



Marin County Employees' Retirement Association

Actuarial Valuation Report as of June 30, 2016

Produced by Cheiron

March 2017

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March 1, 2017

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

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the Marin County Employees' Retirement Association (MCERA, the Plan) as of June 30, 2016. The purpose of this report is to present the results of the annual actuarial valuation of MCERA, including information on the Plan's assets and liabilities and the development of employer and employee contribution rates for the fiscal year beginning July 1, 2017.

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 such other users.

In preparing our report, we relied on information supplied by the MCERA staff. This information includes, but is not limited to, 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 #23.

Future results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions, changes in 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 which 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.

Sincerely,
Cheiron



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



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

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION I – EXECUTIVE SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The funded status of the Plan,
- Past and expected trends in the funding progress of the Plan, and
- Employer and employee contribution rates for Plan Year 2017-2018.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key results, (C) an examination of the historical trends, and (D) the projected outlook for the Plan.

A. Valuation Basis

This valuation determines the employer contributions required for the employers' fiscal years beginning July 1, 2017. The employers are divided into three subgroups: the County of Marin and related Special Districts, the Novato Fire Protection District, and the City of San Rafael.

The Plan's funding policy is to collect contributions from the employers and employees equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method,
- An amortization payment on the Unfunded Actuarial Liability (UAL), and
- The Plan's expected administrative expenses.

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).

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 are amortized over a closed 22-year period, with a three-year ramp up period, two-year ramp down period, and 17 years of level payments as a percentage of payroll.

This valuation was prepared based on the Plan provisions shown in Appendix C. There have been no changes in assumptions or plan provisions since the prior valuation.

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Actuarial experience studies are performed every three years. This valuation was performed based on the economic and demographic assumptions and methods that were determined in the Actuarial Experience Study as of June 30, 2014. A summary of the assumptions and methods used in the current valuation is shown in Appendix B.

This valuation does not include any consideration of external liabilities (or related debt service payments) incurred by the Plan sponsors outside of MCERA, such as those related to pension obligation bonds.

Key Findings of this Valuation

Tables I-1 and I-2 below summarize the key results of the valuation with respect to assets and liabilities for the Plan as a whole, contributions by the main valuation subgroups, and overall membership. The results are presented and compared for both the current and prior plan year.

It is worth noting in the key findings that:

- Overall experience was reasonably close to that anticipated by the Plan's assumptions, reflecting typical levels of fluctuations in assets and liabilities, and there were no unexpected changes that significantly affected costs.
- As a result of lower than expected asset returns, the Plan's funded ratio, the ratio of market assets over Actuarial Liability, decreased from 83.7% last year to 81.5% as of June 30, 2016.
- However, the overall contribution rate for MCERA as a whole still declined slightly, as a result of the phase-in of prior years' actuarial gains.

Table I-1		
Marin County Employees' Retirement Association		
Summary of Key Valuation Results		
(in millions)		
Valuation Date	June 30, 2015	June 30, 2016
Actuarial Liability	\$ 2,469.1	\$ 2,575.8
Market Value of Valuation Assets	<u>2,066.2</u>	<u>2,098.7</u>
Unfunded Actuarial Liability	\$ 402.8	\$ 477.1
Funded Ratio	83.7%	81.5%
Net Employer Contribution Rate		
County of Marin	26.50%	26.13%
Novato Fire Protection District	48.69%	48.06%
City of San Rafael	60.96%	61.04%
Total MCERA	32.22%	31.81%

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Table I-2 Membership Total			
Item	June 30, 2015	June 30, 2016	% Change
Actives	2,609	2,677	2.6%
Current Inactives	653	658	0.8%
Retired Members	<u>2,939</u>	<u>3,057</u>	<u>4.0%</u>
Total Members	6,201	6,392	3.1%
Ratio of Retired Members to Active Members	112.6%	114.2%	
Active Member Payroll (FYE 2016/2017)	\$ 231,589,074	\$ 244,222,469	5.5%
Average Pay per Active	\$ 88,765	\$ 91,230	2.8%

The key results of the June 30, 2016 actuarial valuation are as follows:

- The actuarially determined employer contribution rate decreased for the County from 26.50% to 26.13% of payroll, and Novato from 48.69% to 48.06%. The actuarially determined employer contribution rate for San Rafael increased slightly from 60.96% to 61.04%. Although the Plan experienced investment losses, the losses were offset by contribution rate decreases from the phase-in of prior gains, PEPRA new hires, and higher than expected payroll growth due to expansion in the active workforce.
- As described above, the Plan's funded ratio, the ratio of assets over Actuarial Liability, decreased from 83.7% last year to 81.5% as of June 30, 2016.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Market Value of Assets. The Plan experienced an increase in the UAL from \$402.8 to \$477.1 million. This increase in UAL was primarily due to lower than expected investment returns.
- During the year ending June 30, 2016, the return on Plan assets was 2.07% net of investment expenses, as compared to the 7.25% assumption. Our calculation of this rate of return assumes that external cash flows (i.e., benefit payments, contributions, and administrative expenses) all occur on average mid-year. The use of this simplifying assumption may result in a return that is slightly different from that provided by the investment consultant.
- Overall Plan membership and the number of active members increased compared to last year. There were 295 new hires and rehires during 2015-2016 and the total active population increased from 2,609 to 2,677. The number of members in pay status and deferred status increased from 3,592 to 3,715. Total projected payroll increased from \$231.6 million to \$244.2 million.

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SECTION I – EXECUTIVE SUMMARY

Assets and Liabilities

Table I-3 below presents the assets, liabilities, Unfunded Actuarial Liability, and funding ratios as of June 30, 2016 for each of the three main subgroups.

Table I-3			
Assets & Liabilities			
(in millions)			
Item	County	Novato	San Rafael
Actuarial Liability			
Actives	\$ 637.1	\$ 59.1	\$ 135.4
Current Inactives	77.3	2.9	19.7
Retired Members	<u>1,158.0</u>	<u>110.3</u>	<u>376.0</u>
Total Actuarial Liability	\$ 1,872.4	\$ 172.3	\$ 531.2
Market Value Assets	\$ 1,575.2	\$ 148.4	\$ 375.1
Unfunded Actuarial Liability	\$ 297.1	\$ 23.9	\$ 156.1
Funded Ratio - Market Value	84.1%	86.1%	70.6%
Inactive-Only Funded Ratio	66.0%	65.7%	74.5%

The Inactive-Only Funded Ratio shown in Table I-3 represents the percentage of the Actuarial Liability attributable to members who are not active employees. A funded ratio of 66.0% or more, for example, is required just to fund the liabilities of the inactive County members: those currently retired, disabled, terminated with vested benefits, and their beneficiaries. We note that the funded ratio for San Rafael has fallen slightly below the Inactive-Only Funded Ratio for the current valuation.

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Changes in Employer Contributions

Table I-4 summarizes the impact of actuarial experience and other changes on the employer contribution rate.

Table I-4				
Employer Contribution Reconciliation				
Item	Total	County	Novato	San Rafael
FYE 2017 Net Employer Contribution Rate	32.22%	26.50%	48.69%	60.96%
Expected change in amortization from prior changes	(0.26%)	(0.26%)	(1.70%)	0.12%
Change due to asset loss	0.72%	0.65%	1.34%	0.93%
Change due to contingency reserve drawdown	(0.11%)	(0.13%)	0.00%	0.00%
Change due to demographic (gains)/losses	(0.03%)	(0.07%)	0.25%	0.27%
Change due to PEPRA new hires	(0.29%)	(0.20%)	(0.24%)	(0.57%)
Change due to salary gains	(0.02%)	(0.01%)	(0.05%)	(0.06%)
Change due to effect of payroll on amortization	<u>(0.42%)</u>	<u>(0.35%)</u>	<u>(0.22%)</u>	<u>(0.62%)</u>
Total change from current year's changes	(0.15%)	(0.11%)	1.07%	(0.04%)
FYE 2018 Net Employer Contribution Rate	31.81%	26.13%	48.06%	61.04%

A review of the changes in the employer contribution rate from the prior valuation reveals that Plan experience during the year – including demographic and salary changes, as well as asset experience – resulted in a net decrease in the overall employer contribution rate of 0.15% of pay (the total of the last six rows in the table above) before changes from prior years are taken into account:

- Asset experience produced an investment loss.

The 2.07% return, compared to the 7.25% assumption, resulted in a loss which increased the contribution rate by 0.72% of pay in the current year. The amortization payment for this year's investment losses will continue to be phased-in over the next four years, resulting in similar increases in the employer contribution rates in those years.

- Drawdown of the contingency reserve reduced the County's contribution rate.

The contingency reserve is used to reduce volatility in employer contributions, and can be used to supplement the valuation assets in years when the return on the Market Value of Assets is less than expected. The County had a contingency reserve of approximately \$15.6 million at the beginning of the year, which when drawn down offset the County's contribution rate by 0.13% of payroll. The amortization payment for this offset to the County's unfunded liability will continue to be phased-in over the next four years.

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- Demographic experience was close to expected for all three groups.

The demographic experience of the Plan – rates of retirement, death, disability, and termination – was close to that predicted by the actuarial assumptions in aggregate. There was a small decrease in contribution rate for the County (0.07%), and there were small increases in contribution rates for Novato (0.25%) and San Rafael (0.27%) due to changes in population.

The increases to the Novato and San Rafael rates were primarily driven by an increase in the average employer normal cost rates for the current tiers, based on an influx of new non-PEPRA members with higher entry ages (i.e. members with reciprocal service with another agency or employer), and in some cases, from reductions in the average employee rate as a result of members hitting the 30-year cap on employee contributions. As with the investment losses, the unfunded liability component of these gains and losses will continue to be phased-in over the next four years.

- PEPRA new hires reduced the contribution rates.

PEPRA members make up a growing proportion of the active member population, and they generally contribute a larger share of their cost. PEPRA new hires decreased the contribution rate by 0.29%. As these changes only affect the normal cost, they are not subject to further phase-in.

- Changes in salaries and payroll reduced the contribution rates.

Liability-weighted salary increases for returning members were lower than anticipated for all three groups, reducing the contribution rates by 0.01% of pay for County, 0.05% for Novato and 0.06% for San Rafael. These gains will continue to be phased-in over the next four years.

In addition, the higher than expected overall payroll growth for County, Novato and San Rafael as a result of increases in the active population meant that the UAL is being amortized over a larger than expected payroll base, which further decreased the contribution rate by 0.35%, 0.22% and 0.62%, respectively. The changes in payroll do not affect the dollar amount of the unfunded liability payments, and therefore are not subject to further phase-in.

The net impact of salaries and payroll was a reduction in the current year contribution rates of 0.36% for County, 0.27% for Novato, and 0.68% for San Rafael.

In addition to gains and losses from the Plan experience during the year, there was an expected change in amortization due to the phase-in of prior UAL gains, losses, and assumption changes. This reduced the contribution rates by 0.26% and 1.70% for County and Novato, respectively, and increased the contribution rate by 0.12% for San Rafael. A full description of the prior year changes can be seen in Table IV-2 of this report.

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Changes in UAL

The Unfunded Actuarial Liability (UAL) for MCERA increased by \$74.3 million, from \$402.8 million to \$477.1 million. Table I-5 below presents the specific components of the change in the UAL.

Table I-5				
Change in Unfunded Actuarial Liability				
(in millions)				
Experience	Total	County	Novato	San Rafael
1. Unfunded actuarial liability, 6/30/2015	\$ 402.8	\$ 243.6	\$ 18.4	\$ 140.8
2. Expected change in unfunded actuarial liability	(11.6)	(7.4)	(0.8)	(3.3)
3. Change due to unexpected contributions	(8.9)	(7.2)	(0.6)	(1.2)
4. Change due to investment loss	107.1	80.0	7.8	19.3
5. Change due to contingency reserve drawdown	(16.0)	(16.0)	0.0	0.0
6. Change due to demographic (gains) / losses	6.8	5.5	(0.6)	1.9
7. Change due to salary (gains) / losses	(3.1)	(1.4)	(0.3)	(1.4)
8. Total change in unfunded actuarial liability	\$ 74.3	\$ 53.5	\$ 5.5	\$ 15.3
9. Unfunded actuarial liability, 6/30/2016	\$ 477.1	\$ 297.1	\$ 23.9	\$ 156.1

The overall dollar amount of contributions was slightly higher than expected, based on differences in actual versus projected payroll and the one-year delay in the implementation of contribution rates, which reduced the UAL by \$8.9 million (row 3). The return on the assets used to compute the UAL and the employer contribution rates was 2.07% during the 2015-16 plan year compared to an assumed rate of 7.25%, resulting in an increase in the UAL of \$107.1 million (row 4). The drawdown of the County's contingency reserve reduced the overall UAL by \$16.0 million as of the end of the year (row 5). Finally, liability experience (rows 6 and 7 above) – from salary gains offset by other liability losses – increased the UAL by \$3.7 million.

All of the above combined with the expected UAL reduction (\$11.6 million) from contributions produced an overall increase of \$74.3 million in the UAL last year.

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Plan Risk

One of the most important measures of a plan's risk is the ratio of plan assets to payroll. Table I-6 shows the ratios of assets to active member payroll for each of the three main subgroups within MCERA.

Table I-6			
Asset to Payroll Ratio as of June 30, 2016			
	County	Novato	San Rafael
Active Member Payroll	\$ 200,880,966	\$ 9,420,663	\$ 33,920,840
Assets (Market Value)	\$ 1,575,237,297	\$ 148,395,413	\$ 375,064,531
Ratio of Assets to Payroll	7.84	15.75	11.06
Ratio with 100% Funding	9.32	18.29	15.66

This ratio indicates the sensitivity of the Plan to the returns earned on assets. We note in the table that assets are currently nearly eight times covered payroll for the County; the ratio is over 11 for San Rafael, and nearly 16 for Novato. As funding improves and the Plan reaches 100% funding, the ratio of asset to payroll will increase: to over nine times payroll for the County, nearly 16 for San Rafael, and over 18 for Novato.

To appreciate the impact of the ratio of assets to payroll on the contribution rate, consider the situation for a new plan with almost no assets. Even if the assets suffer a bad year of investment returns, the impact on the plan cost is nil, because the assets are so small.

On the other hand, consider the situation for the County. Suppose MCERA's assets lose 10% of their value in a year. Since they were assumed to earn 7.25%, there is an actuarial loss of 17.25% of plan assets. Based on the current ratio of assets to payroll (784%) for the County, that means the loss in assets is about 135% of active County payroll (784% of the 17.25% loss).

There is only one source of funding to make up for this loss: contributions. Consequently, barring future offsetting investment gains, the County employers would have to make up the asset loss in future contributions. In this example of a one-year loss of 10%, this shortfall will eventually require an average additional amortization payment in the vicinity of 8.9% of payroll if amortized over a 24-year period.

As the plan matures and becomes better funded, the ratio of assets to payroll will increase. When assets are 932% of pay for the County, the 10% loss discussed above will translate to a loss of 161% of payroll, which when amortized over a 24-year period will increase the employer contribution rate by 10.6% of member pay on average. Therefore, the plan is likely to become more sensitive to market variation in the future than it is today.

The expected contribution volatility is higher for San Rafael and Novato, due to their higher relative number of Safety members, who receive higher benefits relative to their payroll. A 10% loss for San Rafael would currently translate to a loss of 191% of pay, which would require an

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average of a 12.6% amortization payment. The same loss for Novato would translate to a loss of 272% of pay, requiring an 18.0% of pay average payment. If the Plan were fully funded, these losses would result in amortization payments of 17.8% and 20.8% for San Rafael and Novato, respectively.

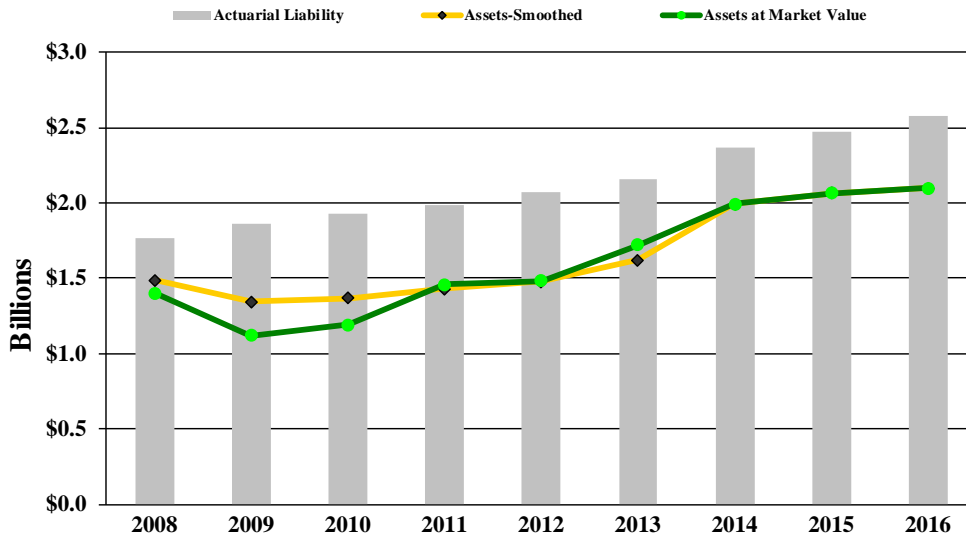
B. Historical Trends

Despite the fact that for most retirement plans the greatest attention is given to the current valuation results, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension plan. It is more important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

Assets and Liabilities

The chart below compares the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) to the Actuarial Liability for the overall MCERA Plan. The percentage shown in the table below the graph is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio is 81.5% as of June 30, 2016, and is slightly lower than the 84.0% funded ratio in 2008.

Chart I-1: Assets and Actuarial Liabilities



Valuation Year	2008	2009	2010	2011	2012	2013	2014*	2015	2016
Funded Ratio	84.0%	72.1%	70.9%	72.1%	71.3%	75.1%	84.3%	83.7%	81.5%
UAL (Billions)	\$ 0.28	\$ 0.52	\$ 0.56	\$ 0.55	\$ 0.59	\$ 0.54	\$ 0.37	\$ 0.40	\$ 0.48

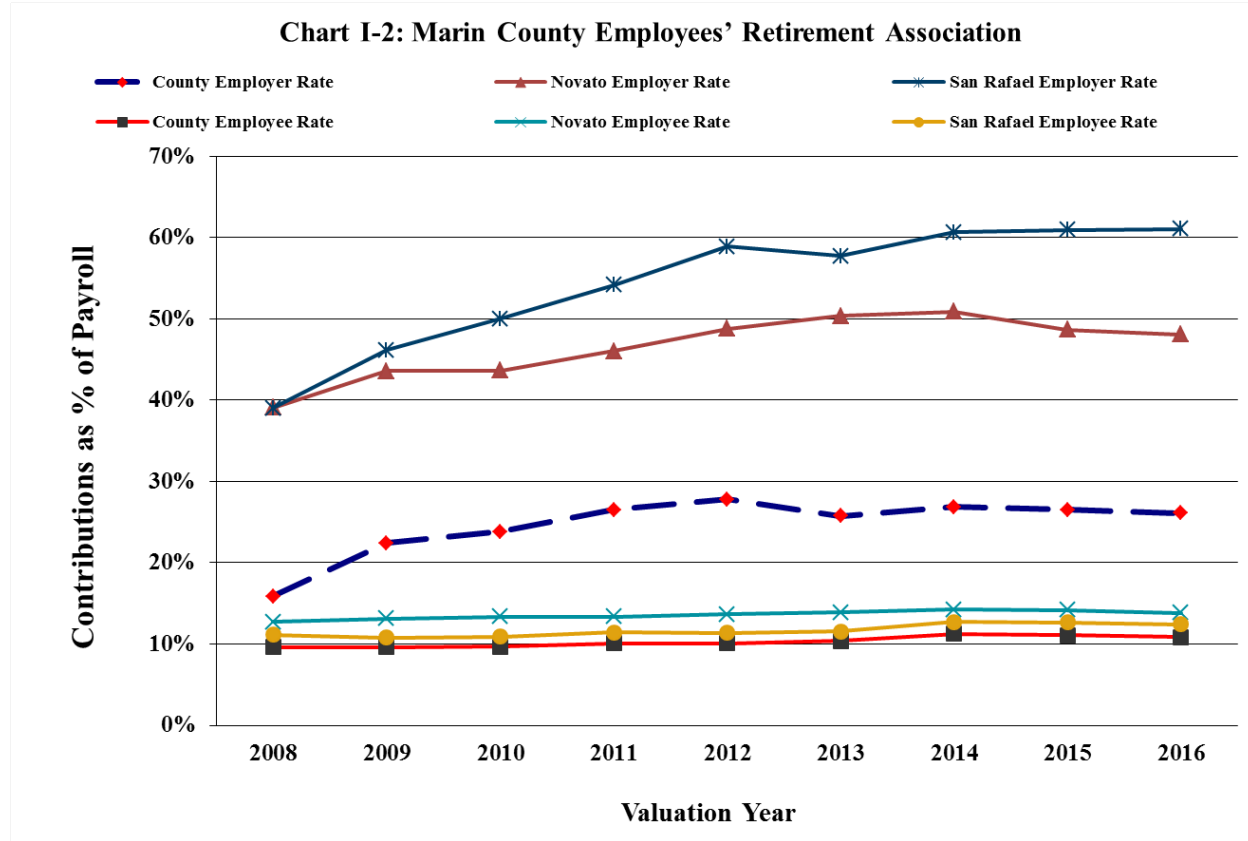
* Beginning in 2014, there is no smoothing of the asset value, thus AVA = MVA.

