduciary net position - beginning	**2,081,884,656**	**2,008,632,893**	**1,720,544,241**
Plan fiduciary net position - ending	**$ 2,098,697,242**	**$ 2,081,884,656**	**$ 2,008,632,893**
Net pension liability - ending	**$ 477,930,440**	**$ 387,385,550**	**$ 247,139,442**
Plan fiduciary net position as a percentage of the total pension liability	81.45%	84.31%	89.04%
Covered employee payroll	$ 238,185,040	$ 223,825,880	$ 218,340,721
Net pension liability as a percentage of covered employee payroll	200.66%	173.07%	113.19%

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

SECTION V – GASB 67 REPORTING INFORMATION

Table V-4
Schedule of Collective Employer Contributions

	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011	FYE 2010	FYE 2009	FYE 2008	FYE 2007
Actuarially Determined Contribution	$ 78,049,814	$ 72,867,357	$ 74,076,755	$ 69,853,000	$ 64,690,000	$ 64,757,000	$ 56,271,000	$ 54,555,000	$ 58,090,000	$ 57,215,000
Contributions in Relation to the Actuarially Determined Contribution	78,049,814	72,867,357	74,076,755	69,853,000	64,690,000	64,757,000	56,271,000	54,555,000	58,090,000	57,215,000
Contribution Deficiency/(Excess)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Covered-Employee Payroll	$ 238,185,040	$ 223,825,880	$ 218,340,721	$ 211,001,594	$ 216,515,000	$ 215,969,000	$ 219,556,000	$ 214,449,000	$ 197,238,000	$ 186,123,000
Contributions as a Percentage of Covered-Employee Payroll	32.77%	32.56%	33.93%	33.11%	29.88%	29.98%	25.63%	25.44%	29.45%	30.74%

The notes below summarize the key methods and assumptions used to determine the ADC for FYE 2016.

Notes to Schedule

Valuation Date	6/30/2014 (to determine FY2015-16 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 2015-16):

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 (24 years remaining as of 6/30/14), the remaining UAL as of June 30, 2013 (16 years as of 6/30/14), 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, 2016 can be found in the June 30, 2014 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 2017 reporting, and the schedules from our prior report will be used for the employers' FYE 2016 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 $0.2 million. Approximately $53,000 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 $23.3 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, 2016 of approximately $15.7 million.

Unrecognized increases in the TPL due to assumption changes from prior periods were approximately $108.6 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, 2016 of approximately $72.4 million.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of approximately $107.1 million. Approximately $21.4 million of that loss was recognized as an increase 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 gains from prior periods were approximately $68.8 million of which $26.2 million was recognized as a reduction in collective pension expense in the current year. The combination of unrecognized investment losses this year and unrecognized net investment gains from prior periods results in a collective deferred outflow of resources as of June 30, 2016 of approximately $43.1 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

Table VI-1
Schedule of Collective Deferred Inflows and Outflows of Resources

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 0	$ 15,686,622
Changes in assumptions	72,376,823	0
Net difference between projected and actual earnings on pension plan investments	43,133,296	0
Total	**$ 115,510,119**	**$ 15,686,622**

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

Measurement year ended June 30:	
2017	23,562,075
2018	23,562,075
2019	31,283,588
2020	21,415,759
2021	0
Thereafter	$ 0

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-2
Calculation of Collective Pension Expense

	Measurement Year Ending 2016	2015
Change in Net Pension Liability	$ 90,544,890	$ 140,246,108
Change in Deferred Outflows	(6,944,885)	(108,565,235)
Change in Deferred Inflows	(76,359,208)	(52,539,561)
Employer Contributions	78,049,814	72,867,357
Pension Expense	**$ 85,290,611**	**$ 52,008,669**
Pension Expense as % of Payroll	**35.81%**	**23.24%**
Operating Expenses		
Service cost	$ 55,208,834	$ 49,064,492
Employee contributions	(24,418,323)	(20,968,208)
Administrative expenses	4,379,760	4,654,623
Total	$ 35,170,271	$ 32,750,907
Financing Expenses		
Interest cost	$ 176,564,792	$ 166,718,783
Expected return on assets	(150,006,527)	(149,660,495)
Total	$ 26,558,265	$ 17,058,288
Changes		
Benefit changes	$ 0	$ 0
Recognition of assumption changes	36,188,412	36,188,412
Recognition of liability gains and losses	(7,816,733)	(7,763,575)
Recognition of investment gains and losses	(4,809,604)	(26,225,364)
Total	$ 23,562,075	$ 2,199,473
Pension Expense	**$ 85,290,611**	**$ 52,008,669**

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 increased from the prior year. In the current year pension expense, the recognition of changes increased by approximately $21.4 million compared to last year, and was further increased by changes in financing expenses of approximately $9.5 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 AICPA[1] 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, 2014 and June 30, 2015 Actuarial Valuations.

Table VII-1
Determination of Employers' Proportionate Share

	June 30, 2016		June 30, 2015	
Employer	UAL (from the June 30, 2015 Actuarial Valuation)*	Proportionate Share	UAL (from the June 30, 2014 Actuarial Valuation)	Proportionate Share
County	$ 219,178,258	54.4105%	$ 194,886,509	52.5803%
LAFCO	8,609	0.0021%	0	0.0000%
Marin City	308,646	0.0766%	229,957	0.0620%
Mosquito District	4,722,061	1.1722%	3,956,584	1.0675%
South Marin Fire	5,904,554	1.4658%	5,772,318	1.5574%
Tamalpais CSD	2,136,544	0.5304%	1,680,852	0.4535%
Courts	11,376,755	2.8242%	11,268,580	3.0403%
City of San Rafael	140,802,328	34.9538%	136,172,560	36.7394%
Novato Fire	18,386,657	4.5644%	16,677,446	4.4996%
Total	**$ 402,824,411**	**100.0000%**	**$ 370,644,806**	**100.0000%**

* Numbers may not sum to total due to rounding

The GASB has recently issued additional guidance (GASB 82) that addresses several topics, including the treatment of employer-paid member contributions in the development of the proportionate shares and the collective pension expense. This recent guidance will not affect the calculation of proportionate shares for MCERA, but it will affect the calculation of pension expense amounts and deferred inflows and outflows for individual employers in future financial statements.

[1]http://www.aicpa.org/interestareas/governmentalauditquality/resources/gasbmatters/downloadabledocuments/aicpaslgep_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, 2016.

Table VII-2
Schedule of Employers' Proportionate Share of Collective Amounts at June 30, 2016*

Employer	Proportionate Share	Share of NPL @ 6.25%	Share of NPL @ 7.25%	Share of NPL @ 8.25%	Share of Deferred Outflows	Share of Deferred Inflows	Pension Expense
County	54.4105%	$ 445,771,324	$ 260,044,342	$ 107,349,525	$ 62,849,633	$ 8,535,170	$ 46,407,048
LAFCO	0.0021%	17,205	10,037	4,143	2,426	329	1,791
Marin City	0.0766%	627,564	366,095	151,128	88,481	12,016	65,333
Mosquito District	1.1722%	9,603,535	5,602,301	2,312,699	1,354,010	183,879	999,777
South Marin Fire	1.4658%	12,008,925	7,005,504	2,891,959	1,693,147	229,935	1,250,190
Tamalpais CSD	0.5304%	4,345,432	2,534,943	1,046,456	612,666	83,202	452,381
Courts	2.8242%	23,137,949	13,497,711	5,572,022	3,262,237	443,022	2,408,777
City of San Rafael	34.9538%	286,367,552	167,054,850	68,962,311	40,375,176	5,483,071	29,812,310
Novato Fire	4.5644%	37,394,963	21,814,657	9,005,361	5,272,344	716,000	3,893,005
Total	**100.0000%**	**$ 819,274,448**	**$ 477,930,440**	**$ 197,295,606**	**$ 115,510,119**	**$ 15,686,622**	**$ 85,290,611**

* 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.