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Contribution Trends

Chart I-2 presents the historical trends for the MCERA contribution rates. The employer contribution rates rose steadily from 2008 through 2013, as the investment losses from 2008-2009 were recognized in the smoothed value of assets. The average employee contribution rates have stayed relatively stable, increasing slightly as the Plan's economic and mortality assumptions have changed.



Gains and Losses

The following chart for MCERA presents the pattern of annual gains and losses for the overall Plan, broken into the investment and liability components. Prior to 2014 the investment gains and losses represent the changes on a smoothed basis (i.e., based on the Actuarial Value of Assets). As of 2014, the Actuarial Value of Assets was set equal to the Market Value of Assets, and the last year's investment gains and losses represent changes on an actual basis. The chart does not include any changes in MCERA's assets and liabilities attributable to changes to actuarial methods, assumptions, or plan benefit changes.

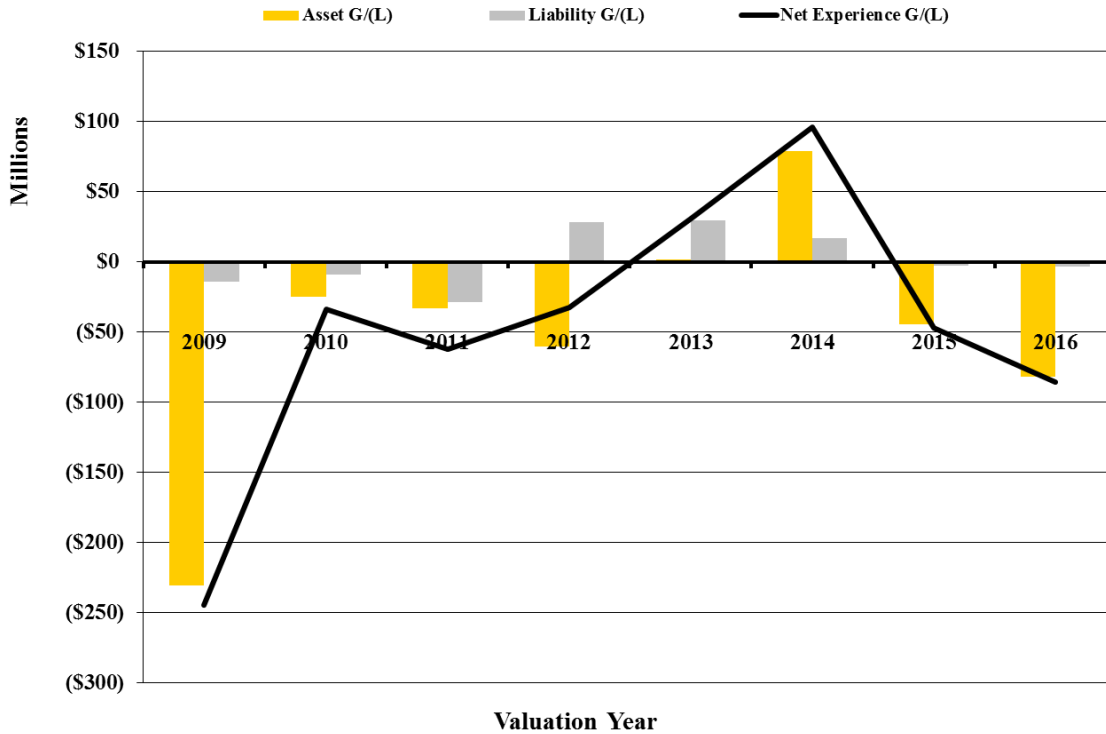
The investment loss in 2008-2009 was by far the most significant gain or loss during the last seven years. Even though the Plan was using actuarial smoothing of the assets, there was a significant loss reflected in the June 30, 2009 valuation, because the amount of smoothing was limited by the 80/120% corridor around the Market Value of Assets (the return on the smoothed value of assets for 2008-2009 was -9.2%).

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Between 2011 and 2014, there was a period of modest liability gains, as salary increases were below their expected levels. There was a small liability loss this year due to population changes.

Chart I-3: Experience Gains and Losses



C. Future Expected Financial Trends

The analysis of projected financial trends is an important component of this valuation. In this section, we present our assessment of the implications of the June 30, 2016 valuation results in terms of contributions and benefit security (assets over liabilities). All the projections in this section are based on the current investment return assumption of 7.25% and future base salary increases of 3.00% per year.

The following graphs show the expected employer contribution rates based on achieving the 7.25% assumption **each year** for the next 20 years. This scenario is highly unlikely: even if the Plan does achieve an **average** return of 7.25% over this time period, the returns in each given year will certainly vary.

The contribution rate graphs which follow – shown separately for the County, Novato, and San Rafael - project that employer contribution rates are expected to decline slightly over the next few years and then stay relatively level over the remainder of the next 14 years, as the bulk of the current unfunded liability is amortized over this period as a level percentage of payroll.

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There is a small short-term reduction in rates projected, as the deferred investment gains from prior years are recognized. There is also a moderate longer-term decline projected in the employer normal cost rates, primarily due to the PEPPRA members becoming a larger proportion of the active member population over time.

Chart I-4: Projection of Contributions, 7.25% Return Each Year – County of Marin

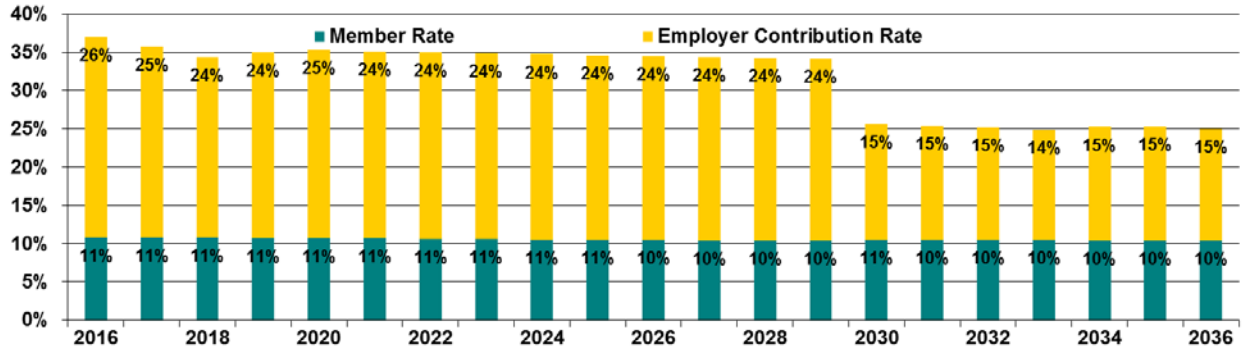
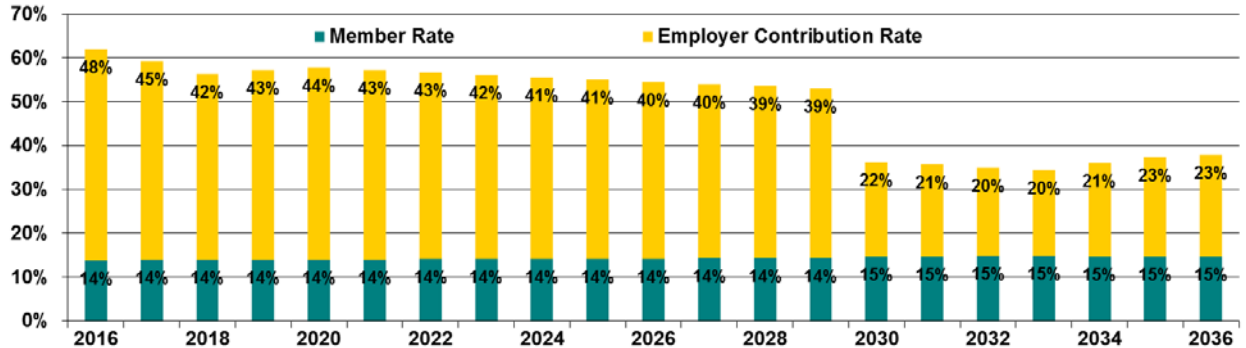


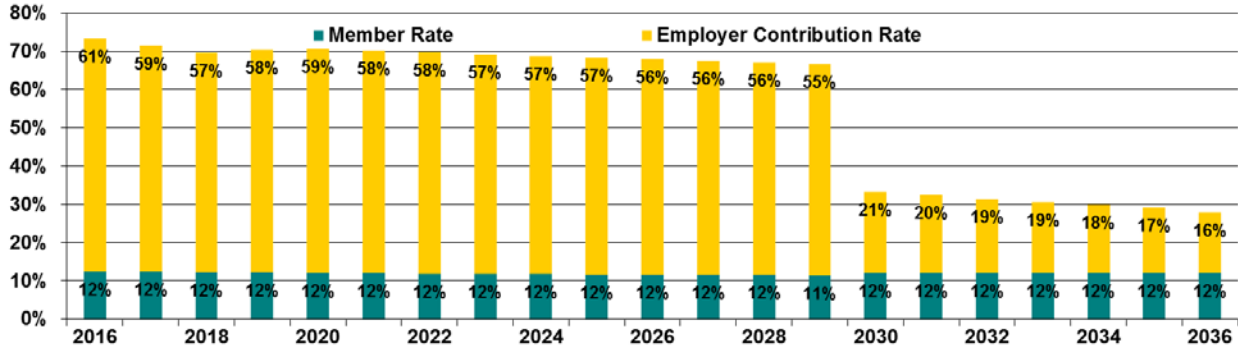
Chart I-5: Projection of Contributions, 7.25% Return Each Year – Novato FPD



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Chart I-6: Projection of Contributions, 7.25% Return Each Year – City of San Rafael



Asset and Liability Projections

The following charts show the projection of assets and liabilities assuming that assets will earn the 7.25% assumption each year during the projection period, and the actuarially determined contributions shown in the projections above are made. The percentages shown at the top of the charts are the ratios of the Market Value of Assets to the Actuarial Liability (the funded ratios).

The charts on the next page show that the projected funded status increases over the next 14 years to approach 100%, as can be expected based on the 14-year amortization policy for the majority of the current unfunded liability, assuming the actuarial assumptions are achieved. However, as above, it is the **actual** return on Plan assets that will determine the future funding status and contribution rate to the Plan.

The liabilities have been divided into those associated with the active employees and the inactive members (members in pay status or eligible to receive a deferred benefit). If the Plan's asset level drops below the liabilities for the inactive members, it indicates that no Plan assets have been set aside to fund future benefits for current active participants. The County and Novato currently have asset levels greater than their inactive liabilities; San Rafael's asset level is currently slightly less than the inactive liability, but it is projected to recover above that level within the next few years.

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Chart I-7: Projection of Assets and Liabilities, 7.25% Return – County of Marin
 (\$ millions)

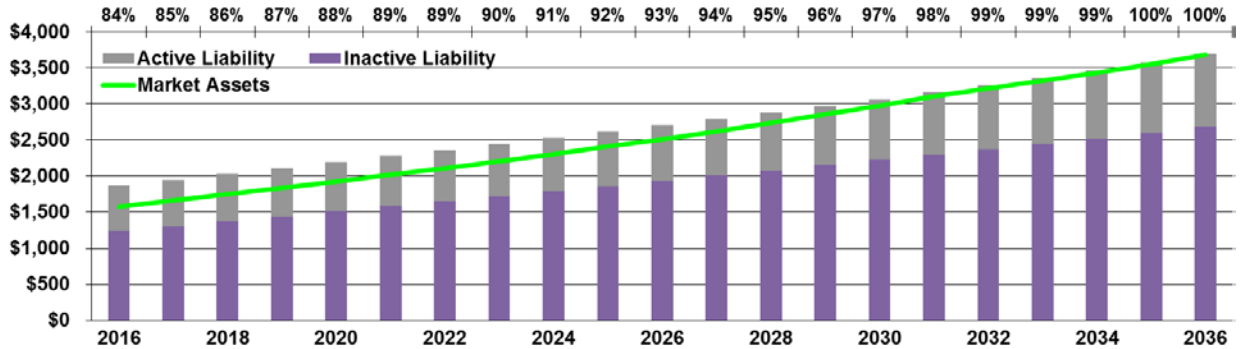


Chart I-8: Projection of Assets and Liabilities, 7.25% Return – Novato FPD
 (\$ millions)

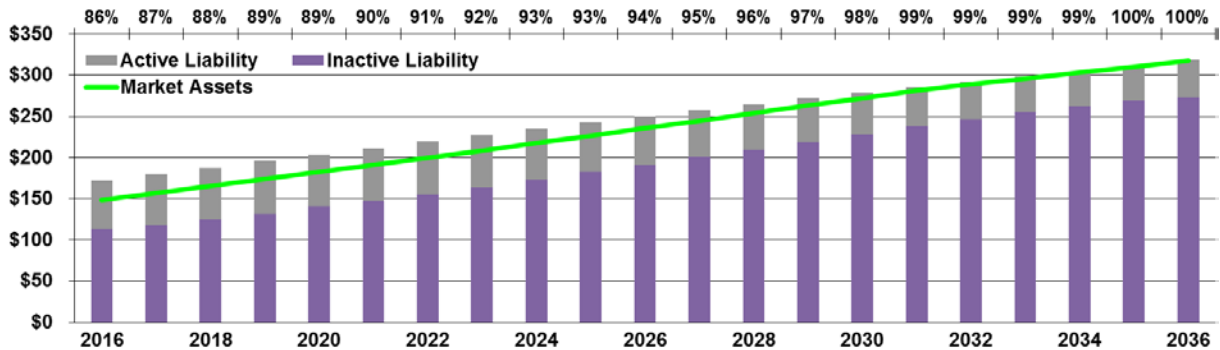
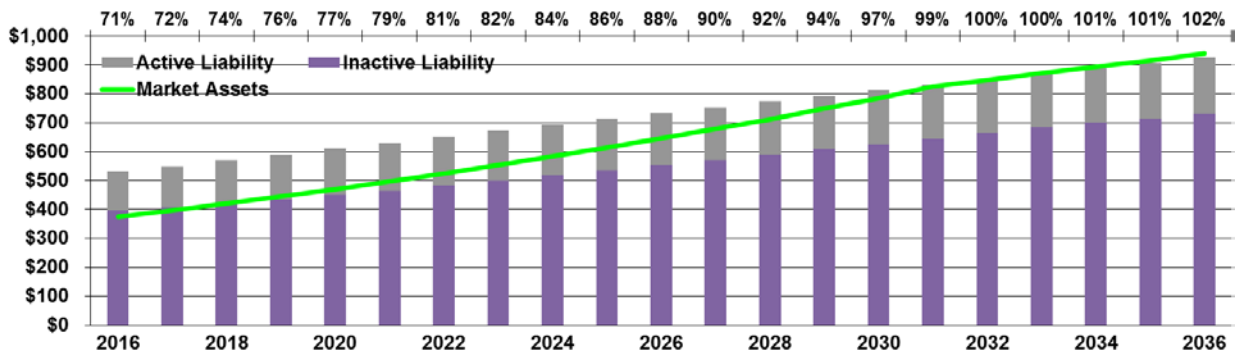


Chart I-9: Projection of Assets and Liabilities, 7.25% Return – City of San Rafael
 (\$ millions)



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION II – ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact employer contributions and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of June 30, 2015 and June 30, 2016,
- Statement of the **changes** in market values during the year,
- An assessment of historical **investment performance versus inflation**, and
- An allocation of the assets between the **employers and their valuation subgroups**.

Disclosure

The Market Value of Assets has replaced the smoothed Actuarial Value of Assets. The market value represents “snap-shot” or “cash-out” values that provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace.

Table II-1 on the next page discloses asset value as of June 30, 2015 and June 30, 2016.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION II – ASSETS

Table II-1		
Statement of Assets at Market Value		
Assets:	June 30, 2015	June 30, 2016
Cash and Cash Equivalents	\$ 43,288,323	\$ 35,586,471
Collateral held for Securities Loaned	48,783,804	36,267,606
Total Cash and Short Term Investments	<u>92,072,127</u>	<u>71,854,077</u>
Receivables:		
Contributions	5,274,370	3,639,298
Interest and Dividends	1,811,712	1,882,749
Due from Brokers for Securities Sold	1,554,594	3,874,113
Other Receivables	2,045,858	1,258,129
Total Receivables	<u>10,686,534</u>	<u>10,654,289</u>
Investments, at Fair Value:		
Domestic Fixed Income	243,056,642	277,371,287
International Fixed Income	63,900,038	61,756,871
Domestic Equities	810,138,708	748,722,068
International Equities	441,603,824	426,412,816
Private Equity	158,919,340	192,518,905
Real Assets	102,000,000	145,156,032
Real Estate	206,737,016	204,430,848
Total Investments	<u>2,026,355,568</u>	<u>2,056,368,827</u>
Other Assets:		
Capital Assets	6,406,474	5,933,038
Prepaid Insurance	456,433	50,852
Total Assets	<u>2,135,977,136</u>	<u>2,144,861,082</u>
Liabilities:		
Accounts Payable and Accrued Expenses	1,661,533	1,462,414
Due to Brokers for Securities Purchased	3,315,677	8,410,972
Rental Security Deposits	329,220	0
Retiree Payroll Payable	2,246	22,849
Obligations Under Securities Lending Program	48,783,804	36,267,606
Total Liabilities	<u>54,092,480</u>	<u>46,163,840</u>
Net Assets Held in Trust for Pension Benefits	\$ 2,081,884,656	\$ 2,098,697,242

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION II – ASSETS

Changes in Market Value

The components of asset change are:

- Contributions (employer and employee)
- Benefit payments
- Expenses (investment and administrative)
- Investment income (realized and unrealized)

Table II-2 below shows the components of changes in the Market Value of Assets during the fiscal years ending June 30, 2015 and June 30, 2016.

Table II-2 Changes in Market Values		
<u>Additions</u>	Fiscal Year ending <u>June 30, 2015</u>	Fiscal Year ending <u>June 30, 2016</u>
Contributions		
Employer's Contribution	\$ 72,867,357	\$ 78,049,814
Members' Contributions	<u>20,968,208</u>	<u>24,418,323</u>
Total Contributions	93,835,565	102,468,137
Investment Income		
Net Appreciation/(Depreciation) in Fair Value of Investments	84,583,896	25,687,408
Interest and Dividends	16,836,187	16,979,679
Real Estate Operating Income, net	9,055,660	10,823,799
Other Investment Income	<u>92,595</u>	<u>150,749</u>
Total Investment Income/(Loss)	110,568,339	53,641,634
Investment Expenses	<u>(10,763,096)</u>	<u>(10,911,481)</u>
Net Investment Income/(Loss)	99,805,243	42,730,153
Securities Lending Activities		
Securities Lending Income	250,330	197,575
Expenses from Securities Lending Activities	<u>0</u>	<u>0</u>
Net Securities Lending Income/(Loss)	250,330	197,575
Total Investment Income/(Loss)	100,055,573	42,927,728
Total Additions/(Declines)	<u>\$ 193,891,138</u>	<u>\$ 145,395,865</u>

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION II – ASSETS

Table II-2 Changes in Market Values (Continued)		
<u>Deductions</u>	Fiscal Year ending <u>June 30, 2015</u>	Fiscal Year ending <u>June 30, 2016</u>
Benefit payments	115,280,886	123,226,093
Refunds of Members' Contributions	703,867	977,426
Administrative Costs	3,668,546	3,514,622
Legal Costs & Litigation Settlement	482,923	451,526
Computer Expenses	333,364	273,381
Actuarial Expenses	169,790	140,232
Total Deductions	120,639,375	128,583,279
 Net increase (Decrease)	 73,251,763	 16,812,586
 Net Assets Held in Trust for Pension Benefits		
Beginning of Year	2,008,632,893	2,081,884,656
End of Year	2,081,884,656	2,098,697,242
 Approximate Return (Net of Investment Expenses)*	 5.0%	 2.1%

*The approximate return is computed using an assumption that cash flows occur mid-year, on average. This calculation will not necessarily match the actual time- or money-weighted returns of the Plan.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION II – ASSETS

Historical Investment Performance

Table II-3 shows the historical annual asset returns on a market value basis, as well as in the increase in the Consumer Price Index (CPI) since 2002.

Table II-3 Net Return on Assets vs. Increase in Consumer Price Index		
Year Ended June 30	Net Return at Market Value	Increase in Consumer Price Index*
2002	N/A	1.2%
2003	N/A	1.6%
2004	N/A	1.4%
2005	N/A	1.1%
2006	N/A	3.9%
2007	18.1%	3.4%
2008	-6.7%	4.2%
2009	-19.8%	0.2%
2010	8.2%	1.1%
2011	23.4%	2.4%
2012	1.6%	2.6%
2013	13.9%	2.6%
2014	18.1%	3.0%
2015	5.0%	2.3%
2016	2.1%	2.7%
10-Year Compound Average	5.6%	2.4%
5-Year Compound Average	7.9%	2.6%

* Based on Consumer Price Index for San Francisco-Oakland-San Jose Area (1982-1984 base period).

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION II – ASSETS

Asset Allocation by Valuation Subgroup

Table II-4 below shows the allocation of the Valuation Assets between the employers and their valuation subgroups (Miscellaneous vs. Safety). These allocations are 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 and subgroup. 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.

The top portion of the table shows the allocations for the active members of each employer. A negative balance indicates that the allocated assets are not sufficient to cover a group's inactive liabilities. The bottom portion of the table shows the total asset allocation (active and inactive) for each of the three main subgroups.

The column on the right shows the funded ratios. For the top portion of the table, the funded ratio is the percentage of the active liabilities that are covered by the Valuation Assets. For the bottom portion, the funded ratio represents the total funded ratio for each group.