Table VII-3

Schedule of Employers' Changes in Proportion and Contribution Differences*

	Proportionate Shares		Impact of Change in Proportion				Contributions		
Employer	6/30/2015	6/30/2016	Net Pension Liability	Deferred Outflows	Deferred Inflows	Net Effect	Actual	Proportionate Share	Difference
County	52.5803%	54.4105%	$ 7,089,930	$ 1,986,961	$ (1,684,623)	$ 6,787,592	$ 48,285,321	$ 42,467,294	$ 5,818,027
LAFCO	0.0000%	0.0021%	8,135	2,280	(1,933)	7,788	68,104	1,639	66,465
Marin City	0.0620%	0.0766%	56,558	15,851	(13,439)	54,146	97,906	59,786	38,119
Mosquito District	1.0675%	1.1722%	405,593	113,668	(96,372)	388,297	888,618	914,900	(26,282)
South Marin Fire	1.5574%	1.4658%	(354,845)	(99,446)	84,314	(339,713)	2,151,878	1,144,054	1,007,823
Tamalpais CSD	0.4535%	0.5304%	297,899	83,487	(70,783)	285,196	382,899	413,976	(31,077)
Courts	3.0403%	2.8242%	(837,140)	(234,609)	198,911	(801,442)	1,981,694	2,204,283	(222,589)
City of San Rafael	36.7394%	34.9538%	(6,917,156)	(1,938,541)	1,643,570	(6,622,186)	19,340,505	27,281,376	(7,940,871)
Novato Fire	4.4996%	4.5644%	251,026	70,350	(59,646)	240,321	4,852,889	3,562,506	1,290,383
Total	**100.0000%**	**100.0000%**	**$ 0**	**$ 0**	**$ 0**	**$ 0**	**$ 78,049,814**	**$ 78,049,814**	**$ 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.

Table VII-4
Reconciliation of Deferred Outflows and Inflows Due to Proportion Change*

	Deferred Outflows				Deferred Inflows			
Employer	6/30/2015	Current Year Net Effect	Recognition	6/30/2016	6/30/2015	Current Year Net Effect	Recognition	6/30/2016
County	$ 0	$ 6,787,592	$ 1,696,898	$ 5,090,694	$ (19,643,454)	$ 0	$ (7,430,932)	$ (12,212,521)
LAFCO	18,314	7,788	11,104	14,998	(220,345)	0	(73,448)	(146,897)
Marin City	11,744	54,146	18,723	47,167	0	0	0	0
Mosquito District	736,462	388,297	465,305	659,453	(879,912)	0	(293,304)	(586,608)
South Marin Fire	145,028	0	71,779	73,248	0	(339,713)	(84,928)	(254,785)
Tamalpais CSD	239,817	285,196	172,894	352,119	0	0	0	0
Courts	712,122	0	307,830	404,292	0	(801,442)	(200,360)	(601,081)
City of San Rafael	22,702,945	0	8,073,666	14,629,279	0	(6,622,186)	(1,655,546)	(4,966,639)
Novato Fire	806,881	240,321	463,521	583,681	(4,629,600)	0	(1,543,200)	(3,086,400)
Total	**$ 25,373,311**	**$ 7,763,341**	**$ 11,281,720**	**$ 21,854,932**	**$ (25,373,311)**	**$(7,763,341)**	**$(11,281,720)**	**$ (21,854,932)**

* 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.

Table VII-5
Reconciliation of Deferred Outflows and Inflows Due to Contribution Differences*

	Deferred Outflows				Deferred Inflows			
Employer	6/30/2015	Current Year Difference	Recognition	6/30/2016	6/30/2015	Current Year Difference	Recognition	6/30/2016
County	$ 7,386,113	$ 5,818,027	$ 4,284,611	$ 8,919,529	$ 0	$ 0	$ 0	$ 0
LAFCO	36,364	66,465	28,737	74,091	(6,243)	0	(3,121)	(3,121)
Marin City	8,610	38,119	12,923	33,807	0	0	0	0
Mosquito District	59,043	0	19,681	39,362	(75,937)	(26,282)	(44,539)	(57,680)
South Marin Fire	941,644	1,007,823	626,817	1,322,650	0	0	0	0
Tamalpais CSD	42,189	0	15,835	26,354	0	(31,077)	(7,769)	(23,308)
Courts	0	0	0	0	(162,209)	(222,589)	(112,433)	(272,364)
City of San Rafael	0	0	0	0	(9,136,688)	(7,940,871)	(5,431,156)	(11,646,403)
Novato Fire	994,432	1,290,383	654,073	1,630,742	(87,320)	0	(43,660)	(43,660)
Total	**$ 9,468,395**	**$ 8,220,818**	**$ 5,642,678**	**$ 12,046,535**	**$(9,468,395)**	**$(8,220,818)**	**$ (5,642,678)**	**$ (12,046,536)**

* Numbers may not sum to total due to rounding

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, 2016*

Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference
County	54.4105%	$ 0	$ 39,380,591	$ 23,469,042	$ 5,090,694	$ 8,919,529
LAFCO	0.0021%	0	1,520	906	14,998	74,091
Marin City	0.0766%	0	55,441	33,040	47,167	33,807
Mosquito District	1.1722%	0	848,401	505,608	659,453	39,362
South Marin Fire	1.4658%	0	1,060,899	632,248	73,248	1,322,650
Tamalpais CSD	0.5304%	0	383,887	228,779	352,119	26,354
Courts	2.8242%	0	2,044,066	1,218,171	404,292	0
City of San Rafael	34.9538%	0	25,298,450	15,076,726	14,629,279	0
Novato Fire	4.5644%	0	3,303,568	1,968,776	583,681	1,630,742
Total	**100.0000%**	**$ 0**	**$ 72,376,823**	**$43,133,296**	**$21,854,932**	**$ 12,046,535**

* 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, 2016*

Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference
County	54.4105%	$ 8,535,170	$ 0	$ 0	$ 12,212,521	$ 0
LAFCO	0.0021%	329	0	0	146,897	3,121
Marin City	0.0766%	12,016	0	0	0	0
Mosquito District	1.1722%	183,879	0	0	586,608	57,680
South Marin Fire	1.4658%	229,935	0	0	254,785	0
Tamalpais CSD	0.5304%	83,202	0	0	0	23,308
Courts	2.8242%	443,022	0	0	601,081	272,364
City of San Rafael	34.9538%	5,483,071	0	0	4,966,639	11,646,403
Novato Fire	4.5644%	716,000	0	0	3,086,400	43,660
Total	**100.0000%**	**$15,686,622**	**$ 0**	**$ 0**	**$21,854,932**	**$ 12,046,536**

* 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.

Table VII-8

Schedule of Employers' Recognition of Deferred Outflows and Inflows at June 30, 2016*

	Recognition for Measurement Year Ending					
Employer	**2017**	**2018**	**2019**	**2020**	**2021**	**Thereafter**
County	$ 11,370,820	$ 12,915,963	$ 20,172,961	$ 11,652,422	$ 0	$ 0
LAFCO	(36,234)	(42,269)	19,220	450	0	0
Marin City	49,694	44,310	47,030	16,404	0	0
Mosquito District	423,338	93,075	457,210	251,036	0	0
South Marin Fire	959,041	705,790	625,582	313,912	0	0
Tamalpais CSD	305,933	235,648	229,458	113,589	0	0
Courts	660,476	457,258	627,503	604,824	0	0
City of San Rafael	9,222,804	8,905,878	7,294,038	7,485,622	0	0
Novato Fire	606,201	246,421	1,810,584	977,501	0	0
Total	**$23,562,075**	**$23,562,075**	**$31,283,588**	**$21,415,759**	**$ 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, 2016 measurement date for their June 30, 2017 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, 2016*

					Change in Employer				
Employer	Collective Pension Expense	Change in Proportion	Contribution Difference	Employer Pension Expense	Net Pension Liability	Deferred Outflows	Deferred Inflows	Employer Contributions	Employer Pension Expense
County	$ 46,407,048	$ (5,734,034)	$ 4,284,611	$ 44,957,625	$ 56,355,858	$ (12,389,817)	$ (47,293,736)	$ 48,285,321	$ 44,957,625
LAFCO	1,791	(62,345)	25,616	(34,937)	10,037	(36,838)	(76,240)	68,104	(34,937)
Marin City	65,333	18,723	12,923	96,978	125,916	(81,790)	(45,052)	97,906	96,978
Mosquito District	999,777	172,001	(24,858)	1,146,920	1,466,960	(98,387)	(1,110,272)	888,618	1,146,920
South Marin Fire	1,250,190	(13,149)	626,817	1,863,858	972,362	(311,579)	(948,802)	2,151,878	1,863,858
Tamalpais CSD	452,381	172,894	8,066	633,342	778,150	(216,789)	(310,918)	382,899	633,342
Courts	2,408,777	107,469	(112,433)	2,403,813	1,720,029	346,302	(1,644,211)	1,981,694	2,403,813
City of San Rafael	29,812,310	6,418,119	(5,431,156)	30,799,273	24,731,723	7,584,706	(20,857,661)	19,340,505	30,799,273
Novato Fire	3,893,005	(1,079,679)	610,413	3,423,739	4,383,857	(800,453)	(5,012,554)	4,852,889	3,423,739
Total	**$ 85,290,611**	**$ 0**	**$ 0**	**$ 85,290,611**	**$ 90,544,890**	**$ (6,004,646)**	**$ (77,299,447)**	**$ 78,049,814**	**$ 85,290,611**