Table II-4 Market Assets and Funding Ratios - Active Members Only					
Plan	Group	Assets 2015	Ratios 2015	Assets 2016	Ratios 2016
County	County Misc	\$ 233,252,625	60.7%	\$ 212,100,697	52.2%
	County Safety	102,929,283	60.2%	94,359,842	55.9%
	Courts	16,411,788	59.1%	14,471,110	55.8%
	South Marin Fire Misc	159,790	50.4%	153,637	32.5%
	South Marin Fire Safety	11,338,412	66.4%	10,827,049	57.9%
	Mosquito District	6,696,410	58.6%	5,985,668	50.6%
	LAFCO	185,027	95.6%	200,466	82.7%
	Tamalpais CSD	1,594,317	42.7%	1,513,623	36.4%
	Marin City CSD	367,472	54.4%	352,679	89.8%
Novato	Novato Misc	2,128,178	80.6%	1,931,587	73.4%
	Novato Safety	33,561,483	65.3%	33,325,184	59.0%
San Rafael	San Rafael Misc	(2,534,065)	(3.9%)	(9,608,519)	(15.1%)
	San Rafael Safety	(4,558,649)	(6.6%)	(11,077,914)	(15.5%)

Market Assets and Funding Ratios - Total					
County		\$ 1,548,074,101	86.4%	\$ 1,575,237,297	84.1%
Novato		147,452,561	88.9%	148,395,413	86.1%
San Rafael		370,720,882	72.5%	375,064,531	70.6%

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016

SECTION III – LIABILITIES

In this section, we present detailed information on Plan liabilities.

Disclosure

Several measures of liabilities are calculated and presented in this report. Note that these measures of liabilities are not applicable for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future Plan obligations, represents the expected amount of money needed today to fully fund all benefits of the Plan both earned as of the valuation date and those to be earned in the future by current plan participants under the current Plan provisions if all assumptions are met.
- **Actuarial Liability:** Used for funding calculations, this liability is calculated taking the Present Value of Future Benefits and subtracting the present value of future Member Contributions and future Employer Normal Costs under an acceptable actuarial cost method. The method used for this Plan is called the **Entry Age Normal** (EAN) cost method. The Actuarial Liability represents the expected amount of money needed today to pay for benefits attributed to service prior to the valuation date. As such, it is the amount of assets targeted by the actuarial cost method for the Plan to hold as of the valuation date.

Table III-1 on the next page shows the Present Value of Future Benefits and Table III-2 shows the Actuarial Liability for each valuation subgroup for the current and prior valuations. The top portion of each table shows the liabilities for the active members for each employer. The bottom portion of the table shows the total liability (active and inactive) for each of the three main subgroups.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION III – LIABILITIES

Table III-1				
Present Value of Benefits - Active Members Only				
Plan	Group	2015	2016	
County	County Misc Tier 1	\$ 18,677,510	\$ 17,888,603	
	County Misc Tier 2	19,898,637	20,563,273	
	County Misc Tier 3	438,758,831	445,062,870	
	County Misc Tier 3A	35,212,634	34,899,876	
	County Misc Tier 4	25,334,260	29,119,699	
	County Misc Tier 5 (PEPRA)	40,743,812	64,570,643	
	County Safety Tier 1A	2,655,102	2,798,095	
	County Safety Tier 2A	39,367,370	41,782,612	
	County Safety Tier 2B	208,730,502	197,276,713	
	County Safety Tier 3 (PEPRA)	14,100,816	21,102,659	
	Courts Tier 1	4,047,791	2,633,300	
	Courts Tier 2	244,448	269,993	
	Courts Tier 3	31,252,001	29,491,496	
	Courts Tier 4	1,024,694	1,113,616	
	Courts Tier 5 (PEPRA)	427,751	1,709,031	
	South Marin Fire Misc Tier 1	512,875	542,024	
	South Marin Fire Misc Tier 2 (PEPRA)	0	463,615	
	South Marin Fire Safety Tier 1	16,494,329	17,001,610	
	South Marin Fire Safety Tier 2	14,371,195	14,392,317	
	South Marin Fire Safety Tier 2A	470,285	896,396	
	South Marin Fire Safety Tier 3A (PEPRA)	2,116,719	3,393,829	
	Mosquito District Tier 1	16,679,780	16,732,943	
	Mosquito District Tier 2 (PEPRA)	0	204,194	
	LAFCO Tier 3	612,115	681,014	
	LAFCO Tier 4 (PEPRA)	0	102,120	
	Tamalpais CSD Tier 1	4,629,462	5,043,548	
	Tamalpais CSD Tier 2 (PEPRA)	249,033	268,153	
	Marin City CSD	1,155,076	1,115,001	
	Novato	Novato Misc Tier 1	4,092,551	3,950,956
		Novato Misc Tier 2A (PEPRA)	0	300,617
Novato Safety Tier 1		67,177,177	70,804,206	
Novato Safety Tier 2		5,013,844	5,023,799	
Novato Safety Tier 3 (PEPRA)		2,277,839	2,859,037	
San Rafael	San Rafael Misc Tier 1	89,700,738	85,428,226	
	San Rafael Misc Tier 2	2,865,424	4,416,285	
	San Rafael Misc Tier 3 (PEPRA)	3,872,204	5,558,854	
	San Rafael Fire Tier 1	45,227,847	45,196,116	
	San Rafael Police Tier 1	55,628,044	55,264,577	
	San Rafael Fire Tier 2	6,994,821	7,487,648	
	San Rafael Police Tier 2	2,529,403	2,620,836	
	San Rafael Safety Tier 3 (PEPRA)	4,845,698	9,435,290	
Total Present Value of Benefits - Active and Inactive Members				
County		\$ 2,112,906,005	\$ 2,206,391,768	
Novato		190,324,310	196,077,257	
San Rafael		589,477,776	611,158,796	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION III – LIABILITIES

Table III-2				
Actuarial Liabilities - Active Members Only				
Plan	Group	2015	2016	
County	County Misc Tier 1	\$ 17,804,323	\$ 17,131,347	
	County Misc Tier 2	16,378,517	17,279,545	
	County Misc Tier 3	326,644,981	339,763,956	
	County Misc Tier 3A	13,451,703	15,073,775	
	County Misc Tier 4	4,669,080	6,942,551	
	County Misc Tier 5 (PEPRA)	5,372,940	10,276,753	
	County Safety Tier 1A	2,655,102	2,798,095	
	County Safety Tier 2A	26,653,510	29,138,187	
	County Safety Tier 2B	140,784,821	134,700,301	
	County Safety Tier 3 (PEPRA)	945,189	2,255,179	
	Courts Tier 1	3,824,247	2,559,204	
	Courts Tier 2	167,712	193,650	
	Courts Tier 3	23,130,014	22,278,670	
	Courts Tier 4	620,267	674,647	
	Courts Tier 5 (PEPRA)	46,303	219,315	
	South Marin Fire Misc Tier 1	317,058	353,780	
	South Marin Fire Misc Tier 2 (PEPRA)	0	119,625	
	South Marin Fire Safety Tier 1	12,254,656	12,924,769	
	South Marin Fire Safety Tier 2	4,666,910	5,383,113	
	South Marin Fire Safety Tier 2A	29,743	62,650	
	South Marin Fire Safety Tier 3A (PEPRA)	134,388	327,055	
	Mosquito District Tier 1	11,418,471	11,818,241	
	Mosquito District Tier 2 (PEPRA)	0	16,709	
	LAFCO Tier 3	193,636	234,250	
	LAFCO Tier 4 (PEPRA)	0	8,066	
	Tamalpais CSD Tier 1	3,713,084	4,123,098	
	Tamalpais CSD Tier 2 (PEPRA)	17,777	36,588	
	Marin City CSD	676,118	392,700	
	Novato	Novato Misc Tier 1	2,641,313	2,602,799
		Novato Misc Tier 2A (PEPRA)	0	28,469
Novato Safety Tier 1		49,299,615	54,149,497	
Novato Safety Tier 2		1,932,824	1,932,091	
Novato Safety Tier 3 (PEPRA)		202,567	416,465	
San Rafael	San Rafael Misc Tier 1	64,045,189	62,273,909	
	San Rafael Misc Tier 2	486,959	860,073	
	San Rafael Misc Tier 3 (PEPRA)	283,412	639,935	
	San Rafael Fire Tier 1	29,623,909	29,790,218	
	San Rafael Police Tier 1	37,181,051	38,653,707	
	San Rafael Fire Tier 2	1,180,936	1,606,215	
	San Rafael Police Tier 2	453,593	633,187	
	San Rafael Safety Tier 3 (PEPRA)	454,564	949,648	

Total Accrued Liabilities - Active and Inactive Members		
County	\$ 1,791,709,527	\$ 1,872,358,344
Novato	165,839,218	172,267,963
San Rafael	511,523,210	531,157,856

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION IV – CONTRIBUTIONS

For this Plan, there are three components to the total contribution: the **normal cost rate** (employee and employer), the **Unfunded Actuarial Liability rate** (UAL rate), and the **administrative expense** contribution.

The normal cost rate is determined in the following steps. First, an individual normal cost rate is determined by taking the value, as of entry age into the Plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of the member's expected future salary producing a normal cost rate that is expected to remain constant over a member's career.

The total normal cost is computed by adding up the expected dollar amount of each active member's normal cost for the current year. The total normal cost is adjusted with interest to the middle of the year, to reflect the fact that the normal cost contributions are paid throughout the year as member payroll payments are made. Finally, the total normal cost is reduced by the expected contributions for each member and divided by the projected pay for each subgroup.

The Unfunded Actuarial Liability (UAL) is the difference between the EAN Actuarial Liability and the Market Value of Assets. The UAL payment is determined using the following pieces, and then divided by the projected payroll for each employer to calculate a UAL rate for each group:

- The amount needed to fund the extraordinary UAL resulting from the 2008-2009 investment losses as a level percent of member payroll over a fixed period (22 years remaining as of the current valuation, reduced from 23 years in the prior valuation);
- The remaining UAL as of June 30, 2013 over a period of 17 years as a level percentage of member payroll (14 years as of June 30, 2016); and
- 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.

Administrative expenses are assumed to be \$4.774 million per year as of June 30, 2016, increasing at 3% per annum. The administrative expenses are split between employees and employers based on their share of the overall contributions.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION IV – CONTRIBUTIONS

Table IV-1 below presents the calculation of employer contribution rates for each of the three main Plan groups, as well as a comparison to the prior year rates.

Table IV-1 Development of the Net Employer Contribution Rates as of June 30, 2016 for FYE 2018						
	June 30, 2015			June 30, 2016		
	County	Novato	San Rafael	County	Novato	San Rafael
1. Total Normal Cost Rate	22.39%	35.58%	28.94%	21.93%	35.53%	28.44%
2. Member Contribution Rate	<u>10.57%</u>	<u>13.51%</u>	<u>12.06%</u>	<u>10.36%</u>	<u>13.23%</u>	<u>11.86%</u>
3. Employer Normal Cost Rate (1-2)	11.82%	22.07%	16.88%	11.57%	22.30%	16.58%
4. UAL Amortization	13.46%	24.39%	41.28%	13.37%	23.57%	41.68%
5. Administrative Expense Rate	<u>1.22%</u>	<u>2.23%</u>	<u>2.80%</u>	<u>1.19%</u>	<u>2.19%</u>	<u>2.78%</u>
6. Final Employer Contribution Rate (3+4+5)	26.50%	48.69%	60.96%	26.13%	48.06%	61.04%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION IV – CONTRIBUTIONS

Table IV-2 below presents the calculation of the UAL payments for the Plan for this valuation.

Table IV-2 Development of Amortization Payment For the June 30, 2016 Actuarial Valuation								
Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2016 Outstanding Balance	Remaining Amortization Years	Length of Phase In/Out	Current Phase In/Out Percentage	Amortization Amount
Charges / (Credits)								
1. County - 2009 Extraordinary Loss	6/30/2009	\$ 146,241,604	30	\$ 156,819,272	22	N/A	100%	\$ 10,923,463
2. County - Initial UAL	6/30/2013	188,358,828	17	179,399,047	14	N/A	100%	17,032,475
3. County - (Gain)/Loss Base	6/30/2014	(223,502,748)	24	(245,469,284)	22	5	60%	(11,396,412)
4. County - Assumption Changes	6/30/2014	99,117,401	22	105,755,906	20	3	100%	8,098,358
5. County - (Gain)/Loss Base	6/30/2015	36,267,023	24	38,294,655	23	5	40%	1,196,930
6. County - (Gain)/Loss Base	6/30/2016	62,321,452	24	62,321,452	24	5	20%	998,452
7. Novato - 2009 Extraordinary Loss	6/30/2009	14,765,994	30	15,834,020	22	N/A	100%	1,102,941
8. Novato - Initial UAL	6/30/2013	17,008,202	17	16,199,163	14	N/A	100%	1,537,978
9. Novato - (Gain)/Loss Base	6/30/2014	(22,114,107)	24	(24,287,549)	22	5	60%	(1,127,599)
10. Novato - Assumption Changes	6/30/2014	6,230,650	22	6,647,955	20	3	100%	509,073
11. Novato - (Gain)/Loss Base	6/30/2015	2,876,813	24	3,037,651	23	5	40%	94,944
12. Novato - (Gain)/Loss Base	6/30/2016	6,441,310	24	6,441,310	24	5	20%	103,196
13. San Rafael - 2009 Extraordinary Loss	6/30/2009	34,997,031	30	37,528,370	22	N/A	100%	2,614,091
14. San Rafael - Initial UAL	6/30/2013	124,305,953	17	118,393,017	14	N/A	100%	11,240,450
15. San Rafael - (Gain)/Loss Base	6/30/2014	(54,710,285)	24	(60,087,379)	22	5	60%	(2,789,679)
16. San Rafael - Assumption Changes	6/30/2014	30,608,707	22	32,658,761	20	3	100%	2,500,875
17. San Rafael - (Gain)/Loss Base	6/30/2015	8,187,631	24	8,645,388	23	5	40%	270,218
18. San Rafael - (Gain)/Loss Base	6/30/2016	18,955,168	24	18,955,168	24	5	20%	303,681
Total				\$ 477,086,922				\$ 43,213,436

The single equivalent amortization period - i.e., the length of time required to amortize the overall UAL as a level percentage of payroll based on the total current amortization payment – is approximately 15 years.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION IV – CONTRIBUTIONS

Tables IV-3 through IV-6 present the calculation of employer contribution rates for each employer and Tier.

Table IV-3 Development of the County Misc/Safety Member Contribution Rates as of June 30, 2016 for FYE 2018							
	County Misc Tier 1	County Misc Tier 2	County Misc Tier 3	County Misc Tier 3A	County Misc Tier 4	County Misc Tier 5	County Misc
A. Total Normal Cost Rate	19.93%	20.10%	19.27%	20.66%	19.61%	17.44%	19.00%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>2.90%</u>	<u>8.79%</u>	<u>8.93%</u>	<u>9.60%</u>	<u>8.34%</u>	<u>8.66%</u>	8.83%
C. Employer Normal Cost Rate (A-B)	17.03%	11.31%	10.34%	11.06%	11.27%	8.78%	10.17%
D. UAL Amortization Rate	11.34%	11.34%	11.34%	11.34%	11.34%	11.34%	11.34%
E. Administrative Expense Rate	<u>1.36%</u>	<u>1.08%</u>	<u>1.04%</u>	<u>1.07%</u>	<u>1.08%</u>	<u>0.96%</u>	1.03%
F. Net June 30, 2016 Contribution Rate (C+D+E)	29.73%	23.73%	22.72%	23.47%	23.69%	21.08%	22.54%

	County Safety Tier 2A	County Safety Tier 2B	County Safety Tier 3	County Safety	County Misc / Safety
A. Total Normal Cost Rate	32.68%	32.32%	25.65%	31.32%	21.54%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>14.27%</u>	<u>17.60%</u>	<u>12.49%</u>	<u>16.34%</u>	10.38%
C. Employer Normal Cost Rate (A-B)	18.41%	14.72%	13.16%	14.98%	11.16%
D. UAL Amortization Rate	20.25%	20.25%	20.25%	20.25%	13.18%
E. Administrative Expense Rate	<u>1.85%</u>	<u>1.67%</u>	<u>1.60%</u>	<u>1.68%</u>	1.16%
F. Net June 30, 2016 Contribution Rate (C+D+E)	40.51%	36.64%	35.01%	36.91%	25.50%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION IV – CONTRIBUTIONS

Table IV-4 Development of the County Special Districts Contribution Rates as of June 30, 2016 for FYE 2018								
	South Marin Fire Misc Tier 1	South Marin Fire Misc Tier 2	Tamalpais CSD Tier 1	Tamalpais CSD Tier 2	Marin City CSD Tier 1	Mosquito District Tier 1	Mosquito District Tier 2	
A. Total Normal Cost Rate	29.50%	20.91%	23.23%	15.63%	20.90%	23.87%	20.49%	
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>14.07%</u>	<u>9.56%</u>	<u>9.36%</u>	<u>9.56%</u>	<u>9.77%</u>	<u>9.47%</u>	<u>9.56%</u>	
C. Employer Normal Cost Rate (A-B)	15.43%	11.35%	13.87%	6.07%	11.13%	14.40%	10.93%	
D. UAL Amortization Rate	5.62%	5.62%	21.65%	21.65%	6.82%	19.26%	19.26%	
E. Administrative Expense Rate	<u>1.01%</u>	<u>0.81%</u>	<u>1.70%</u>	<u>1.33%</u>	<u>0.86%</u>	<u>1.61%</u>	<u>1.44%</u>	
F. Net June 30, 2016 Contribution Rate (C+D+E)	22.06%	17.78%	37.22%	29.05%	18.81%	35.27%	31.63%	

	LAFCO Tier 3	LAFCO Tier 4	South Marin Fire Safety Tier 1	South Marin Fire Safety Tier 2	South Marin Fire Safety Tier 2A	South Marin Fire Safety Tier 3A	Special Districts	Total County
A. Total Normal Cost Rate	20.08%	11.27%	38.40%	40.92%	35.33%	31.93%	31.21%	21.93%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>7.23%</u>	<u>8.66%</u>	<u>14.28%</u>	<u>12.95%</u>	<u>12.54%</u>	<u>15.97%</u>	11.82%	10.36%
C. Employer Normal Cost Rate (A-B)	12.85%	2.61%	24.12%	27.97%	22.79%	15.96%	19.39%	11.57%
D. UAL Amortization Rate	5.49%	5.49%	11.57%	11.57%	11.57%	11.57%	14.19%	13.37%
E. Administrative Expense Rate	<u>0.88%</u>	<u>0.39%</u>	<u>1.71%</u>	<u>1.89%</u>	<u>1.64%</u>	<u>1.32%</u>	1.61%	1.19%
F. Net June 30, 2016 Contribution Rate (C+D+E)	19.22%	8.49%	37.40%	41.43%	36.00%	28.85%	35.19%	26.13%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION IV – CONTRIBUTIONS

Table IV-5

Development of the Courts and Novato Contribution Rates as of June 30, 2016 for FYE 2018

	Courts Tier 1	Courts Tier 2	Courts Tier 3	Courts Tier 4	Courts Tier 5	Courts Total
A. Total Normal Cost Rate	15.53%	15.31%	18.99%	22.17%	17.96%	18.85%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>0.00%</u>	<u>7.48%</u>	<u>8.92%</u>	<u>10.74%</u>	<u>8.66%</u>	8.73%
C. Employer Normal Cost Rate (A-B)	15.53%	7.83%	10.07%	11.43%	9.30%	10.12%
D. UAL Amortization Rate	17.11%	17.11%	17.11%	17.11%	17.11%	17.11%
E. Administrative Expense Rate	<u>1.56%</u>	<u>1.19%</u>	<u>1.30%</u>	<u>1.36%</u>	<u>1.26%</u>	1.30%
F. Net June 30, 2016 Contribution Rate (C+D+E)	34.20%	26.13%	28.48%	29.90%	27.67%	28.53%

	Novato Misc Tier 1	Novato Misc Tier 2A	Novato Misc	Novato Safety Tier 1	Novato Safety Tier 2	Novato Safety Tier 3	Novato Safety	Novato Total
A. Total Normal Cost Rate	22.32%	19.49%	21.84%	37.54%	40.69%	28.29%	36.97%	35.53%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>9.49%</u>	<u>8.66%</u>	<u>9.36%</u>	<u>13.54%</u>	<u>13.98%</u>	<u>14.15%</u>	<u>13.54%</u>	13.23%
C. Employer Normal Cost Rate (A-B)	12.83%	10.83%	12.48%	24.00%	26.71%	14.14%	23.43%	22.30%
D. UAL Amortization Rate	6.94%	6.94%	6.94%	25.32%	25.32%	25.32%	25.32%	23.57%
E. Administrative Expense Rate	<u>0.95%</u>	<u>0.85%</u>	<u>0.93%</u>	<u>2.36%</u>	<u>2.49%</u>	<u>1.89%</u>	<u>2.33%</u>	2.19%
F. Net June 30, 2016 Contribution Rate (C+D+E)	20.72%	18.62%	20.35%	51.68%	54.52%	41.35%	51.08%	48.06%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

SECTION IV – CONTRIBUTIONS

**Table IV-6
Development of the San Rafael Contribution Rates as of June 30, 2016 for FYE 2018**

	San Rafael Misc Tier 1	San Rafael Misc Tier 2	San Rafael Misc Tier 3	San Rafael Misc
A. Total Normal Cost Rate	27.28%	21.32%	16.01%	24.67%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>11.83%</u>	<u>8.40%</u>	<u>8.66%</u>	10.94%
C. Employer Normal Cost Rate (A-B)	15.45%	12.92%	7.35%	13.73%
D. UAL Amortization Rate	34.82%	34.82%	34.82%	34.82%
E. Administrative Expense Rate	<u>2.40%</u>	<u>2.28%</u>	<u>2.02%</u>	2.32%
F. Net June 30, 2016 Contribution Rate (C+D+E)	52.67%	50.02%	44.19%	50.87%

	San Rafael Fire Tier 1	San Rafael Police Tier 1	San Rafael Fire Tier 2	San Rafael Police Tier 2	San Rafael Safety Tier 3	San Rafael Safety	San Rafael Total
A. Total Normal Cost Rate	35.37%	33.98%	30.39%	34.21%	23.59%	32.33%	28.44%
B. Member Contribution Rate (Excluding Admin Expense)	<u>13.48%</u>	<u>12.86%</u>	<u>11.10%</u>	<u>12.67%</u>	<u>12.49%</u>	<u>12.90%</u>	11.86%
C. Employer Normal Cost Rate (A-B)	21.89%	21.12%	19.29%	21.54%	11.10%	19.43%	16.58%
D. UAL Amortization Rate	48.85%	48.85%	48.85%	48.85%	48.85%	48.85%	41.68%
E. Administrative Expense Rate	<u>3.38%</u>	<u>3.34%</u>	<u>3.26%</u>	<u>3.36%</u>	<u>2.87%</u>	<u>3.26%</u>	2.78%
F. Net June 30, 2016 Contribution Rate (C+D+E)	74.12%	73.31%	71.40%	73.75%	62.82%	71.54%	61.04%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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SECTION IV – CONTRIBUTIONS

The following table shows the contribution rates for the new benefit Tiers for those employers that did not have any active members in those Tiers as of June 30, 2016. The Normal Cost rates for these Tiers are based on the pooled demographic profiles of the employers with current active PEPRA members.

**Table IV-7
Development of Contribution Rates for New Tiers with No Active Members as of June 30, 2016 for FYE 2018**

	South Marin Fire Safety Tier 3	Marin City CSD Tier 2	Novato Misc Tier 2
A. Total Normal Cost Rate	28.29%	19.12%	19.12%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>14.15%</u>	<u>9.56%</u>	<u>9.56%</u>
C. Employer Normal Cost Rate (A-B)	14.14%	9.56%	9.56%
D. UAL Amortization Rate	11.57%	6.82%	6.94%
E. Administrative Expense Rate	<u>1.23%</u>	<u>0.78%</u>	<u>0.79%</u>
F. Net June 30, 2016 Contribution Rate (C+D+E)	26.94%	17.16%	17.29%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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SECTION IV – CONTRIBUTIONS

Table IV-8 contains a comparison of the employer contribution rates for each employer and Tier to the prior year rates, as well as the number of active members in each Tier as of June 30, 2016.

		Table IV-8		
Plan	Group	# of Active Members	2015	2016
County	County Misc Tier 1	14	29.87%	29.73%
	County Misc Tier 2	51	23.83%	23.73%
	County Misc Tier 3	904	22.96%	22.72%
	County Misc Tier 3A	117	23.65%	23.47%
	County Misc Tier 4	138	23.60%	23.69%
	County Misc Tier 5 (PEPRA)	458	21.31%	21.08%
	County Misc	1,682	22.93%	22.54%
	County Safety Tier 1A	1	20.78%	21.22%
	County Safety Tier 2A	61	40.60%	40.51%
	County Safety Tier 2B	221	35.89%	36.64%
	County Safety Tier 3 (PEPRA)	74	34.87%	35.01%
	County Safety	357	36.49%	36.91%
	County Misc/Safety	2,039	25.89%	25.50%
	Courts Tier 1	2	40.40%	34.20%
	Courts Tier 2	1	25.51%	26.13%
	Courts Tier 3	76	28.01%	28.48%
	Courts Tier 4	4	28.75%	29.90%
	Courts Tier 5 (PEPRA)	17	30.64%	27.67%
	Courts	100	28.75%	28.53%
	South Marin Fire Misc Tier 1	1	29.80%	22.06%
	South Marin Fire Misc Tier 2 (PEPRA)	2	N/A	17.78%
	South Marin Fire Safety Tier 1	15	37.86%	37.40%
	South Marin Fire Safety Tier 2	24	41.23%	41.43%
	South Marin Fire Safety Tier 2A	2	35.97%	36.00%
	South Marin Fire Safety Tier 3A (PEPRA)	10	29.40%	28.85%
	Mosquito District Tier 1	30	33.78%	35.27%
	Mosquito District Tier 2 (PEPRA)	1	N/A	31.63%
	LAFCO Tier 3	2	24.05%	19.22%
	LAFCO Tier 4 (PEPRA)	1	N/A	8.49%
	Tamalpais CSD Tier 1	9	35.61%	37.22%
	Tamalpais CSD Tier 2 (PEPRA)	2	29.58%	29.05%
	Marin City CSD	5	21.44%	18.81%
	Special Districts	104	36.10%	35.19%
Total County	2,243	26.50%	26.13%	
Novato	Novato Misc Tier 1	7	21.49%	20.72%
	Novato Misc Tier 2A (PEPRA)	3	N/A	18.62%
	Novato Safety Tier 1	53	52.09%	51.68%
	Novato Safety Tier 2	7	53.96%	54.52%
	Novato Safety Tier 3 (PEPRA)	7	41.12%	41.35%
Total Novato	77	48.69%	48.06%	
San Rafael	San Rafael Misc Tier 1	151	50.40%	52.67%
	San Rafael Misc Tier 2	21	46.81%	50.02%
	San Rafael Misc Tier 3 (PEPRA)	49	42.11%	44.19%
	San Rafael Misc	221	49.06%	50.87%
	San Rafael Fire Tier 1	39	75.67%	74.12%
	San Rafael Police Tier 1	49	74.79%	73.31%
	San Rafael Fire Tier 2	14	72.59%	71.40%
	San Rafael Police Tier 2	5	75.53%	73.75%
	San Rafael Safety Tier 3 (PEPRA)	29	64.88%	62.82%
	San Rafael Safety	136	74.00%	71.54%
Total San Rafael	357	60.96%	61.04%	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided by MCERA as of June 30, 2016. Cheiron did not audit any of the data; however, it was reviewed to ensure that it complies with generally accepted actuarial standards.

Data pertaining to active and inactive Members and their beneficiaries as of the valuation date was supplied by the Plan Administrator on electronic media. As is usual in studies of this type, Member data was neither verified nor audited.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: County of Marin														
	Miscellaneous		Marin County		Total		Miscellaneous		Marin Special Districts		Total		Total County and Special 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



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: County of Marin												
	Tier 1		Tier 2		Tier 3		Tier 3A		Tier 4		Tier 5	
	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous
	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	16	14	54	51	967	904	133	117	139	138	314	458
Average Age	63.91	64.77	62.49	63.01	52.29	53.09	45.52	46.21	43.36	44.40	40.25	40.27
Average Service	32.56	33.89	17.09	18.18	14.77	15.65	5.51	6.49	2.38	3.15	1.47	1.80
Average Pay*	\$104,155	\$111,557	\$72,918	\$76,202	\$86,589	\$90,391	\$85,251	\$89,357	\$75,948	\$82,137	\$67,915	\$72,041
Service Retired												
Number	594	567	247	244	556	630	1	5	1	1	0	0
Average Age	76.94	77.49	76.61	77.36	65.32	65.89	65.29	61.14	60.47	61.47	0.00	0.00
Average Total Benefit*	\$44,469	\$46,483	\$21,514	\$21,974	\$30,426	\$30,845	\$21,269	\$10,858	\$10,816	\$11,032	\$0	\$0
Beneficiaries												
Number	164	166	44	46	35	42	0	0	0	0	0	0
Average Age	79.41	79.43	71.32	70.48	58.48	60.34	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$25,838	\$26,501	\$13,468	\$14,251	\$19,765	\$19,795	\$0	\$0	\$0	\$0	\$0	\$0
Duty Disabled												
Number	23	23	30	29	33	33	0	0	0	0	0	0
Average Age	72.17	73.17	64.29	65.62	62.42	63.42	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$38,941	\$39,973	\$27,615	\$28,058	\$40,327	\$41,133	\$0	\$0	\$0	\$0	\$0	\$0
Ordinary Disabled												
Number	11	11	11	11	7	9	0	0	0	0	0	0
Average Age	71.09	72.09	69.68	70.68	62.31	61.47	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$23,176	\$23,827	\$17,334	\$17,680	\$20,630	\$19,846	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay												
Number	792	767	332	330	631	714	1	5	1	1	0	0
Average Age	77.24	77.70	74.57	75.15	64.76	65.39	65.29	61.14	60.47	61.47	0.00	0.00
Average Total Benefit*	\$40,155	\$41,638	\$20,860	\$21,289	\$30,243	\$30,532	\$21,269	\$10,858	\$10,816	\$11,032	\$0	\$0
Terminated Vested												
Number	2	3	3	3	161	153	6	10	1	5	1	1
Average Age	73.35	69.63	60.50	61.50	50.88	49.56	41.83	43.84	36.20	39.38	58.67	59.67
Average Service	5.95	4.77	5.42	5.42	8.00	7.93	5.01	5.71	0.62	2.37	11.97	11.97
Transfers												
Number	2	1	9	8	174	163	10	14	6	5	2	4
Average Age	58.86	59.84	58.43	60.42	50.54	49.95	47.54	45.76	42.30	43.57	30.26	32.59
Average Service	11.57	9.43	3.12	2.40	5.08	5.48	2.69	3.17	1.59	1.26	1.58	2.02
Total Inactive												
Number	4	4	12	11	335	316	16	24	7	10	3	5
Average Age	66.10	67.19	58.95	60.71	50.70	49.76	45.40	44.96	41.43	41.48	39.73	38.01
Average Service	8.76	5.93	3.70	3.23	6.48	6.67	3.56	4.23	1.45	1.82	5.04	4.01

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: County of Marin										
	Tier 1A Safety		Tier 2A Safety		Tier 1B Safety		Tier 2B Safety		Tier 3 Safety	
	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	1	63	61	0	0	241	221	54	74
Average Age	67.91	68.91	46.37	46.29	0.00	0.00	42.28	42.80	30.21	30.04
Average Service	30.30	31.31	11.91	12.76	0.00	0.00	12.96	13.34	0.99	1.57
Average Pay*	\$214,061	\$223,136	\$92,847	\$97,131	\$0	\$0	\$111,338	\$113,826	\$72,051	\$77,016
Service Retired										
Number	70	68	24	26	31	31	94	109	0	0
Average Age	72.19	72.88	63.69	64.79	61.98	62.95	57.61	58.11	0.00	0.00
Average Total Benefit*	\$74,996	\$75,061	\$41,113	\$41,630	\$93,910	\$96,258	\$58,610	\$62,097	\$0	\$0
Beneficiaries										
Number	45	45	7	5	4	4	6	9	0	0
Average Age	74.24	74.34	58.75	58.37	52.40	53.40	59.59	57.72	0.00	0.00
Average Total Benefit*	\$39,803	\$40,936	\$38,473	\$35,430	\$13,636	\$13,977	\$47,042	\$40,140	\$0	\$0
Duty Disabled										
Number	40	39	26	26	6	6	28	30	0	0
Average Age	71.82	72.52	55.91	56.91	60.01	61.01	53.61	53.95	0.00	0.00
Average Total Benefit*	\$49,029	\$50,820	\$36,401	\$37,755	\$103,781	\$106,376	\$49,915	\$51,426	\$0	\$0
Ordinary Disabled										
Number	1	1	2	2	0	0	4	4	0	0
Average Age	68.72	69.72	53.37	54.37	0.00	0.00	51.63	50.56	0.00	0.00
Average Total Benefit*	\$23,870	\$24,467	\$29,501	\$30,091	\$0	\$0	\$61,839	\$59,967	\$0	\$0
Total In Pay										
Number	156	153	59	59	41	41	132	152	0	0
Average Age	72.67	73.20	59.33	60.42	60.75	61.73	56.67	57.07	0.00	0.00
Average Total Benefit*	\$57,858	\$58,514	\$38,329	\$39,006	\$87,523	\$89,711	\$56,338	\$58,635	\$0	\$0
Terminated Vested										
Number	0	0	6	6	0	0	13	14	1	1
Average Age	0.00	0.00	38.87	44.69	0.00	0.00	43.69	45.32	56.44	57.44
Average Service	0.00	0.00	9.52	10.00	0.00	0.00	6.12	6.25	2.37	2.37
Transfers										
Number	0	0	6	8	1	0	55	59	0	1
Average Age	0.00	0.00	41.37	41.51	61.08	0.00	45.55	45.65	0.00	34.90
Average Service	0.00	0.00	4.67	4.57	4.25	0.00	5.00	4.97	0.00	0.31
Total Inactive										
Number	0	0	12	14	1	0	68	73	1	2
Average Age	0.00	0.00	40.12	42.87	61.08	0.00	45.19	45.59	56.44	46.17
Average Service	0.00	0.00	7.09	6.89	4.25	0.00	5.21	5.22	2.37	1.34

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: Marin Special Districts														
	Court Tier 1		Court Tier 2		Court Tier 3		Court Tier 4		Court Tier 5		Total		Marin City CSD	
	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous
	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	3	2	1	1	88	76	4	4	6	17	102	100	5	5
Average Age	58.23	58.91	47.60	48.60	52.22	52.27	49.50	50.47	49.30	40.01	52.08	50.21	49.65	45.36
Average Service	29.06	35.40	14.02	15.02	14.49	15.21	7.75	7.56	0.95	0.97	13.85	12.88	8.80	5.27
Average Pay*	\$137,109	\$98,807	\$54,245	\$56,511	\$70,352	\$73,225	\$63,226	\$67,723	\$39,195	\$68,002	\$70,046	\$72,461	\$56,255	\$67,369
Service Retired														
Number	16	17	11	12	49	61	0	0	0	0	76	90	0	1
Average Age	69.13	69.52	76.73	76.72	64.94	65.25	0.00	0.00	0.00	0.00	67.53	67.59	0.00	67.52
Average Total Benefit*	\$59,697	\$63,766	\$34,203	\$33,926	\$27,085	\$27,718	\$0	\$0	\$0	\$0	\$34,981	\$35,354	\$0	\$30,846
Beneficiaries														
Number	0	0	0	0	3	4	0	0	0	0	3	4	1	1
Average Age	0.00	0.00	0.00	0.00	64.99	68.44	0.00	0.00	0.00	0.00	64.99	68.44	80.31	81.31
Average Total Benefit*	\$0	\$0	\$0	\$0	\$15,398	\$15,559	\$0	\$0	\$0	\$0	\$15,398	\$15,559	\$24,327	\$24,935
Duty Disabled														
Number	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ordinary Disabled														
Number	0	0	1	1	2	2	0	0	0	0	3	3	0	0
Average Age	0.00	0.00	68.71	69.71	61.96	62.96	0.00	0.00	0.00	0.00	64.21	65.21	0.00	0.00
Average Total Benefit*	\$0	\$0	\$13,306	\$13,572	\$31,502	\$32,132	\$0	\$0	\$0	\$0	\$25,437	\$25,946	\$0	\$0
Total In Pay														
Number	16	17	12	13	54	67	0	0	0	0	82	97	1	2
Average Age	69.13	69.52	76.06	76.18	64.84	65.37	0.00	0.00	0.00	0.00	67.32	67.55	80.31	74.42
Average Total Benefit*	\$59,697	\$63,766	\$32,461	\$32,360	\$26,600	\$27,123	\$0	\$0	\$0	\$0	\$33,916	\$34,247	\$24,327	\$27,891
Terminated Vested														
Number	0	0	1	0	14	14	1	0	0	0	16	14	0	0
Average Age	0.00	0.00	64.65	0.00	46.07	44.77	38.51	0.00	0.00	0.00	46.76	44.77	0.00	0.00
Average Service	0.00	0.00	14.91	0.00	8.64	8.40	6.14	0.00	0.00	0.00	8.87	8.40	0.00	0.00
Transfers														
Number	0	0	2	2	21	20	1	1	0	0	24	23	0	0
Average Age	0.00	0.00	58.44	59.44	49.40	49.30	28.81	29.81	0.00	0.00	49.30	49.33	0.00	0.00
Average Service	0.00	0.00	3.53	3.53	5.35	5.34	2.04	2.04	0.00	0.00	5.06	5.04	0.00	0.00
Total Inactive														
Number	0	0	3	2	35	34	2	1	0	0	40	37	0	0
Average Age	0.00	0.00	60.51	59.44	48.07	47.44	33.66	29.81	0.00	0.00	48.28	47.61	0.00	0.00
Average Service	0.00	0.00	7.32	3.53	6.67	6.60	4.09	2.04	0.00	0.00	6.59	6.31	0.00	0.00

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: Marin Special Districts																
	Southern Marin Fire Tier 1 Miscellaneous		Southern Marin Fire Tier 2 Miscellaneous		Total		Southern Marin Fire Tier 1 Safety		Southern Marin Fire Tier 2 Safety		Southern Marin Fire Tier 2A Safety		Southern Marin Fire Tier 3A Safety		Total	
	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	6/30/2015	6/30/2016
Active Participants																
Number	1	1	0	2	1	3	16	15	26	24	1	2	6	10	49	51
Average Age	53.41	54.41	0.00	48.06	53.41	50.17	47.13	47.18	40.90	41.38	33.19	32.92	33.91	33.01	41.92	41.11
Average Service	10.91	11.92	0.00	2.89	10.91	5.90	15.54	16.43	4.62	5.56	1.01	1.10	0.83	1.24	7.65	7.73
Average Pay*	\$86,498	\$86,803	\$0	\$90,004	\$86,498	\$88,937	\$109,980	\$114,640	\$100,908	\$103,701	\$93,482	\$88,927	\$98,055	\$88,188	\$103,369	\$103,297
Service Retired																
Number	3	3	0	0	3	3	21	23	1	1	0	0	0	0	22	24
Average Age	69.17	70.17	0.00	0.00	69.17	70.17	61.95	62.29	60.32	61.32	0.00	0.00	0.00	0.00	61.88	62.25
Average Total Benefit*	\$23,989	\$24,588	\$0	\$0	\$23,989	\$24,588	\$77,012	\$77,391	\$4,535	\$4,648	\$0	\$0	\$0	\$0	\$73,717	\$74,360
Beneficiaries																
Number	0	0	0	0	0	0	9	9	0	0	0	0	0	0	9	9
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	64.86	65.86	0.00	0.00	0.00	0.00	0.00	0.00	64.86	65.86
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$40,435	\$41,502	\$0	\$0	\$0	\$0	\$0	\$0	\$40,435	\$41,502
Duty Disabled																
Number	1	1	0	0	1	1	16	16	0	0	0	0	0	0	16	16
Average Age	71.28	72.28	0.00	0.00	71.28	72.28	64.42	65.42	0.00	0.00	0.00	0.00	0.00	0.00	64.42	65.42
Average Total Benefit*	\$4,021	\$4,121	\$0	\$0	\$4,021	\$4,121	\$51,780	\$53,075	\$0	\$0	\$0	\$0	\$0	\$0	\$51,780	\$53,075
Ordinary Disabled																
Number	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	55.21	56.21	0.00	0.00	0.00	0.00	0.00	0.00	55.21	56.21
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$54,260	\$55,617	\$0	\$0	\$0	\$0	\$0	\$0	\$54,260	\$55,617
Total In Pay																
Number	4	4	0	0	4	4	47	49	1	1	0	0	0	0	48	50
Average Age	69.70	70.70	0.00	0.00	69.70	70.70	63.21	63.84	60.32	61.32	0.00	0.00	0.00	0.00	63.15	63.79
Average Total Benefit*	\$18,997	\$19,472	\$0	\$0	\$18,997	\$19,472	\$60,934	\$62,415	\$4,535	\$4,648	\$0	\$0	\$0	\$0	\$59,759	\$61,259
Terminated Vested																
Number	1	1	0	0	1	1	1	1	2	3	0	0	0	0	3	4
Average Age	71.85	72.85	0.00	0.00	71.85	72.85	52.15	53.15	48.70	49.10	0.00	0.00	0.00	0.00	49.85	50.11
Average Service	8.92	8.92	0.00	0.00	8.92	8.92	0.54	0.54	3.10	3.26	0.00	0.00	0.00	0.00	2.24	2.58
Transfers																
Number	0	0	0	0	0	0	11	10	5	6	0	0	0	0	16	16
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	50.03	51.29	35.62	38.58	0.00	0.00	0.00	0.00	45.53	46.53
Average Service	0.00	0.00	0.00	0.00	0.00	0.00	6.67	5.93	3.92	3.31	0.00	0.00	0.00	0.00	5.81	4.95
Total Inactive																
Number	1	1	0	0	1	1	12	11	7	9	0	0	0	0	19	20
Average Age	71.85	72.85	0.00	0.00	71.85	72.85	50.20	51.46	39.36	42.09	0.00	0.00	0.00	0.00	46.21	47.24
Average Service	8.92	8.92	0.00	0.00	8.92	8.92	6.16	5.44	3.69	3.29	0.00	0.00	0.00	0.00	5.25	4.47