* Numbers may not sum to total due to rounding

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.

Table VII-10
Schedule of Employers' RSI Information at June 30, 2016*

Employer	Proportionate Shares	Proportionate Share of NPL	Covered-Employee 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	54.4105%	$ 260,044,342	$ 180,339,571	144.2%	81.5%	$ 48,285,321	$ 48,285,321	$ 0	26.8%
LAFCO	0.0021%	10,037	232,415	4.3%	81.5%	68,104	68,104	0	29.3%
Marin City	0.0766%	366,095	306,716	119.4%	81.5%	97,906	97,906	0	31.9%
Mosquito District	1.1722%	5,602,301	2,856,069	196.2%	81.5%	888,618	888,618	0	31.1%
South Marin Fire	1.4658%	7,005,504	5,290,483	132.4%	81.5%	2,151,878	2,151,878	0	40.7%
Tamalpais CSD	0.5304%	2,534,943	880,657	287.8%	81.5%	382,899	382,899	0	43.5%
Courts	2.8242%	13,497,711	7,074,242	190.8%	81.5%	1,981,694	1,981,694	0	28.0%
City of San Rafael	34.9538%	167,054,850	32,126,272	520.0%	81.5%	19,340,505	19,340,505	0	60.2%
Novato Fire	4.5644%	21,814,657	9,078,616	240.3%	81.5%	4,852,889	4,852,889	0	53.5%
Total	**100.0000%**	**$ 477,930,440**	**$ 238,185,040**	**200.7%**	**81.5%**	**$ 78,049,814**	**$ 78,049,814**	**$ 0**	**32.8%**