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

	Participant Data as of June 30,2016: Marin Special Districts							
	Southern Marin Fire		Mosquito District		Mosquito District		Total	
	Total		Tier 1 Miscellaneous		Tier 2 Miscellaneous		Total	
	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	50	54	33	30	0	1	33	31
Average Age	42.15	41.62	49.93	50.49	0.00	41.85	49.93	50.21
Average Service	7.72	7.63	12.63	13.51	0.00	0.75	12.63	13.10
Average Pay*	\$103,032	\$102,499	\$88,908	\$92,008	\$0	\$76,193	\$88,908	\$91,498
Service Retired								
Number	25	27	13	14	0	0	13	14
Average Age	62.75	63.13	64.87	64.97	0.00	0.00	64.87	64.97
Average Total Benefit*	\$67,750	\$68,830	\$56,486	\$56,522	\$0	\$0	\$56,486	\$56,522
Beneficiaries								
Number	9	9	3	4	0	0	3	4
Average Age	64.86	65.86	70.64	71.45	0.00	0.00	70.64	71.45
Average Total Benefit*	\$40,435	\$41,502	\$16,581	\$15,721	\$0	\$0	\$16,581	\$15,721
Duty Disabled								
Number	17	17	1	1	0	0	1	1
Average Age	64.82	65.82	70.91	71.91	0.00	0.00	70.91	71.91
Average Total Benefit*	\$48,971	\$50,195	\$33,722	\$34,565	\$0	\$0	\$33,722	\$34,565
Ordinary Disabled								
Number	1	1	0	0	0	0	0	0
Average Age	55.21	56.21	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$54,260	\$55,617	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay								
Number	52	54	17	19	0	0	17	19
Average Age	63.65	64.31	66.24	66.70	0.00	0.00	66.24	66.70
Average Total Benefit*	\$56,623	\$58,164	\$48,105	\$46,777	\$0	\$0	\$48,105	\$46,777
Terminated Vested								
Number	4	5	0	1	0	0	0	1
Average Age	55.35	54.66	0.00	33.97	0.00	0.00	0.00	33.97
Average Service	3.91	3.85	0.00	9.85	0.00	0.00	0.00	9.85
Transfers								
Number	16	16	1	1	0	0	1	1
Average Age	45.53	46.53	49.03	50.03	0.00	0.00	49.03	50.03
Average Service	5.81	4.95	11.00	11.00	0.00	0.00	11.00	11.00
Total Inactive								
Number	20	21	1	2	0	0	1	2
Average Age	47.49	48.46	49.03	42.00	0.00	0.00	49.03	42.00
Average Service	5.43	4.68	11.00	10.43	0.00	0.00	11.00	10.43

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: Marin Special Districts														
	LAFCO Tier 2 Miscellaneous		LAFCO Tier 3 Miscellaneous		LAFCO Tier 4 Miscellaneous		Total		Tamalpais CSD Tier 1 Miscellaneous		Tamalpais CSD Tier 2 Miscellaneous		Total	
	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	0	0	2	2	0	1	2	3	9	9	2	2	11	11
Average Age	0.00	0.00	42.14	43.14	0.00	26.52	42.14	37.60	57.69	58.69	31.47	32.47	52.92	53.92
Average Service	0.00	0.00	5.25	6.11	0.00	0.70	5.25	4.31	16.04	17.05	1.21	2.21	13.34	14.35
Average Pay*	\$0	\$0	\$94,595	\$101,832	\$0	\$71,032	\$94,595	\$91,565	\$82,887	\$85,236	\$59,271	\$60,119	\$78,593	\$80,670
Service Retired														
Number	2	2	2	2	0	0	4	4	6	8	0	0	6	8
Average Age	67.38	68.38	56.76	57.76	0.00	0.00	62.07	63.07	68.52	67.16	0.00	0.00	68.52	67.16
Average Total Benefit*	\$25,598	\$26,238	\$5,605	\$5,717	\$0	\$0	\$15,602	\$15,978	\$26,743	\$24,050	\$0	\$0	\$26,743	\$24,050
Beneficiaries														
Number	0	0	0	0	0	0	0	0	1	3	0	0	1	3
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.92	51.89	0.00	0.00	78.92	51.89
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,948	\$8,182	\$0	\$0	\$23,948	\$8,182
Duty Disabled														
Number	0	0	0	0	0	0	0	0	1	1	0	0	1	1
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.31	44.31	0.00	0.00	43.31	44.31
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,264	\$27,946	\$0	\$0	\$27,264	\$27,946
Ordinary Disabled														
Number	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay														
Number	2	2	2	2	0	0	4	4	8	12	0	0	8	12
Average Age	67.38	68.38	56.76	57.76	0.00	0.00	62.07	63.07	66.67	61.44	0.00	0.00	66.67	61.44
Average Total Benefit*	\$25,598	\$26,238	\$5,605	\$5,717	\$0	\$0	\$15,602	\$15,978	\$26,459	\$20,408	\$0	\$0	\$26,459	\$20,408
Terminated Vested														
Number	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Service	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transfers														
Number	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.08	0.00	0.00	0.00	59.08	0.00
Average Service	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.70	0.00	0.00	0.00	7.70	0.00
Total Inactive														
Number	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.08	0.00	0.00	0.00	59.08	0.00
Average Service	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.70	0.00	0.00	0.00	7.70	0.00

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: Novato Fire Protection District										
	Tier 1 Miscellaneous		Tier 2A Miscellaneous		Tier 1 Safety		Tier 2 Safety		Tier 3 Safety	
	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	8	7	0	3	54	53	7	7	6	7
Average Age	48.62	47.62	0.00	43.67	44.32	45.48	40.21	41.21	29.55	33.45
Average Service	11.21	12.44	0.00	0.72	15.55	16.63	6.60	6.49	1.47	2.25
Average Pay*	\$102,163	\$103,742	\$0	\$49,707	\$123,749	\$128,178	\$107,855	\$111,103	\$99,476	\$108,570
Service Retired										
Number	3	4	0	0	52	52	0	0	0	0
Average Age	64.48	65.03	0.00	0.00	65.55	66.24	0.00	0.00	0.00	0.00
Average Total Benefit*	\$42,542	\$39,449	\$0	\$0	\$93,708	\$95,282	\$0	\$0	\$0	\$0
Beneficiaries										
Number	1	1	0	0	15	15	0	0	0	0
Average Age	51.67	52.67	0.00	0.00	63.91	63.66	0.00	0.00	0.00	0.00
Average Total Benefit*	\$10,934	\$11,207	\$0	\$0	\$40,620	\$41,648	\$0	\$0	\$0	\$0
Duty Disabled										
Number	0	0	0	0	31	31	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	67.47	68.47	0.00	0.00	0.00	0.00
Average Total Benefit*	\$0	\$0	\$0	\$0	\$63,841	\$65,437	\$0	\$0	\$0	\$0
Ordinary Disabled										
Number	0	0	0	0	0	0	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay										
Number	4	5	0	0	98	98	0	0	0	0
Average Age	61.28	62.56	0.00	0.00	65.91	66.55	0.00	0.00	0.00	0.00
Average Total Benefit*	\$34,640	\$33,800	\$0	\$0	\$76,135	\$77,632	\$0	\$0	\$0	\$0
Terminated Vested										
Number	1	1	0	0	2	3	0	0	0	0
Average Age	56.56	57.56	0.00	0.00	47.21	44.50	0.00	0.00	0.00	0.00
Average Service	6.16	6.16	0.00	0.00	4.82	7.18	0.00	0.00	0.00	0.00
Transfers										
Number	1	1	0	0	11	10	0	0	0	0
Average Age	52.73	53.73	0.00	0.00	43.08	42.71	0.00	0.00	0.00	0.00
Average Service	1.25	1.25	0.00	0.00	3.14	4.04	0.00	0.00	0.00	0.00
Total Inactive										
Number	2	2	0	0	13	13	0	0	0	0
Average Age	54.65	55.65	0.00	0.00	43.71	43.12	0.00	0.00	0.00	0.00
Average Service	3.71	3.71	0.00	0.00	3.39	4.76	0.00	0.00	0.00	0.00

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: Novato Fire Protection District						
	Miscellaneous		Safety		Total	
	6/30/2015	6/30/2016	6/30/2015	6/30/2016	6/30/2015	6/30/2016
Active Participants						
Number	8	10	67	67	75	77
Average Age	48.62	46.43	42.57	43.78	43.22	44.12
Average Service	11.21	8.92	13.35	14.07	13.12	13.40
Average Pay*	\$102,163	\$87,532	\$119,915	\$124,345	\$118,021	\$119,564
Service Retired						
Number	3	4	52	52	55	56
Average Age	64.48	65.03	65.55	66.24	65.49	66.15
Average Total Benefit*	\$42,542	\$39,449	\$93,708	\$95,282	\$90,917	\$91,294
Beneficiaries						
Number	1	1	15	15	16	16
Average Age	51.67	52.67	63.91	63.66	63.14	62.91
Average Total Benefit*	\$10,934	\$11,207	\$40,620	\$41,648	\$38,765	\$39,745
Duty Disabled						
Number	0	0	31	31	31	31
Average Age	0.00	0.00	67.47	68.47	67.47	68.47
Average Total Benefit*	\$0	\$0	\$63,841	\$65,437	\$63,841	\$65,437
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	4	5	98	98	102	103
Average Age	61.28	62.56	65.91	66.55	65.73	66.35
Average Total Benefit*	\$34,640	\$33,800	\$76,135	\$77,632	\$74,507	\$75,504
Terminated Vested						
Number	1	1	2	3	3	4
Average Age	56.56	57.56	47.21	44.50	50.32	47.77
Average Service	6.16	6.16	4.82	7.18	5.26	6.93
Transfers						
Number	1	1	11	10	12	11
Average Age	52.73	53.73	43.08	42.71	43.88	43.71
Average Service	1.25	1.25	3.14	4.04	2.98	3.79
Total Inactive						
Number	2	2	13	13	15	15
Average Age	54.65	55.65	43.71	43.12	45.17	44.79
Average Service	3.71	3.71	3.39	4.76	3.44	4.62

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: City of San Rafael										
	Miscellaneous		Police		Fire		Total Safety		Total	
	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

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2016: City of San Rafael																
	Tier 1 Miscellaneous		Tier 2 Miscellaneous		Tier 3 Miscellaneous		Tier 1 Police		Tier 2 Police		Tier 3 Safety		Tier 1 Fire		Tier 2 Fire	
	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	6/30/2015	6/30/2016
Active Participants																
Number	167	151	18	21	36	49	53	49	5	5	15	29	41	39	14	14
Average Age	50.99	51.46	39.97	42.58	35.85	35.42	42.52	43.94	35.64	36.64	28.73	28.73	43.38	43.90	31.66	32.95
Average Service	14.02	14.82	2.40	2.85	0.97	1.51	13.93	14.99	2.41	3.41	1.60	1.46	13.00	13.24	2.86	3.68
Average Pay*	\$79,472	\$80,942	\$65,324	\$78,164	\$61,063	\$63,135	\$118,943	\$122,967	\$113,827	\$114,248	\$87,556	\$94,139	\$130,608	\$136,903	\$106,812	\$109,150
Service Retired																
Number	222	234	0	0	0	0	73	77	0	0	0	0	82	82	0	0
Average Age	68.85	69.12	0.00	0.00	0.00	0.00	64.61	65.15	0.00	0.00	0.00	0.00	66.77	67.01	0.00	0.00
Average Total Benefit*	\$33,607	\$35,033	\$0	\$0	\$0	\$0	\$64,828	\$65,623	\$0	\$0	\$0	\$0	\$86,377	\$89,573	\$0	\$0
Beneficiaries																
Number	36	35	0	0	0	0	16	15	0	0	0	0	20	22	0	0
Average Age	75.60	75.77	0.00	0.00	0.00	0.00	68.41	67.82	0.00	0.00	0.00	0.00	69.97	72.15	0.00	0.00
Average Total Benefit*	\$15,781	\$16,655	\$0	\$0	\$0	\$0	\$31,046	\$31,590	\$0	\$0	\$0	\$0	\$36,681	\$37,646	\$0	\$0
Duty Disabled																
Number	18	17	0	0	0	0	38	39	0	0	0	0	21	21	0	0
Average Age	65.04	65.40	0.00	0.00	0.00	0.00	60.75	61.13	0.00	0.00	0.00	0.00	65.76	66.71	0.00	0.00
Average Total Benefit*	\$26,299	\$27,310	\$0	\$0	\$0	\$0	\$51,826	\$53,191	\$0	\$0	\$0	\$0	\$79,231	\$81,219	\$0	\$0
Ordinary Disabled																
Number	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Age	82.45	83.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$11,415	\$11,719	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay																
Number	278	288	0	0	0	0	127	131	0	0	0	0	123	125	0	0
Average Age	69.58	69.81	0.00	0.00	0.00	0.00	63.93	64.26	0.00	0.00	0.00	0.00	67.12	67.86	0.00	0.00
Average Total Benefit*	\$30,665	\$32,181	\$0	\$0	\$0	\$0	\$56,682	\$58,025	\$0	\$0	\$0	\$0	\$77,077	\$79,030	\$0	\$0
Terminated Vested																
Number	26	24	1	0	0	0	7	5	0	0	0	0	2	2	0	0
Average Age	50.31	50.24	35.83	0.00	0.00	0.00	48.33	48.08	0.00	0.00	0.00	0.00	52.33	53.33	0.00	0.00
Average Service	6.15	5.95	2.10	0.00	0.00	0.00	9.55	8.82	0.00	0.00	0.00	0.00	4.99	4.99	0.00	0.00
Transfers																
Number	49	54	2	5	2	7	20	20	0	0	0	0	7	7	0	0
Average Age	46.90	47.84	47.44	40.56	39.95	35.17	47.88	46.08	0.00	0.00	0.00	0.00	45.97	46.97	0.00	0.00
Average Service	2.96	3.51	2.46	1.77	0.25	0.26	5.65	5.06	0.00	0.00	0.00	0.00	5.06	5.06	0.00	0.00
Total Inactive																
Number	75	78	3	5	2	7	27	25	0	0	0	0	9	9	0	0
Average Age	48.08	48.58	43.57	40.56	39.95	35.17	48.00	46.48	0.00	0.00	0.00	0.00	47.38	48.38	0.00	0.00
Average Service	4.06	4.26	2.34	1.77	0.25	0.26	6.66	5.81	0.00	0.00	0.00	0.00	5.04	5.04	0.00	0.00

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN COUNTY
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	8	1	2	0	1	0	0	0	0	0	0	0	0	12
25 to 29	46	19	22	4	5	4	1	0	0	0	0	0	0	101
30 to 34	39	35	24	18	4	32	5	0	0	0	0	0	0	157
35 to 39	29	19	22	8	10	41	38	4	0	0	0	0	0	171
40 to 44	18	12	15	16	8	47	48	20	4	0	0	0	0	188
45 to 49	15	13	17	4	6	51	42	45	16	3	0	0	0	212
50 to 54	15	8	13	16	15	44	58	45	28	23	5	0	0	270
55 to 59	15	12	10	9	8	27	53	52	17	24	5	5	5	237
60 to 64	3	7	5	4	7	33	48	42	20	20	15	4	4	208
65 to 69	2	2	4	1	1	15	24	31	10	3	4	3	3	100
70 & up	0	0	0	0	0	1	9	7	1	6	1	1	1	26
Total	190	128	134	80	65	295	326	246	96	79	30	13	13	1,682

**MARIN COUNTY
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	55,625	54,725	54,376	0	49,647	0	0	0	0	0	0	0	0	54,844
25 to 29	61,987	61,732	67,821	67,111	84,906	75,543	67,665	0	0	0	0	0	0	65,141
30 to 34	68,069	67,177	72,395	73,344	70,158	86,469	80,152	0	0	0	0	0	0	73,324
35 to 39	69,183	65,021	89,044	86,116	75,929	90,595	82,856	73,582	0	0	0	0	0	80,738
40 to 44	97,256	69,677	70,935	77,082	84,486	91,113	92,285	96,569	75,341	0	0	0	0	87,791
45 to 49	69,971	73,710	75,899	68,999	99,223	89,338	100,541	94,015	92,728	74,959	0	0	0	89,092
50 to 54	82,303	102,971	78,290	94,179	88,221	83,412	85,735	82,123	94,534	88,269	84,091	0	0	86,452
55 to 59	80,422	95,605	80,376	90,316	85,830	92,093	91,683	90,316	86,385	109,805	89,758	84,386	84,386	91,450
60 to 64	56,414	76,302	80,597	84,589	71,597	81,013	81,775	91,896	93,856	103,706	108,646	100,585	100,585	88,401
65 to 69	79,690	45,152	109,606	53,840	75,608	87,640	88,340	85,940	78,030	78,831	63,380	167,979	167,979	86,907
70 & up	0	0	0	0	0	122,719	61,075	73,302	62,878	85,274	78,117	66,851	66,851	73,269
Total	71,195	71,906	76,974	81,235	82,647	87,761	88,025	88,964	89,800	97,628	94,353	107,312	107,312	84,391

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN COUNTY
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service													Total
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	5	4	0	0	1	0	0	0	0	0	0	0	0	0
25 to 29	16	11	6	2	6	2	0	0	0	0	0	0	0	0
30 to 34	5	11	6	7	7	19	3	0	0	0	0	0	0	0
35 to 39	4	1	0	5	1	16	32	5	0	0	0	0	0	0
40 to 44	0	2	1	1	0	8	20	19	3	0	0	0	0	0
45 to 49	0	1	0	0	1	6	19	18	17	8	0	0	0	0
50 to 54	0	2	1	0	1	4	6	8	4	5	1	0	0	0
55 to 59	0	0	0	0	1	4	2	0	4	3	2	0	0	0
60 to 64	0	0	0	0	0	0	4	1	0	1	0	0	0	0
65 to 69	0	0	0	0	0	1	1	1	0	0	1	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	30	32	14	15	18	60	87	52	28	17	4	0	0	357

**MARIN COUNTY
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service													Total
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	74,824	79,940	0	0	81,491	0	0	0	0	0	0	0	0	0
25 to 29	71,921	76,546	74,281	90,133	93,349	106,925	0	0	0	0	0	0	0	0
30 to 34	78,539	82,008	77,440	88,622	93,884	104,942	107,127	0	0	0	0	0	0	0
35 to 39	70,699	80,870	0	78,898	97,683	100,370	108,951	112,405	0	0	0	0	0	0
40 to 44	0	80,944	83,675	108,332	0	109,599	109,271	120,692	118,054	0	0	0	0	0
45 to 49	0	138,050	0	0	104,919	113,330	102,158	112,090	120,806	136,676	0	0	0	0
50 to 54	0	121,836	93,558	0	163,768	116,827	117,989	117,635	121,435	111,913	186,763	0	0	0
55 to 59	0	0	0	0	109,042	130,593	95,724	0	128,569	121,620	122,836	0	0	0
60 to 64	0	0	0	0	0	0	88,384	118,768	0	88,629	0	0	0	0
65 to 69	0	0	0	0	0	111,321	103,557	84,261	0	0	223,136	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	73,345	84,010	77,683	86,896	98,566	107,857	106,790	115,710	121,710	123,910	163,893	0	0	103,649

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service													Total
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	3	0	0	0	0	0	0	0	0	0	0	0	0	3
25 to 29	3	1	1	0	0	0	0	0	0	0	0	0	0	5
30 to 34	1	0	0	0	0	0	1	0	0	0	0	0	0	2
35 to 39	5	0	1	0	1	4	8	3	0	0	0	0	0	22
40 to 44	3	0	1	0	1	6	6	4	0	0	0	0	0	21
45 to 49	0	0	0	0	0	4	4	5	1	0	0	0	0	14
50 to 54	2	1	0	0	1	2	13	5	3	1	1	0	0	29
55 to 59	0	2	0	0	1	3	9	6	2	3	4	2	2	32
60 to 64	0	1	0	0	0	1	5	4	2	1	0	0	0	14
65 to 69	0	0	1	0	0	1	2	0	1	0	0	0	0	5
70 & up	0	0	0	0	1	2	2	0	0	1	0	0	0	6
Total	17	5	4	0	5	23	50	27	9	6	5	2	2	153

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service													Total
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	39,904	0	0	0	0	0	0	0	0	0	0	0	0	39,904
25 to 29	48,504	48,867	54,632	0	0	0	0	0	0	0	0	0	0	49,802
30 to 34	37,226	0	0	0	0	0	63,492	0	0	0	0	0	0	50,359
35 to 39	79,257	0	65,607	0	52,000	67,098	69,726	90,172	0	0	0	0	0	73,209
40 to 44	89,616	0	130,000	0	95,996	58,232	77,331	75,991	0	0	0	0	0	76,771
45 to 49	0	0	0	0	0	94,571	79,288	69,398	98,807	0	0	0	0	81,517
50 to 54	62,627	94,107	0	0	83,328	48,356	80,294	71,710	84,843	70,746	63,492	0	0	75,536
55 to 59	0	45,318	0	0	169,048	65,450	70,220	84,299	103,392	93,200	77,354	94,963	0	80,610
60 to 64	0	265,000	0	0	0	52,164	98,136	97,788	95,276	79,165	0	0	0	104,908
65 to 69	0	0	42,959	0	0	56,511	74,811	0	79,165	0	0	0	0	65,651
70 & up	0	0	0	0	30,701	106,163	66,994	0	0	70,746	0	0	0	74,627
Total	64,284	99,722	73,299	0	86,215	70,006	77,050	80,628	92,204	83,376	74,581	94,963	2	77,440

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	3	0	2	0	1	0	0	0	0	0	0	0	0	6
30 to 34	1	1	3	1	0	3	0	0	0	0	0	0	0	9
35 to 39	1	0	0	0	3	1	2	0	0	0	0	0	0	7
40 to 44	0	0	0	0	3	2	4	1	0	0	0	0	0	10
45 to 49	0	0	1	1	4	0	1	3	1	0	0	0	0	11
50 to 54	0	0	0	0	1	1	2	1	1	1	0	0	0	7
55 to 59	0	1	0	0	0	0	0	0	0	0	0	0	0	1
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	2	6	2	12	7	9	5	2	1	0	0	0	51

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	69,310	0	85,045	0	101,477	0	0	0	0	0	0	0	0	79,916
30 to 34	80,256	89,110	92,617	91,153	0	94,665	0	0	0	0	0	0	0	91,374
35 to 39	65,497	0	0	0	99,127	92,160	105,965	0	0	0	0	0	0	95,281
40 to 44	0	0	0	0	114,248	98,974	129,547	96,128	0	0	0	0	0	115,501
45 to 49	0	0	92,160	94,329	107,383	0	122,526	108,513	114,716	0	0	0	0	107,164
50 to 54	0	0	0	0	121,449	118,748	103,098	119,857	117,326	112,936	0	0	0	113,787
55 to 59	0	169,000	0	0	0	0	0	0	0	0	0	0	0	169,000
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	70,737	129,055	90,017	92,741	107,715	98,979	117,649	108,305	116,021	112,936	0	0	0	103,297

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	1	0	0	0	0	0	0	0	0	0	0	0	1
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	1	2	0	0	0	0	0	0	3
45 to 49	0	0	0	0	0	0	2	0	0	0	0	0	0	2
50 to 54	2	0	0	0	0	0	0	1	0	0	0	0	0	3
55 to 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 to 64	0	0	0	0	0	0	1	0	0	0	0	0	0	1
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	0	0	0	1	5	1	0	0	0	0	0	10

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	48,299	0	0	0	0	0	0	0	0	0	0	0	48,299
30 to 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	125,678	74,519	0	0	0	0	0	0	91,572
45 to 49	0	0	0	0	0	0	102,323	0	0	0	0	0	0	102,323
50 to 54	50,411	0	0	0	0	0	0	83,952	0	0	0	0	0	61,591
55 to 59	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60 to 64	0	0	0	0	0	0	162,881	0	0	0	0	0	0	162,881
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	50,411	48,299	0	0	0	125,678	103,313	83,952	0	0	0	0	0	87,532

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	2	0	0	0	0	0	0	0	0	0	0	2
25 to 29	0	1	1	0	0	0	0	0	0	0	0	0	0	2
30 to 34	0	0	0	0	0	1	0	0	0	0	0	0	0	1
35 to 39	0	0	1	0	0	1	5	3	0	0	0	0	0	10
40 to 44	0	0	1	0	0	4	16	4	0	0	0	0	0	25
45 to 49	1	0	0	0	0	0	3	7	4	1	0	0	0	16
50 to 54	1	0	0	0	0	0	1	0	1	3	1	0	0	7
55 to 59	0	0	0	0	0	0	2	2	0	0	0	0	0	4
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	5	0	0	6	27	16	5	4	1	0	0	67

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	109,954	0	0	0	0	0	0	0	0	0	0	109,954
25 to 29	0	103,519	111,177	0	0	0	0	0	0	0	0	0	0	107,348
30 to 34	0	0	0	0	0	111,177	0	0	0	0	0	0	0	111,177
35 to 39	0	0	111,177	0	0	111,177	114,854	124,041	0	0	0	0	0	116,875
40 to 44	0	0	109,954	0	0	110,869	115,392	122,058	0	0	0	0	0	115,517
45 to 49	111,888	0	0	0	0	0	115,436	122,312	144,541	228,434	0	0	0	132,561
50 to 54	104,254	0	0	0	0	0	183,621	0	172,693	150,639	224,095	0	0	162,369
55 to 59	0	0	0	0	0	0	110,885	124,664	0	0	0	0	0	117,775
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	108,071	103,519	110,443	0	0	110,972	117,490	122,867	150,171	170,088	224,095	0	0	124,345

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	3	1	1	0	0	0	0	0	0	0	0	0	0	5
25 to 29	8	5	3	1	3	0	0	0	0	0	0	0	0	20
30 to 34	1	4	1	2	3	1	2	0	0	0	0	0	0	14
35 to 39	2	4	3	4	0	12	3	0	0	0	0	0	0	28
40 to 44	2	1	2	1	0	11	4	5	0	0	0	0	0	26
45 to 49	3	2	1	0	0	3	6	9	2	1	0	0	0	27
50 to 54	2	1	0	1	0	7	5	8	4	6	3	0	0	37
55 to 59	1	2	0	0	1	4	8	9	2	4	0	0	0	31
60 to 64	0	0	1	0	1	9	5	6	0	2	1	0	0	25
65 to 69	0	0	0	0	0	0	0	3	1	1	0	0	0	5
70 & up	0	0	0	1	0	0	0	1	0	1	0	0	0	3
Total	22	20	12	10	8	47	33	41	9	15	4	0	0	221

**CITY OF SAN RAFAEL
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	53,039	28,088	57,213	0	0	0	0	0	0	0	0	0	0	48,884
25 to 29	50,365	63,912	50,538	46,530	43,168	0	0	0	0	0	0	0	0	52,506
30 to 34	86,160	67,820	54,269	67,824	79,508	63,632	78,870	0	0	0	0	0	0	71,947
35 to 39	54,425	62,562	50,712	51,139	0	81,156	45,371	0	0	0	0	0	0	65,206
40 to 44	114,407	47,561	58,042	64,428	0	72,494	70,512	78,848	0	0	0	0	0	74,254
45 to 49	116,878	73,856	121,524	0	0	124,192	64,148	72,952	90,988	85,383	0	0	0	85,232
50 to 54	99,657	110,799	0	116,045	0	110,511	79,165	79,776	66,731	81,029	81,349	0	0	87,322
55 to 59	179,744	76,508	0	0	66,476	92,306	81,660	70,889	72,433	82,362	0	0	0	81,744
60 to 64	0	0	67,080	0	75,173	84,782	102,081	87,953	0	52,416	72,993	0	0	84,849
65 to 69	0	0	0	0	0	0	0	99,888	141,678	105,878	0	0	0	109,444
70 & up	0	0	0	27,356	0	0	0	64,370	0	72,794	0	0	0	54,840
Total	77,979	66,413	59,993	59,456	63,710	87,518	76,373	78,507	81,716	78,967	79,260	0	0	76,730

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF POLICE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

COUNTS BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	6	0	0	0	0	0	0	0	0	0	0	0	0	6
25 to 29	6	4	5	2	0	0	0	0	0	0	0	0	0	17
30 to 34	2	0	0	4	1	3	2	0	0	0	0	0	0	12
35 to 39	0	0	0	1	1	0	8	0	0	0	0	0	0	10
40 to 44	0	0	0	0	0	2	10	4	0	0	0	0	0	16
45 to 49	1	0	0	0	0	3	2	4	3	0	0	0	0	13
50 to 54	0	0	0	0	1	0	0	2	0	3	0	0	0	6
55 to 59	0	0	0	0	0	0	0	1	0	0	1	0	0	2
60 to 64	0	0	0	0	0	0	1	0	0	0	0	0	0	1
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	15	4	5	7	3	8	23	11	3	3	1	0	0	83

**CITY OF SAN RAFAEL
DISTRIBUTION OF POLICE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total	
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	84,349	0	0	0	0	0	0	0	0	0	0	0	0	84,349
25 to 29	95,058	103,047	94,585	93,021	0	0	0	0	0	0	0	0	0	96,559
30 to 34	80,663	0	0	102,276	99,989	109,665	111,754	0	0	0	0	0	0	101,910
35 to 39	0	0	0	108,498	99,691	0	122,318	0	0	0	0	0	0	118,673
40 to 44	0	0	0	0	0	112,900	117,556	130,700	0	0	0	0	0	120,260
45 to 49	99,511	0	0	0	0	116,467	114,784	128,826	139,576	0	0	0	0	124,039
50 to 54	0	0	0	0	175,559	0	0	143,684	0	131,479	0	0	0	142,894
55 to 59	0	0	0	0	0	0	0	133,439	0	0	127,218	0	0	130,329
60 to 64	0	0	0	0	0	0	114,725	0	0	0	0	0	0	114,725
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	89,152	103,047	94,585	100,521	125,080	113,025	118,344	132,628	139,576	131,479	127,218	0	0	112,370

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF FIRE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	2	1	1	0	0	0	0	0	0	4
30 to 34	0	2	0	2	4	4	1	0	0	0	0	0	13
35 to 39	0	0	0	2	1	6	1	1	0	0	0	0	11
40 to 44	0	0	0	0	0	0	3	4	0	0	0	0	7
45 to 49	0	0	0	0	0	1	4	3	3	0	0	0	11
50 to 54	0	0	0	0	0	1	1	1	0	0	0	0	3
55 to 59	0	0	0	0	0	1	0	1	0	2	0	0	4
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	6	6	14	10	10	3	2	0	0	53

**CITY OF SAN RAFAEL
DISTRIBUTION OF FIRE ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2016**

AVERAGE PAY BY AGE/SERVICE

Age	Service												Total
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	103,446	117,438	138,895	0	0	0	0	0	0	115,806
30 to 34	0	90,919	0	117,438	114,104	127,553	124,355	0	0	0	0	0	115,976
35 to 39	0	0	0	110,688	109,261	132,491	142,666	162,627	0	0	0	0	130,079
40 to 44	0	0	0	0	0	0	135,644	146,806	0	0	0	0	142,022
45 to 49	0	0	0	0	0	138,427	133,579	137,360	141,602	0	0	0	137,239
50 to 54	0	0	0	0	0	114,743	141,888	117,139	0	0	0	0	124,590
55 to 59	0	0	0	0	0	181,264	0	132,507	0	137,095	0	0	146,990
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	90,919	0	110,524	113,852	134,177	135,016	141,157	141,602	137,095	0	0	129,572

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APPENDIX A – MEMBERSHIP INFORMATION

Changes in Plan Membership: Marin County Miscellaneous

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	1,623	203	204	174	29	86	1,399	243	3,961
New Entrants	194	0	0	0	0	0	0	0	194
Rehires	12	(10)	(1)	(1)	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	(1)	0	0	1	0	0	0	0
Retirements	(53)	(15)	(1)	(19)	0	0	86	2	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	1	0	1
Vested Terminations	(29)	(1)	(1)	31	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(2)	0	0	0	0	(1)	(12)	15	0
Non-Vested Terminations and Death without beneficiary	(33)	(1)	40	(3)	0	0	(26)	0	(23)
Transfers	(10)	24	(1)	(8)	0	0	0	0	5
Beneficiary Deaths	0	0	0	0	0	0	0	(9)	(9)
Domestic Relations Orders	0	0	0	4	0	0	0	2	6
Withdrawals Paid	(12)	(1)	(8)	(1)	0	0	0	0	(22)
Data Corrections	(8)	(3)	(1)	(2)	1	0	(1)	1	(13)
June 30, 2016	1,682	195	231	175	31	85	1,447	254	4,100

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Changes in Plan Membership: Marin County Safety

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	359	62	17	20	7	100	219	62	846
New Entrants	26	0	0	0	0	0	0	0	26
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	(2)	0	0	0	0	2	0	0	0
Ordinary Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(13)	(3)	0	(2)	0	0	17	1	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	1	0	1
Vested Terminations	(3)	0	0	3	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	(2)	2	0
Non-Vested Terminations and Death without beneficiary	(6)	0	6	0	(1)	(1)	(1)	0	(3)
Transfers	0	10	(1)	(4)	0	0	0	0	5
Beneficiary Deaths	0	0	0	0	0	0	0	(4)	(4)
Domestic Relations Orders	0	0	0	4	0	0	0	2	6
Withdrawals Paid	(2)	(1)	0	0	0	0	0	0	(3)
Data Corrections	(1)	0	0	0	0	0	0	0	(1)
June 30, 2016	357	68	22	21	7	101	234	63	873

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APPENDIX A – MEMBERSHIP INFORMATION

Changes in Plan Membership: Marin Special Districts Miscellaneous

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	154	27	29	17	3	3	102	8	343
New Entrants	17	0	0	0	0	0	0	0	17
Rehires	3	(1)	(1)	(1)	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(12)	(4)	0	(3)	0	0	19	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(4)	0	0	4	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(1)	0	0	0	0	0	(1)	2	0
Non-Vested Terminations and Death without beneficiary	(2)	0	2	0	0	0	0	0	0
Transfers	(1)	2	0	(1)	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(1)	(1)
Domestic Relations Orders	0	0	0	0	0	0	0	3	3
Withdrawals Paid	0	0	(1)	0	0	0	0	0	(1)
Data Corrections	(1)	0	1	0	0	0	0	0	0
June 30, 2016	153	24	30	16	3	3	120	12	361

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Changes in Plan Membership: Marin Special Districts Safety

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	49	16	1	3	1	16	22	9	117
New Entrants	5	0	0	0	0	0	0	0	5
Rehires	1	(1)	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(2)	0	0	0	0	0	2	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(1)	0	0	1	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	0	0	0
Non-Vested Terminations and Death without beneficiary	0	0	0	0	0	0	0	0	0
Transfers	(1)	1	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	0	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2016	51	16	1	4	1	16	24	9	122

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Changes in Plan Membership: Marin County and Special Districts All Groups

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	2,185	308	251	214	40	205	1,742	322	5,267
New Entrants	242	0	0	0	0	0	0	0	242
Rehires	16	(12)	(2)	(2)	0	0	0	0	0
Duty Disabilities	(2)	0	0	0	0	2	0	0	0
Ordinary Disabilities	(1)	(1)	0	0	2	0	0	0	0
Retirements	(80)	(22)	(1)	(24)	0	0	124	3	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	2	0	2
Vested Terminations	(37)	(1)	(1)	39	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(3)	0	0	0	0	(1)	(15)	19	0
Non-Vested Terminations and Death without beneficiary	(41)	(1)	48	(3)	(1)	(1)	(27)	0	(26)
Transfers	(12)	37	(2)	(13)	0	0	0	0	10
Beneficiary Deaths	0	0	0	0	0	0	0	(14)	(14)
Domestic Relations Orders	0	0	0	8	0	0	0	7	15
Withdrawals Paid	(14)	(2)	(9)	(1)	0	0	0	0	(26)
Data Corrections	(10)	(3)	0	(2)	1	0	(1)	1	(14)
June 30, 2016	2,243	303	284	216	42	205	1,825	338	5,456

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Changes in Plan Membership: Novato Fire Protection District Miscellaneous

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	8	1	0	1	0	0	3	1	14
New Entrants	3	0	0	0	0	0	0	0	3
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(1)	0	0	0	0	0	1	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	0	0	0	0	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	0	0	0
Non-Vested Terminations and Death without beneficiary	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	0	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2016	10	1	0	1	0	0	4	1	17

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Changes in Plan Membership: Novato Fire Protection District Safety

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	67	11	4	2	0	31	52	15	182
New Entrants	1	0	0	0	0	0	0	0	1
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	0	(1)	0	0	0	0	1	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(1)	0	0	1	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	(1)	1	0
Non-Vested Terminations and Death without beneficiary	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(1)	(1)
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	0	(1)	0	0	0	0	0	(1)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2016	67	10	3	3	0	31	52	15	181

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Changes in Plan Membership: Novato Fire Protection District All Groups

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	75	12	4	3	0	31	55	16	196
New Entrants	4	0	0	0	0	0	0	0	4
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(1)	(1)	0	0	0	0	2	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(1)	0	0	1	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	(1)	1	0
Non-Vested Terminations and Death without beneficiary	0	0	0	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(1)	(1)
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	0	(1)	0	0	0	0	0	(1)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2016	77	11	3	4	0	31	56	16	198

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APPENDIX A – MEMBERSHIP INFORMATION

Changes in Plan Membership: City of San Rafael Miscellaneous

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	221	53	55	27	2	18	222	36	634
New Entrants	19	0	0	0	0	0	0	0	19
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(13)	(1)	0	0	0	0	14	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(1)	0	0	1	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(1)	0	1	0
Non-Vested Terminations and Death without beneficiary	(4)	0	4	0	0	0	(2)	0	(2)
Transfers	0	14	(1)	(5)	0	0	0	0	8
Beneficiary Deaths	0	0	0	0	0	0	0	(3)	(3)
Domestic Relations Orders	0	0	0	1	0	0	0	1	2
Withdrawals Paid	(1)	0	(3)	0	0	0	0	0	(4)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2016	221	66	55	24	2	17	234	35	654

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APPENDIX A – MEMBERSHIP INFORMATION

Changes in Plan Membership: City of San Rafael Police

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	73	20	9	7	0	38	73	16	236
New Entrants	13	0	0	0	0	0	0	0	13
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	(1)	0	0	0	0	1	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(1)	(2)	0	(1)	0	0	4	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	0	0	0	0	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	0	1	1
Non-Vested Terminations and Death without beneficiary	0	0	0	0	0	0	0	0	0
Transfers	0	2	0	0	0	0	0	0	2
Beneficiary Deaths	0	0	0	0	0	0	0	(2)	(2)
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	(1)	0	(1)	(1)	0	0	0	0	(3)
Data Corrections	0	0	1	0	0	0	0	0	1
June 30, 2016	83	20	9	5	0	39	77	15	248

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Changes in Plan Membership: City of San Rafael Fire

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	55	7	5	2	0	21	82	20	192
New Entrants	0	0	0	0	0	0	0	0	0
Rehires	1	0	(1)	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(2)	0	0	0	0	0	2	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	0	0	0	0	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	(2)	2	0
Non-Vested Terminations and Death without beneficiary	(1)	0	1	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	0	(1)	0	0	0	0	0	(1)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2016	53	7	4	2	0	21	82	22	191

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Changes in Plan Membership: City of San Rafael All Groups

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2015	349	80	69	36	2	77	377	72	1,062
New Entrants	32	0	0	0	0	0	0	0	32
Rehires	1	0	(1)	0	0	0	0	0	0
Duty Disabilities	(1)	0	0	0	0	1	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(16)	(3)	0	(1)	0	0	20	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(1)	0	0	1	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(1)	(2)	4	1
Non-Vested Terminations and Death without beneficiary	(5)	0	5	0	0	0	(2)	0	(2)
Transfers	0	16	(1)	(5)	0	0	0	0	10
Beneficiary Deaths	0	0	0	0	0	0	0	(5)	(5)
Domestic Relations Orders	0	0	0	1	0	0	0	1	2
Withdrawals Paid	(2)	0	(5)	(1)	0	0	0	0	(8)
Data Corrections	0	0	1	0	0	0	0	0	1
June 30, 2016	357	93	68	31	2	77	393	72	1,093

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Benefit Form Elections: Marin County and Special Districts					
Status	Marin County		Marin Special Districts		Total
	Misc	Safety	Misc	Safety	
Service Retired					
Option 1 - Cash Refund Annuity	58	2	4	0	64
Option 2 - J&S 100%	63	19	8	3	93
Option 3 - J&S 50%	8	2	0	1	11
Option 4	1	0	0	0	1
Unmodified Benefit Option	1,317	211	108	19	1,655
Unmodified Option - Service Connected Disability	0	0	0	1	1
(missing)	0	0	0	0	0
Total Service Retired	1,447	234	120	24	1,825
Ordinary Disability					
Option 1 - Cash Refund Annuity	3	0	0	0	3
Option 2 - J&S 100%	1	0	0	0	1
Option 3 - J&S 50%	0	0	0	0	0
Option 4	0	0	0	0	0
Unmodified Benefit Option	27	7	3	1	38
Unmodified Option - Service Connected Disability	0	0	0	0	0
(missing)	0	0	0	0	0
Total Ordinary Disability	31	7	3	1	42
Duty Disability					
Option 1 - Cash Refund Annuity	1	2	1	0	4
Option 2 - J&S 100%	0	0	0	0	0
Option 3 - J&S 50%	1	1	0	0	2
Option 4	0	0	0	0	0
Unmodified Benefit Option	1	4	0	0	5
Unmodified Option - Service Connected Disability	82	94	2	16	194
(missing)	0	0	0	0	0
Total Duty Disability	85	101	3	16	205
Total	1,563	342	126	41	2,072

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Benefit Form Elections: Novato Fire Protection District			
Status	Miscellaneous	Safety	Total
Service Retired			
Option 1 - Cash Refund Annuity	0	0	0
Option 2 - J&S 100%	0	1	1
Option 3 - J&S 50%	1	0	1
Option 4	0	0	0
Unmodified Benefit Option	3	51	54
Unmodified Option - Service Connected Disability (missing)	0	0	0
Total Service Retired	4	52	56
Ordinary Disability			
Option 1 - Cash Refund Annuity	0	0	0
Option 2 - J&S 100%	0	0	0
Option 3 - J&S 50%	0	0	0
Option 4	0	0	0
Unmodified Benefit Option	0	0	0
Unmodified Option - Service Connected Disability (missing)	0	0	0
Total Ordinary Disability	0	0	0
Duty Disability			
Option 1 - Cash Refund Annuity	0	0	0
Option 2 - J&S 100%	0	0	0
Option 3 - J&S 50%	0	0	0
Option 4	0	0	0
Unmodified Benefit Option	0	1	1
Unmodified Option - Service Connected Disability (missing)	0	30	30
Total Duty Disability	0	31	31
Total	4	83	87