* Numbers may not sum to total due to rounding

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2015: County of Marin	Marin County						Marin Special Districts						Total County and Special Districts	
	Miscellaneous		Safety		Total		Miscellaneous		Safety		Total			
	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015
Active Participants														
Number	1,556	1,623	341	359	1,897	1,982	166	154	49	49	215	203	2,112	2,185
Average Age	49.68	49.09	42.07	41.26	48.31	47.67	50.77	51.48	41.61	41.92	48.68	49.17	48.35	47.81
Average Service	11.00	10.63	11.90	11.03	11.16	10.70	12.60	13.26	7.58	7.65	11.45	11.90	11.19	10.81
Average Pay*	$80,674	$81,673	$104,544	$102,469	$84,965	$85,440	$73,487	$74,676	$98,396	$103,369	$79,164	$81,602	$84,374	$85,083
Service Retired														
Number	1,346	1,399	204	219	1,550	1,618	92	102	20	22	112	124	1,662	1,742
Average Age	72.21	72.25	63.43	63.55	71.05	71.07	66.93	67.08	61.05	61.88	65.88	66.16	70.70	70.72
Average Total Benefit*	$33,374	$34,794	$66,037	$66,927	$37,673	$39,144	$36,958	$36,154	$67,734	$73,717	$42,454	$42,819	$37,995	$39,405
Beneficiaries														
Number	256	243	64	62	320	305	8	8	10	9	18	17	338	322
Average Age	75.74	74.93	71.51	69.67	74.89	73.86	69.76	70.76	66.68	64.86	68.05	67.64	74.53	73.53
Average Total Benefit*	$21,568	$22,723	$36,393	$38,665	$24,533	$25,964	$17,551	$18,026	$40,288	$40,435	$30,183	$29,890	$24,834	$26,171
Duty Disabled														
Number	88	86	100	100	188	186	3	3	16	16	19	19	207	205
Average Age	65.24	65.68	61.98	61.88	63.51	63.64	60.83	61.83	63.42	64.42	63.01	64.01	63.46	63.67
Average Total Benefit*	$35,099	$35,522	$47,598	$49,279	$41,747	$42,918	$21,038	$21,669	$50,272	$51,780	$45,656	$47,026	$42,106	$43,299
Ordinary Disabled														
Number	32	29	6	7	38	36	3	3	1	1	4	4	42	40
Average Age	67.38	68.43	56.51	54.56	65.67	65.74	63.21	64.21	54.21	55.21	60.96	61.96	65.22	65.36
Average Total Benefit*	$19,329	$20,345	$48,409	$47,175	$23,920	$25,562	$24,938	$25,437	$52,680	$54,260	$31,874	$32,643	$24,678	$26,270
Total In Pay														
Number	1,722	1,757	374	388	2,096	2,145	106	116	47	48	153	164	2,249	2,309
Average Age	72.29	72.23	64.31	63.94	70.87	70.73	66.87	67.13	62.91	63.15	65.65	65.96	70.51	70.39
Average Total Benefit*	$31,446	$32,922	$55,751	$57,506	$35,783	$37,369	$34,702	$34,252	$55,630	$59,759	$41,131	$41,718	$36,147	$37,678
Terminated Vested														
Number	164	174	16	20	180	194	15	17	3	3	18	20	198	214
Average Age	50.68	50.95	49.33	42.88	50.56	50.12	49.77	48.23	48.85	49.85	49.61	48.47	50.47	49.97
Average Service	8.01	7.81	7.32	6.95	7.94	7.72	6.36	8.88	2.24	2.24	5.67	7.88	7.74	7.73
Transfers														
Number	205	203	59	62	264	265	25	27	16	16	41	43	305	308
Average Age	50.61	50.38	45.64	45.39	49.50	49.21	49.62	50.01	44.53	45.53	47.63	48.34	49.25	49.09
Average Service	4.92	4.80	4.21	4.95	4.76	4.83	4.90	5.48	5.81	5.81	5.26	5.60	4.83	4.94
Total Inactive														
Number	369	377	75	82	444	459	40	44	19	19	59	63	503	522
Average Age	50.64	50.65	46.43	44.78	49.93	49.60	49.68	49.32	45.21	46.21	48.24	48.38	49.73	49.45
Average Service	6.29	6.19	4.87	5.44	6.05	6.05	5.45	6.79	5.25	5.25	5.38	6.33	5.97	6.09

*All payroll and benefit figures shown are annual

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2015: City of San Rafael	Miscellaneous		Police		Fire		Total Safety		Total	
	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015
Active Participants										
Number	217	221	70	73	59	55	129	128	346	349
Average Age	48.03	47.62	38.88	39.21	40.39	40.39	39.57	39.72	44.87	44.73
Average Service	11.11	10.95	10.05	10.61	10.48	10.42	10.24	10.53	10.79	10.79
Average Pay*	$74,713	$75,321	$109,030	$112,143	$120,957	$124,551	$114,485	$117,475	$89,541	$90,781
Service Retired										
Number	211	222	70	73	79	82	149	155	360	377
Average Age	68.78	68.85	64.53	64.61	66.53	66.77	65.59	65.75	67.46	67.58
Average Total Benefit*	$31,917	$33,607	$64,326	$64,828	$82,667	$86,377	$74,050	$76,228	$49,356	$51,130
Beneficiaries										
Number	39	36	17	16	22	20	39	36	78	72
Average Age	76.17	75.60	69.97	68.41	70.51	69.97	70.27	69.28	73.22	72.44
Average Total Benefit*	$14,279	$15,781	$27,305	$31,046	$34,293	$36,681	$31,247	$34,176	$22,763	$24,979
Duty Disabled										
Number	18	18	40	38	21	21	61	59	79	77
Average Age	64.21	65.04	60.39	60.75	64.81	65.76	61.91	62.53	62.43	63.12
Average Total Benefit*	$25,533	$26,299	$49,089	$51,826	$76,923	$79,231	$58,671	$61,581	$51,121	$53,333
Ordinary Disabled										
Number	2	2	0	0	0	0	0	0	2	2
Average Age	81.45	82.45	0.00	0.00	0.00	0.00	0.00	0.00	81.45	82.45
Average Total Benefit*	$11,082	$11,415	$0	$0	$0	$0	$0	$0	$11,082	$11,415
Total In Pay										
Number	270	278	127	127	122	123	249	250	519	528
Average Age	69.63	69.58	63.95	63.93	66.95	67.12	65.42	65.50	67.61	67.65
Average Total Benefit*	$28,789	$30,665	$54,571	$56,682	$72,955	$77,077	$63,579	$66,716	$45,480	$47,735
Terminated Vested										
Number	25	27	7	7	2	2	9	9	34	36
Average Age	49.30	49.77	47.33	48.33	51.33	52.33	48.22	49.22	49.01	49.63
Average Service	7.03	6.00	9.55	9.55	4.99	4.99	8.54	8.54	7.43	6.63
Transfers										
Number	56	53	24	20	6	7	30	27	86	80
Average Age	46.59	46.65	47.66	47.88	42.87	45.97	46.70	47.38	46.63	46.90
Average Service	3.52	2.83	6.17	5.65	5.40	5.06	6.02	5.50	4.39	3.73
Total Inactive										
Number	81	80	31	27	8	9	39	36	120	116
Average Age	47.42	47.71	47.59	48.00	44.98	47.38	47.05	47.84	47.30	47.75
Average Service	4.60	3.90	6.94	6.66	5.30	5.04	6.60	6.26	5.25	4.63