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Benefit Form Elections: City of San Rafael				
	Miscellaneous	Police	Fire	Total
Service Retired				
Option 1 - Cash Refund Annuity	5	1	0	6
Option 2 - J&S 100%	19	14	4	37
Option 3 - J&S 50%	2	0	0	2
Option 4	0	0	0	0
Unmodified Benefit Option	208	61	78	347
Unmodified Option - Service Connected Disability	0	0	0	0
(missing)	0	1	0	1
Total Service Retired	234	77	82	393
Ordinary Disability				
Option 1 - Cash Refund Annuity	0	0	0	0
Option 2 - J&S 100%	0	0	0	0
Option 3 - J&S 50%	0	0	0	0
Option 4	0	0	0	0
Unmodified Benefit Option	2	0	0	2
Unmodified Option - Service Connected Disability	0	0	0	0
(missing)	0	0	0	0
Total Ordinary Disability	2	0	0	2
Duty Disability				
Option 1 - Cash Refund Annuity	1	1	0	2
Option 2 - J&S 100%	0	0	0	0
Option 3 - J&S 50%	0	0	0	0
Option 4	0	0	0	0
Unmodified Benefit Option	1	0	0	1
Unmodified Option - Service Connected Disability	15	38	21	74
(missing)	0	0	0	0
Total Duty Disability	17	39	21	77
Total	253	116	103	472

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Marin County and Special Districts: Service Retired

Age	Marin County				Marin Special Districts				Total	
	Miscellaneous		Safety		Miscellaneous		Safety			
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit		
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	3	\$41,324	0	\$0	0	\$0	3	\$41,324
50 to 54	20	\$19,390	27	\$52,816	4	\$5,754	2	\$37,048	53	\$36,056
55 to 59	88	\$23,213	58	\$69,147	17	\$34,967	8	\$90,203	171	\$43,096
60 to 64	183	\$34,887	57	\$77,979	26	\$39,811	8	\$64,607	274	\$45,187
65 to 69	361	\$38,713	31	\$68,181	32	\$38,574	3	\$73,212	427	\$41,084
70 to 74	286	\$40,224	31	\$60,063	27	\$32,062	2	\$52,201	346	\$41,434
75 to 79	205	\$39,177	17	\$90,262	10	\$47,930	1	\$148,035	233	\$43,747
80 to 84	160	\$29,842	9	\$40,504	3	\$27,643	0	\$0	172	\$30,361
85 to 89	88	\$33,639	1	\$59,189	0	\$0	0	\$0	89	\$33,926
90 to 94	44	\$20,821	0	\$0	1	\$19,324	0	\$0	45	\$20,788
95+	12	\$19,868	0	\$0	0	\$0	0	\$0	12	\$19,868
<Total>	1447	\$35,394	234	\$68,116	120	\$36,118	24	\$74,360	1825	\$40,150

Marin County and Special Districts: Duty Disabled

Age	Marin County				Marin Special Districts				Total	
	Miscellaneous		Safety		Miscellaneous		Safety			
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit		
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	1	\$48,237	0	\$0	0	\$0	1	\$48,237
35 to 39	0	\$0	2	\$49,879	0	\$0	0	\$0	2	\$49,879
40 to 44	1	\$28,936	2	\$44,470	1	\$27,946	0	\$0	4	\$36,456
45 to 49	2	\$34,171	7	\$47,362	0	\$0	0	\$0	9	\$44,431
50 to 54	5	\$30,654	20	\$44,691	0	\$0	1	\$54,236	26	\$42,359
55 to 59	11	\$35,896	13	\$50,225	0	\$0	2	\$49,677	26	\$44,121
60 to 64	19	\$30,957	17	\$54,407	0	\$0	4	\$60,539	40	\$43,881
65 to 69	15	\$38,458	9	\$58,953	0	\$0	3	\$47,185	27	\$46,259
70 to 74	16	\$34,903	16	\$62,981	2	\$19,343	5	\$54,933	39	\$48,192
75 to 79	10	\$58,174	8	\$42,433	0	\$0	1	\$37,227	19	\$50,444
80 to 84	5	\$24,939	3	\$40,582	0	\$0	0	\$0	8	\$30,805
85 to 89	1	\$15,124	2	\$37,793	0	\$0	0	\$0	3	\$30,237
90 to 94	0	\$0	1	\$29,434	0	\$0	0	\$0	1	\$29,434
95+	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	85	\$36,358	101	\$50,937	3	\$22,211	16	\$53,075	205	\$44,639

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Marin County and Special Districts: Ordinary Disabled

Age	Marin County				Marin Special Districts				Total	
	Miscellaneous		Safety		Miscellaneous		Safety			
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit		
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	1	\$35,093	0	\$0	0	\$0	1	\$35,093
40 to 44	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
45 to 49	1	\$13,027	1	\$20,065	0	\$0	0	\$0	2	\$16,546
50 to 54	1	\$23,373	2	\$30,091	1	\$35,186	0	\$0	4	\$29,685
55 to 59	1	\$20,700	1	\$55,913	0	\$0	1	\$55,617	3	\$44,076
60 to 64	7	\$23,598	1	\$128,799	0	\$0	0	\$0	8	\$36,748
65 to 69	7	\$19,080	1	\$24,467	1	\$13,572	0	\$0	9	\$19,066
70 to 74	9	\$19,619	0	\$0	1	\$29,078	0	\$0	10	\$20,565
75 to 79	3	\$15,195	0	\$0	0	\$0	0	\$0	3	\$15,195
80 to 84	1	\$2,730	0	\$0	0	\$0	0	\$0	1	\$2,730
85 to 89	1	\$54,472	0	\$0	0	\$0	0	\$0	1	\$54,472
90 to 94	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	31	\$20,490	7	\$46,360	3	\$25,946	1	\$55,617	42	\$26,028

Marin County and Special Districts: Beneficiaries

Age	Marin County				Marin Special Districts				Total	
	Miscellaneous		Safety		Miscellaneous		Safety			
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit		
0 to 24	1	\$31,339	0	\$0	0	\$0	0	\$0	1	\$31,339
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	2	\$17,908	1	\$27,911	0	\$0	0	\$0	3	\$21,242
40 to 44	4	\$19,387	0	\$0	0	\$0	1	\$42,753	5	\$24,060
45 to 49	3	\$18,899	0	\$0	2	\$13,552	0	\$0	5	\$16,760
50 to 54	8	\$20,950	7	\$45,545	1	\$8,182	0	\$0	16	\$30,912
55 to 59	15	\$20,176	9	\$26,590	1	\$8,182	2	\$59,427	27	\$24,777
60 to 64	24	\$22,889	7	\$32,137	1	\$33,686	1	\$57,309	33	\$26,221
65 to 69	35	\$26,164	12	\$49,720	1	\$12,955	2	\$31,922	50	\$31,783
70 to 74	31	\$24,283	9	\$48,053	2	\$11,694	1	\$48,147	43	\$29,228
75 to 79	34	\$25,497	5	\$33,235	2	\$15,880	1	\$35,206	42	\$26,192
80 to 84	34	\$23,597	4	\$35,113	2	\$14,673	0	\$0	40	\$24,302
85 to 89	29	\$23,627	4	\$26,484	0	\$0	1	\$7,407	34	\$23,487
90 to 94	25	\$18,264	3	\$44,330	0	\$0	0	\$0	28	\$21,057
95+	9	\$20,634	2	\$25,393	0	\$0	0	\$0	11	\$21,499
<Total>	254	\$23,174	63	\$38,674	12	\$14,550	9	\$41,502	338	\$26,245

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Novato Fire Protection District: Service Retired

Age	<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	1	\$57,108	1	\$57,108
50 to 54	1	\$9,603	3	\$106,602	4	\$82,353
55 to 59	0	\$0	6	\$75,595	6	\$75,595
60 to 64	1	\$26,978	12	\$107,546	13	\$101,348
65 to 69	1	\$22,447	13	\$95,866	14	\$90,622
70 to 74	1	\$98,767	11	\$102,574	12	\$102,257
75 to 79	0	\$0	6	\$76,507	6	\$76,507
80 to 84	0	\$0	0	\$0	0	\$0
85 to 89	0	\$0	0	\$0	0	\$0
90 to 94	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0
<Total>	4	\$39,449	52	\$95,282	56	\$91,294

Novato Fire Protection District: Duty Disabled

Age	<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	0	\$0	0	\$0
50 to 54	0	\$0	3	\$57,335	3	\$57,335
55 to 59	0	\$0	0	\$0	0	\$0
60 to 64	0	\$0	6	\$68,738	6	\$68,738
65 to 69	0	\$0	6	\$74,177	6	\$74,177
70 to 74	0	\$0	12	\$65,836	12	\$65,836
75 to 79	0	\$0	4	\$52,254	4	\$52,254
80 to 84	0	\$0	0	\$0	0	\$0
85 to 89	0	\$0	0	\$0	0	\$0
90 to 94	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0
<Total>	0	\$0	31	\$65,437	31	\$65,437

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Novato Fire Protection District: Ordinary Disabled

Age	<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	0	\$0	0	\$0
50 to 54	0	\$0	0	\$0	0	\$0
55 to 59	0	\$0	0	\$0	0	\$0
60 to 64	0	\$0	0	\$0	0	\$0
65 to 69	0	\$0	0	\$0	0	\$0
70 to 74	0	\$0	0	\$0	0	\$0
75 to 79	0	\$0	0	\$0	0	\$0
80 to 84	0	\$0	0	\$0	0	\$0
85 to 89	0	\$0	0	\$0	0	\$0
90 to 94	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0
<Total>	0	\$0	0	\$0	0	\$0

Novato Fire Protection District: Surviving Beneficiaries

Age	<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	1	\$71,790	1	\$71,790
50 to 54	1	\$11,207	2	\$28,608	3	\$22,808
55 to 59	0	\$0	3	\$37,148	3	\$37,148
60 to 64	0	\$0	2	\$38,509	2	\$38,509
65 to 69	0	\$0	5	\$41,040	5	\$41,040
70 to 74	0	\$0	1	\$57,529	1	\$57,529
75 to 79	0	\$0	0	\$0	0	\$0
80 to 84	0	\$0	0	\$0	0	\$0
85 to 89	0	\$0	1	\$44,524	1	\$44,524
90 to 94	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0
<Total>	1	\$11,207	15	\$41,648	16	\$39,745

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

City of San Rafael: Service Retired

Age	<u>Miscellaneous</u>		<u>Police</u>		<u>Fire</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	0	\$0	0	\$0	0	\$0
50 to 54	9	\$17,798	7	\$25,530	6	\$89,971	22	\$39,942
55 to 59	24	\$45,266	14	\$54,754	17	\$96,765	55	\$63,599
60 to 64	54	\$39,350	15	\$64,187	18	\$110,459	87	\$58,344
65 to 69	59	\$41,880	22	\$93,274	15	\$95,999	96	\$62,114
70 to 74	36	\$31,849	12	\$57,689	7	\$77,334	55	\$43,276
75 to 79	21	\$24,877	4	\$45,465	8	\$64,560	33	\$36,992
80 to 84	14	\$29,285	3	\$72,920	7	\$64,443	24	\$44,994
85 to 89	10	\$21,343	0	\$0	3	\$56,263	13	\$29,401
90 to 94	5	\$8,012	0	\$0	0	\$0	5	\$8,012
95+	2	\$11,382	0	\$0	1	\$54,156	3	\$25,640
<Total>	234	\$35,033	77	\$65,623	82	\$89,573	393	\$52,406

City of San Rafael: Duty Disabled

Age	<u>Miscellaneous</u>		<u>Police</u>		<u>Fire</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	5	\$57,190	0	\$0	5	\$57,190
40 to 44	0	\$0	1	\$55,682	0	\$0	1	\$55,682
45 to 49	1	\$33,769	3	\$45,380	1	\$47,675	5	\$43,517
50 to 54	1	\$34,794	2	\$45,990	1	\$57,624	4	\$46,099
55 to 59	1	\$10,056	3	\$36,584	0	\$0	4	\$29,952
60 to 64	3	\$16,132	4	\$88,214	5	\$96,092	12	\$73,476
65 to 69	4	\$31,839	11	\$59,202	6	\$82,614	21	\$60,679
70 to 74	5	\$30,999	4	\$46,472	7	\$84,536	16	\$58,290
75 to 79	2	\$27,455	6	\$34,160	0	\$0	8	\$32,484
80 to 84	0	\$0	0	\$0	1	\$32,414	1	\$32,414
85 to 89	0	\$0	0	\$0	0	\$0	0	\$0
90 to 94	0	\$0	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	17	\$27,310	39	\$53,191	21	\$81,219	77	\$55,121

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

City of San Rafael: Ordinary Disabled

Age	<u>Miscellaneous</u>		<u>Police</u>		<u>Fire</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	0	\$0	0	\$0	0	\$0
50 to 54	0	\$0	0	\$0	0	\$0	0	\$0
55 to 59	0	\$0	0	\$0	0	\$0	0	\$0
60 to 64	0	\$0	0	\$0	0	\$0	0	\$0
65 to 69	0	\$0	0	\$0	0	\$0	0	\$0
70 to 74	1	\$15,478	0	\$0	0	\$0	1	\$15,478
75 to 79	0	\$0	0	\$0	0	\$0	0	\$0
80 to 84	0	\$0	0	\$0	0	\$0	0	\$0
85 to 89	0	\$0	0	\$0	0	\$0	0	\$0
90 to 94	1	\$7,960	0	\$0	0	\$0	1	\$7,960
95+	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	2	\$11,719	0	\$0	0	\$0	2	\$11,719

City of San Rafael: Surviving Beneficiaries

Age	<u>Miscellaneous</u>		<u>Police</u>		<u>Fire</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	1	\$20,344	0	\$0	1	\$20,344
50 to 54	3	\$8,989	1	\$52,851	1	\$17,101	5	\$19,384
55 to 59	2	\$13,719	1	\$15,629	3	\$28,051	6	\$21,203
60 to 64	2	\$3,042	3	\$15,113	4	\$64,444	9	\$34,356
65 to 69	3	\$37,019	3	\$27,778	1	\$92,983	7	\$41,054
70 to 74	7	\$23,504	2	\$30,222	3	\$27,353	12	\$25,586
75 to 79	4	\$14,290	2	\$75,969	2	\$32,817	8	\$34,342
80 to 84	4	\$25,149	0	\$0	5	\$28,224	9	\$26,857
85 to 89	4	\$13,485	2	\$21,986	3	\$29,130	9	\$20,589
90 to 94	6	\$5,859	0	\$0	0	\$0	6	\$5,859
95+	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	35	\$16,655	15	\$31,590	22	\$37,646	72	\$26,180

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX A – MEMBERSHIP INFORMATION

Plan	Retirement Eligibility								
	Current Actives	Number Reaching Service Retirement Eligibility As Defined in Section 1.1 in Year(s)							Total
		0	1	2	3	4	5	6-10	
County									
Miscellaneous Tier 1	14	14	0	0	0	0	0	0	14
Miscellaneous Tier 2	51	48	1	2	0	0	0	0	51
Miscellaneous Tier 3	904	508	61	56	29	24	30	108	816
Miscellaneous Tier 3A	117	2	2	2	14	10	6	26	62
Miscellaneous Tier 4	138	0	0	1	1	4	2	57	65
Miscellaneous Tier 5	458	8	7	17	27	30	45	36	170
Safety Tier 1A	1	1	0	0	0	0	0	0	1
Safety Tier 2A	61	24	4	1	4	2	6	7	48
Safety Tier 2B	221	60	9	12	16	10	6	58	171
Safety Tier 3	74	0	0	0	1	2	0	2	5
Total County	2,039	665	84	91	92	82	95	294	1,403
Courts									
Courts Tier 1	2	2	0	0	0	0	0	0	2
Courts Tier 2	1	0	0	1	0	0	0	0	1
Courts Tier 3	76	42	7	2	1	1	4	8	65
Courts Tier 4	4	1	0	0	1	0	0	0	2
Courts Tier 5	17	0	0	0	1	4	1	0	6
Total Courts	100	45	7	3	3	5	5	8	76
Special Districts									
South Marin Fire Miscellaneous	3	1	0	0	0	0	1	0	2
South Marin Fire Safety	51	11	2	1	5	1	2	11	33
Mosquito District	31	17	0	1	0	1	0	7	26
LAFCO	3	0	0	0	0	1	0	1	2
Tamalpais CSD	11	7	1	0	0	0	0	1	9
Marin CSD	5	1	0	0	0	0	0	2	3
Total Special Districts	104	37	3	2	5	3	3	22	75
Total County and Special Districts	2,243	747	94	96	100	90	103	324	1,554
Novato									
Miscellaneous	10	2	0	1	1	0	0	5	9
Safety	67	18	2	4	4	5	6	21	60
Total Novato	77	20	2	5	5	5	6	26	69
San Rafael									
Miscellaneous Tier 1	151	75	7	7	12	4	6	19	130
Miscellaneous Tier 2	21	1	0	0	0	0	0	7	8
Miscellaneous Tier 3	49	0	0	0	1	3	3	5	12
Fire Tier 1	39	8	3	3	2	5	2	7	30
Fire Tier 2	14	0	0	0	0	0	0	0	0
Safety Tier 1	49	16	2	2	3	2	2	20	47
Safety Tier 2	5	0	0	0	0	0	0	1	1
Safety Tier 3	29	0	0	0	0	0	1	0	1
Total San Rafael	357	100	12	12	18	14	14	59	229

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the actuarial valuation as of June 30, 2016 are:

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.

Actuarial Assumptions

3. Rate of Return

Assets are assumed to earn 7.25% net of investment, but not administrative expenses.

4. Administrative Expenses

Administrative expenses are assumed to be \$4.774 million for the next year, to be split between employees and employers based on their share of the overall contributions. Administrative expenses are assumed to increase by 3.0% per year.

5. Cost-of-Living

The cost-of-living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.75% per year.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

6. Post Retirement 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.

7. Internal Revenue Code Section 415 Limit

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit at the time of retirement.

8. Internal Revenue Code Section 401(a)(17)

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

9. PEPRA Compensation Limit

The PEPRA Pensionable Compensation Limit (GC 7522.10) is reflected in the valuation to project compensation and benefits for PEPRA members. The limit is expected to increase by 2.75% in future years.

10. Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 7.25%.

11. Sick Leave Service Credit Upon Retirement

Active members' benefits are adjusted by a percentage, in accordance with the table below, for anticipated conversions of sick leave or other terminal earnings to retirement service credit or final compensation.

	Rate
Marin County	1.20%
Marin Courts	1.20%
Marin Special Districts	1.20%
Novato Fire Protection District	3.00%
City of San Rafael	2.50%

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

12. Family Composition

Percentage married for all active members who retire, become disabled, or die during active service is shown in the table below. Male members are assumed to be three years older than their spouses and female members are assumed to be one year younger than their spouses.

Percentage Married	
Gender	Percentage
Males	80%
Females	50%

13. Increases in Pay

Wage inflation component: 3.00%

Additional longevity and promotion component:

Service	Miscellaneous	Safety
0	8.00%	5.00%
1	8.00%	5.00%
2	8.00%	5.00%
3	6.00%	2.00%
4	2.00%	1.25%
5+	0.75%	1.25%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

14. Rates of Termination (All Types)

Sample rates of termination are shown in the following tables below. Note that termination rates do not apply once a member is eligible for retirement.

Service	Miscellaneous		
	Male	Female	Safety
0	15.00%	15.00%	8.00%
1	9.00%	10.00%	5.00%
2	7.00%	8.00%	4.00%
3	7.00%	8.00%	4.00%
4	7.00%	8.00%	4.00%

Age	Miscellaneous						Safety
	5-9 Years of Service	Male			Females		
		10-14 Years of Service	15-29 Years of Service	5-9 Years of Service	10-14 Years of Service	15-29 Years of Service	5-19 Years of Service
20	7.00%	5.30%	3.00%	7.75%	5.30%	3.00%	2.06%
25	7.00%	5.30%	3.00%	7.75%	5.30%	3.00%	2.24%
30	7.00%	5.30%	3.00%	7.75%	5.30%	3.00%	3.53%
35	6.75%	4.50%	2.50%	7.75%	4.50%	2.50%	3.41%
40	4.80%	3.20%	2.00%	5.80%	3.20%	2.00%	1.14%
45	3.75%	2.50%	1.70%	4.75%	2.50%	1.70%	1.70%
50	2.10%	0.00%	0.00%	3.10%	0.00%	0.00%	0.27%
55	1.20%	0.00%	0.00%	2.20%	0.00%	0.00%	0.10%
60	1.20%	0.00%	0.00%	2.20%	0.00%	0.00%	0.00%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

15. Withdrawal

Rates of withdrawal apply to active Members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits.

30% of all Miscellaneous Member terminations with less than five years of service are assumed to take a refund of contributions, as well as 15% of those with five or more years of service.

25% of all Safety Member terminations with less than 10 years of service are assumed to take a refund of contributions, and 5% of those with 10 or more years are assumed to take a refund.

16. Vested Termination and Reciprocal Transfers

Rates of vested termination apply to active Members who terminate their employment and leave their member contributions on deposit with the Plan.

70% of all Miscellaneous Member terminations with less than five years of service are assumed to leave their contributions on deposit, as well as 85% of those with five or more years of service.

75% of all Safety Member terminations with less than 10 years of service are assumed to leave their contributions on deposit, as well as 95% of those with 10 or more years of service.

No vested terminations or transfers are assumed to occur with 30 years of service. Vested terminated Miscellaneous Members are assumed to begin receiving benefits at age 55; terminated Safety Members are assumed to begin receiving benefits at age 50.

20% of vested terminated Miscellaneous members and 40% of vested terminated Safety Members are assumed to be reciprocal.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

17. Rates of Service-Connected Disability

Sample service-connected disability rates of active participants are shown below.

Age	Miscellaneous		
	Male	Female	Safety
20	0.0250%	0.0125%	0.0605%
25	0.0400%	0.0200%	0.0825%
30	0.0650%	0.0325%	0.1980%
35	0.0800%	0.0400%	0.3025%
40	0.1050%	0.0525%	0.6490%
45	0.1300%	0.0650%	0.6270%
50	0.1550%	0.0775%	0.7040%
55	0.1650%	0.0825%	2.1450%
60	0.1850%	0.0925%	0.0000%
65	0.1950%	0.0975%	0.0000%

18. Rates of Non Service-Connected Disability

Sample non service-connected disability rates of active participants are shown below.