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2015: Novato Fire Protection District	Miscellaneous		Safety		Total	
	6/30/2014	6/30/2015	6/30/2014	6/30/2015	6/30/2014	6/30/2015
Active Participants						
Number	9	8	66	67	75	75
Average Age	49.62	48.62	41.85	42.57	42.78	43.22
Average Service	10.53	11.21	12.55	13.35	12.31	13.12
Average Pay*	$90,563	$102,163	$114,260	$119,915	$111,417	$118,021
Service Retired						
Number	2	3	51	52	53	55
Average Age	62.42	64.48	64.59	65.55	64.51	65.49
Average Total Benefit*	$51,324	$42,542	$92,578	$93,708	$91,021	$90,917
Beneficiaries						
Number	1	1	15	15	16	16
Average Age	50.67	51.67	62.91	63.91	62.21	63.14
Average Total Benefit*	$10,616	$10,934	$39,437	$40,620	$37,636	$38,765
Duty Disabled						
Number	0	0	31	31	31	31
Average Age	0.00	0.00	66.47	67.47	66.47	67.47
Average Total Benefit*	$0	$0	$62,003	$63,841	$62,003	$63,841
Ordinary Disabled						
Number	0	0	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	$0	$0	$0	$0	$0	$0
Total In Pay						
Number	3	4	97	98	100	102
Average Age	58.50	61.28	64.93	65.91	64.75	65.73
Average Total Benefit*	$37,755	$34,640	$74,589	$76,135	$73,484	$74,507
Terminated Vested						
Number	1	1	3	2	4	3
Average Age	55.56	56.56	51.70	47.21	52.66	50.32
Average Service	6.16	6.16	4.94	4.82	5.24	5.26
Transfers						
Number	1	1	10	11	11	12
Average Age	51.73	52.73	42.54	43.08	43.38	43.88
Average Service	1.25	1.25	3.12	3.14	2.95	2.98
Total Inactive						
Number	2	2	13	13	15	15
Average Age	53.65	54.65	44.65	43.71	45.85	45.17
Average Service	3.71	3.71	3.54	3.39	3.56	3.44

Please refer to the June 30, 2015 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, 2016 is provided below, including any assumptions that differ from those used in the June 30, 2015 actuarial valuation. Please refer to the June 30, 2015 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 Assets	7.25 percent per year, net of investment expenses
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 Expenses	Administrative expenses in the actuarial valuation are assumed to be $4.635 million for FY2015-16, 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 FY2015-16 amounts.
Postretirement COLA	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 (15 years remaining as of June 30, 2015), except for the additional UAL attributable to the extraordinary loss from 2008-2009, which is being amortized over a separate closed period (23 years as of June 30, 2015).

   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, 2015 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.

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