Age	Miscellaneous	Safety
20	0.0000%	0.0200%
25	0.0030%	0.0300%
30	0.0050%	0.0500%
35	0.0080%	0.0700%
40	0.0130%	0.1600%
45	0.0220%	0.2600%
50	0.0450%	0.3600%
55	0.0780%	0.4600%
60	0.1280%	0.0000%
65	0.1970%	0.0000%

19. Rates of Mortality for Active Lives

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.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

20. Rates of Mortality for Retired Healthy Lives

Rates of mortality for retired Members and their beneficiaries are given by CalPERS 2014 Post-Retirement Healthy Mortality rates, adjusted by 110% for Safety Males and 95% for Miscellaneous and Safety Females, with the 20-year static projection used by CalPERS replaced by generational improvements from a base year of 2009 using Scale MP-2014.

21. Rates of Mortality for Retired Disabled Lives

Rates of mortality among disabled Members are given by CalPERS 2014 Disability Mortality rates (Non-Industrial rates for Miscellaneous members and Industrial Disability rates for Safety members), adjusted by 90% for Males and Females (Miscellaneous and Safety) with the 20-year static projection used by CalPERS replaced by generational improvements from a base year of 2009 using Scale MP-2014.

22. Mortality Improvement

Mortality is assumed to improve in future years in accordance with the MP-2014 generational improvement tables.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

23. Rates of Retirement

Rates of retirement are based on age according to the following tables below.

PEPRA: For New Members we assume that the current retirement rates will apply, but that no Non-Safety members will retire before age 52.

Miscellaneous Rates

Age	<20 Years of Service	20-29 Years of Service	30+ Years of Service
50-54	4.00%	4.00%	4.00%
55	8.00%	10.00%	25.00%
56	4.00%	4.00%	25.00%
57	4.00%	6.00%	25.00%
58	4.00%	8.00%	25.00%
59	8.00%	10.00%	25.00%
60-61	8.00%	10.00%	35.00%
62-74	20.00%	20.00%	35.00%
75-79	25.00%	25.00%	35.00%
80	100.00%	100.00%	100.00%

Safety Rates

Age	3% @ 50	3% @ 50	3% @ 50	3% @ 55	3% @ 55	3% @ 55
	<20 Years of Service	20-29 Years of Service	30+ Years of Service	<20 Years of Service	20-29 Years of Service	30+ Years of Service
40-49	0.00%	3.00%	3.00%	0.00%	1.00%	1.00%
50	25.00%	25.00%	50.00%	5.00%	5.00%	30.00%
51-53	10.00%	10.00%	20.00%	5.00%	5.00%	30.00%
54	10.00%	10.00%	20.00%	5.00%	15.00%	30.00%
55	25.00%	25.00%	50.00%	20.00%	40.00%	50.00%
56	25.00%	25.00%	50.00%	10.00%	30.00%	50.00%
57-59	25.00%	25.00%	50.00%	10.00%	20.00%	50.00%
60-64	50.00%	50.00%	50.00%	30.00%	30.00%	50.00%
65	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Brief Outline of Plan Provisions

Definitions

Compensation

Compensation means the cash remuneration for services paid by the employer. It includes base pay and certain differential, incentive, and special pay allowances defined by the Board of Retirement. Overtime is excluded, with the exception of overtime paid under the Fair Labor Standards Act that is regular and recurring.

PEPRA: For non-reciprocal members joining the Plan on and after January 1, 2013 (New Members), only base compensation or normal monthly rate of pay, as defined, up to the PEPRA wage cap (\$117,020 for 2016 and \$118,775 for 2017) will count for computing Plan benefits and employee contributions and employer contributions for those participating in Social Security. For those not participating in Social Security, the compensation cap is 120% of the cap above (\$140,424 for 2016 and \$142,530 for 2017). In addition, some sources of compensation, such as leave cashouts, allowances, and some types of special pays, will be excluded from benefit and contribution computations for New Members.

Credited Service

In general, Credited Service is earned for the period during which Member Contributions are paid.

Temporary service for which the Member was not credited, or service for which the Member withdrew his or her Member Contributions, may be purchased by paying or repaying the Member Contributions with interest. The categories of services that credit may be purchased for are listed below:

- Leave without Pay (Member's illness): Member may purchase only up to twelve months of service per incident.
- Re-deposits: Member may only purchase the amount of service previously withdrawn.
- Service Prior to Membership: Member must pay employee portion and applicable interest.
- Military Leave without Pay: Member, who has taken a leave without pay in order to serve in the military, will be given an option to buy the service time.
- Service In-Between: Member may purchase service per incident.
- Public Service: Member must have been employed by the date as indicated below and cannot be receiving a benefit from the other entity:

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

April 16, 1979:

Novato Fire Protection District

May 1, 1979:

County of Marin
Marin County Courts
Marin City Community Service District
Tamalpais Community Service District
Southern Marin Fire Protection District
Marin/Sonoma Mosquito and Vector Control District
Local Agency Formation Commission (LAFCO)

May 7, 1979:

City of San Rafael

In all cases of service buybacks, repayment terms for most payment plans may not exceed the length of the period of service being purchased, with a maximum of five years. Payment for public service purchases may also not exceed five years. In the event of an active Member's death, the beneficiary is given the opportunity to pay off any service purchase agreements at the time of death.

A percentage of credited sick leave may be credited according to the Member's applicable bargaining unit.

Final Compensation

For County employees hired after June 30, 1980, and Bargaining Units 10 and 13, LAFCO Tier 3 members and San Rafael employees hired after July 1, 2011, Final Compensation means the highest Compensation earned during any thirty-six consecutive months of the Member's employment. For all others, it is the highest Compensation earned during any twelve months of employment.

PEPRA: For all New Members, highest average Compensation will be based on the highest thirty-six consecutive months, rather than 12 months.

Miscellaneous Member

Any Member who is not a Safety Member is a Miscellaneous Member. Miscellaneous Members are called "Nonsafety Members" Under PEPRA.

Safety Member

Any sworn Member engaged in law enforcement or fire suppression, and most probation officers are Safety Members.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Membership

Eligibility

All full-time, permanent employees of the City of San Rafael, Novato Fire Protection Districts, Marin County, and other participating special districts become Members on their date of appointment.

PEPRA: A New Member is any Member joining the Plan for the first time on or after January 1, 2013, or who was a member of the Plan previously but withdrew MCERA contributions and did not redeposit them with interest upon reentry. Employees who transfer from and are eligible for reciprocity with another public employer will not be New Members if their service in the reciprocal system was under a pre-PEPRA tier.

Member Contributions

Each Member contributes a percentage of Compensation to the Plan through payroll deduction. The percentage contributed depends on the Member's age upon joining the Plan, and is determined in accordance with the requirements of the '37 Act. Members do not contribute after earning 30 years of Credited Service.

Interest is credited semiannually to each Member's accumulated contributions. The crediting rate is set by the Board; the current annual rate is 7.25%.

PEPRA: New Members must contribute half of the normal cost of the Plan. Contributions for these Members will be based on the Normal Cost associated with their benefits; General and Safety members will pay different rates, as will those with different COLA caps.

New Members will pay a single contribution rate, not a rate based on entry age. All New Members are expected to continue contributing after earning 30 years of service.

Service Retirement

Eligibility

Miscellaneous County Members hired after July 1, 2008, Courts Members hired after January 1, 2009, and San Rafael Miscellaneous Members hired after July 1, 2011 are eligible to retire at age 55 if they have earned 10 years of Credited Service. All other Miscellaneous Members are eligible to retire at age 50 if they have earned 10 years of Credited Service. Alternatively, Miscellaneous Members are eligible to retire at any age after having earned 30 years of Credited Service, or upon reaching age 70 with no service requirement.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Safety Members are eligible to retire at age 50 if they have earned 10 years of Credited Service. Alternatively, Safety Members are eligible to retire at any age after having earned 20 years of Credited Service, or upon reaching age 70 with no service requirement.

PEPRA: New Nonsafety Members are eligible to retire upon attaining age 52 and completing five or more years of service, or upon reaching age 70 with no service requirement. New Safety Members are eligible to retire upon attaining age 50 and completing five or more years of service, or upon reaching age 70 with no service requirement. New Members must reach PEPRA-specified ages, regardless of their years of service, to retire for service.

Benefit Amount

The Service Retirement Benefit payable to the Member is equal to the Member's Final Compensation multiplied by credited service, the benefit factor from Table 1 and the age factor from Table 2 corresponding to the Member's code section. The age factor multiplied by the benefit factor for each code section is also shown in Table 2, other than the PEPRA factors. The appropriate code sections for each group are listed in Table 1 on the next page.

The percentage of Final Compensation may not exceed 100%.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Table 1: Member Group Descriptions						
Description	Class	FAP	COLA	Code Section	Formula Retirement Age ¹	Benefit Factor
Special Districts Courts Tier 1	Miscellaneous	1	4	31676.14	55.50	2.00%
Special Districts Courts Tier 2	Miscellaneous	3	2	31676.1	61.25	2.00%
Special Districts Courts Tier 3	Miscellaneous	3	2	31676.16	55.00	2.00%
Special Districts Courts Tier 4	Miscellaneous	3	2	31676.16	55.00	2.00%
Special Districts Courts Tier 5	Miscellaneous	3	2	7522.20	62.00	2.00%
Special Districts LAFCO Tier 7 (also referred to as Tier 2)	Miscellaneous	1	4	31676.11	58.50	2.00%
Special Districts LAFCO Tier 3	Miscellaneous	3	2	31676.16	55.00	2.00%
Special Districts LAFCO Tier 4	Miscellaneous	3	2	7522.20	62.00	2.00%
Special Districts Marin City CSD Tier 1	Miscellaneous	1	4	31676.11	58.50	2.00%
Special Districts Marin City CSD Tier 2	Miscellaneous	3	4	7522.20	62.00	2.00%
Special Districts Mosquito District Tier 1	Miscellaneous	1	4	31676.14	55.50	2.00%
Special Districts Mosquito District Tier 2	Miscellaneous	3	4	7522.20	62.00	2.00%
Special Districts Tamalpais CSD Tier 1	Miscellaneous	1	4	31676.11	58.50	2.00%
Special Districts Tamalpais CSD Tier 2	Miscellaneous	3	4	7522.20	62.00	2.00%
Special Districts South Marin Fire Miscellaneous Tier 1	Miscellaneous	1	4	31676.19	55.00	2.70%
Special Districts South Marin Fire Miscellaneous Tier 2	Miscellaneous	3	4	7522.20	62.00	2.00%
Special Districts South Marin Fire Safety Tier 1	Safety	1	4	31664.1	50.00	3.00%
Special Districts South Marin Fire Safety Tier 2	Safety	1	4	31664.2	55.00	3.00%
Special Districts South Marin Fire Safety Tier 2A	Safety	3	3	31664.2	55.00	3.00%
Special Districts South Marin Fire Safety Tier 3	Safety	3	4	7522.25(d)	57.00	2.70%
Special Districts South Marin Fire Safety Tier 3A	Safety	3	3	7522.25(d)	57.00	2.70%
County Miscellaneous Tier 1	Miscellaneous	1	4	31676.14	55.50	2.00%
County Miscellaneous Tier 2	Miscellaneous	3	2	31676.1	61.25	2.00%
County Miscellaneous Tier 3	Miscellaneous	3	2	31676.16	55.00	2.00%
County Miscellaneous Tier 3A ²	Miscellaneous	3	2	31676.16	55.00	2.00%
County Miscellaneous Tier 4 ²	Miscellaneous	3	2	31676.1	61.25	2.00%
County Miscellaneous Tier 5	Miscellaneous	3	2	7522.20	62.00	2.00%
County Safety Tier 1A	Safety	1	4	31664.2	55.00	3.00%
County Safety Tier 1B	Safety	1	4	31664.1	50.00	3.00%
County Safety Tier 2A	Safety	3	2	31664.2	55.00	3.00%
County Safety Tier 2B	Safety	3	2	31664.1	50.00	3.00%
County Safety Tier 3	Safety	3	2	7522.25(d)	57.00	2.70%
Novato Miscellaneous Tier 1	Miscellaneous	1	4	31676.16	55.00	2.00%
Novato Miscellaneous Tier 2	Miscellaneous	3	4	7522.20	62.00	2.00%
Novato Miscellaneous Tier 2A	Miscellaneous	3	2	7522.20	62.00	2.00%
Novato Safety Tier 1	Safety	1	4	31664.1	50.00	3.00%
Novato Safety Tier 2	Safety	1	4	31664.2	55.00	3.00%
Novato Safety Tier 3	Safety	3	4	7522.25(d)	57.00	2.70%
San Rafael Miscellaneous Tier 1	Miscellaneous	1	3	31676.19	55.00	2.70%
San Rafael Miscellaneous Tier 2 ²	Miscellaneous	3	2	31676.16	55.00	2.00%
San Rafael Miscellaneous Tier 3	Miscellaneous	3	2	7522.20	62.00	2.00%
San Rafael Fire Tier 1	Safety	1	3	31664.2	55.00	3.00%
San Rafael Fire Tier 2	Safety	3	2	31664.2	55.00	3.00%
San Rafael Fire Tier 3	Safety	3	2	7522.25(d)	57.00	2.70%
San Rafael Safety Tier 1	Safety	1	3	31664.2	55.00	3.00%
San Rafael Safety Tier 2	Safety	3	2	31664.2	55.00	3.00%
San Rafael Safety Tier 3	Safety	3	2	7522.25(d)	57.00	2.70%

¹ This represents the age at which a retiring member would receive the benefit factor shown in the final column.

² Members of these Tiers must be age 55 with 10 years of service to receive a service retirement benefit.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Table 2: Age & Service Factors

Miscellaneous

Age	Misc 2% at Age 61.25 CERL §: 31676.1		Misc 2% at Age 58.5 CERL §: 31676.11		Misc 2% at Age 55.5 CERL §: 31676.14		Misc 2% at Age 55 CERL §: 31676.16		Misc 2.7% at Age 55 CERL §: 31676.19		Misc 2.7% at Age 67 GC §: 7522.20	
	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit
	50	0.7091	1.18%	0.7454	1.24%	0.8850	1.48%	0.7130	1.43%	1.0000	2.00%	1.0000
51	0.7457	1.24%	0.7882	1.31%	0.9399	1.57%	0.7610	1.52%	1.0700	2.14%	1.0000	1.00%
52	0.7816	1.30%	0.8346	1.39%	1.0000	1.67%	0.8140	1.63%	1.1400	2.28%	1.0000	1.00%
53	0.8181	1.36%	0.8850	1.48%	1.0447	1.74%	0.8710	1.74%	1.2100	2.42%	1.1000	1.10%
54	0.8556	1.43%	0.9399	1.57%	1.1048	1.84%	0.9330	1.87%	1.2800	2.56%	1.2000	1.20%
55	0.8954	1.49%	1.0000	1.67%	1.1686	1.95%	1.0000	2.00%	1.3500	2.70%	1.3000	1.30%
56	0.9382	1.56%	1.0447	1.74%	1.2365	2.06%	1.0260	2.05%	1.3500	2.70%	1.4000	1.40%
57	0.9846	1.64%	1.1048	1.84%	1.3093	2.18%	1.0520	2.10%	1.3500	2.70%	1.5000	1.50%
58	1.0350	1.73%	1.1686	1.95%	1.3608	2.27%	1.0780	2.16%	1.3500	2.70%	1.6000	1.60%
59	1.0899	1.82%	1.2365	2.06%	1.4123	2.35%	1.1050	2.21%	1.3500	2.70%	1.7000	1.70%
60	1.1500	1.92%	1.3093	2.18%	1.4638	2.44%	1.1310	2.26%	1.3500	2.70%	1.8000	1.80%
61	1.1947	1.99%	1.3608	2.27%	1.5153	2.53%	1.1570	2.31%	1.3500	2.70%	1.9000	1.90%
62	1.2548	2.09%	1.4123	2.35%	1.5668	2.61%	1.1830	2.37%	1.3500	2.70%	2.0000	2.00%
63	1.3186	2.20%	1.4638	2.44%	1.5668	2.61%	1.2090	2.42%	1.3500	2.70%	2.1000	2.10%
64	1.3865	2.31%	1.5153	2.53%	1.5668	2.61%	1.2090	2.42%	1.3500	2.70%	2.2000	2.20%
65	1.4593	2.43%	1.5668	2.61%	1.5668	2.61%	1.2090	2.42%	1.3500	2.70%	2.3000	2.30%
66	1.4593	2.43%	1.5668	2.61%	1.5668	2.61%	1.2090	2.42%	1.3500	2.70%	2.4000	2.40%
67+	1.4593	2.43%	1.5668	2.61%	1.5668	2.61%	1.2090	2.42%	1.3500	2.70%	2.5000	2.50%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Safety

Age	Safety 2% at Age 50		Safety 3% at Age 50		Safety 3% at Age 55		Safety 2.7% at Age 57	
	CERL §: 31664		CERL §: 31664.1		CERL §: 31664.2		GC §: 7522.25(d)	
	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit
41	0.6258	1.25%	0.6258	1.88%	0.4777	1.43%	2.0000	2.00%
42	0.6625	1.33%	0.6625	1.99%	0.5058	1.52%	2.0000	2.00%
43	0.7004	1.40%	0.7004	2.10%	0.5347	1.60%	2.0000	2.00%
44	0.7397	1.48%	0.7397	2.22%	0.5647	1.69%	2.0000	2.00%
45	0.7805	1.56%	0.7805	2.34%	0.5958	1.79%	2.0000	2.00%
46	0.8226	1.65%	0.8226	2.47%	0.6280	1.88%	2.0000	2.00%
47	0.8678	1.74%	0.8678	2.60%	0.6625	1.99%	2.0000	2.00%
48	0.9085	1.82%	0.9085	2.73%	0.6936	2.08%	2.0000	2.00%
49	0.9522	1.90%	0.9522	2.86%	0.7269	2.18%	2.0000	2.00%
50	1.0000	2.00%	1.0000	3.00%	0.7634	2.29%	2.0000	2.00%
51	1.0516	2.10%	1.0000	3.00%	0.8028	2.41%	2.1000	2.10%
52	1.1078	2.22%	1.0000	3.00%	0.8457	2.54%	2.2000	2.20%
53	1.1692	2.34%	1.0000	3.00%	0.8926	2.68%	2.3000	2.30%
54	1.2366	2.47%	1.0000	3.00%	0.9418	2.83%	2.4000	2.40%
55	1.3099	2.62%	1.0000	3.00%	1.0000	3.00%	2.5000	2.50%
56	1.3099	2.62%	1.0000	3.00%	1.0000	3.00%	2.6000	2.60%
57+	1.3099	2.62%	1.0000	3.00%	1.0000	3.00%	2.7000	2.70%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

PEPRA: For New Nonsafety Members, the benefit multiplier will be 1% at age 52, increasing by 0.1% for each year of age to 2.5% at 67. For New Safety Members, the benefit multiplier will be 2% at age 50, increasing by 0.1% for each year of age to 2.7% at age 57. In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age.

New Members are subject to the PEPRA caps and other restrictions on pensionable compensation described in other parts of the valuation.

Form of Benefit

The Service Retirement Benefit will be paid monthly beginning at retirement and for the life of the Member. If the member selects the unmodified benefit form, in the event of the Member's death 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, benefits are increased or decreased to reflect changes in the CPI for the San Francisco Bay Area. Annual increases may not exceed the COLA figures shown in Table 1, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than the figures shown.

In addition, ad hoc cost-of-living adjustments have been granted in the past and may be granted in the future.

A lump sum benefit of \$5,000 will be payable upon the death of a retired member.

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Service-Connected Disability

Eligibility

Members are eligible for Service-Connected Disability Retirement benefits at any age if they are permanently disabled as a result of injuries or illness sustained in the line of duty.

Benefit Amount

The Service-Connected Disability Retirement Benefit payable to Members is equal to the greater of 50% of their Final Compensation or – if the Member is eligible at disability for a Service Retirement Benefit – the Service Retirement Benefit accrued on the date of disability.

PEPRA: The Service-Connected Disability Retirement Benefit for New Members will be based on the new definitions of Pensionable Compensation and Final Compensation applicable to New Members.

Form of Benefit

The Service-Connected Disability Retirement Benefit will be paid monthly beginning at the effective date of disability retirement and for the life of the Member; in the event of the Member's death, 100% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member.

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Nonservice-Connected Disability

Eligibility

Members are eligible to for Nonservice-Connected Disability Retirement benefits if they are permanently disabled at any age after earning five years of Credited Service.

Benefit Amount

The Nonservice-Connected Disability Retirement Benefit payable to Miscellaneous Members is equal to the greatest of:

- 1.5% of Final Compensation at disability multiplied by years of Credited Service at disability;
- 1.5% of Final Compensation at disability multiplied by years of Credited Service projected to age 65, but not to exceed one-third of Final Compensation; or,
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

The Nonservice-Connected Disability Retirement Benefit payable to Safety Members is equal to the greatest of:

- 1.8% of Final Compensation at disability multiplied by years of Credited Service at disability;
- 1.8% of Final Compensation at disability multiplied by years of Credited Service projected to age 55, but not to exceed one-third of Final Compensation; or,
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

PEPRA: The Nonservice-Connected Disability Retirement Benefit for New Members will be based on the new definitions of Pensionable Compensation and Final Compensation applicable to New Members.

Form of Benefit

The Nonservice-Connected Disability Retirement Benefit will be paid monthly beginning at the effective date of disability retirement, and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member.

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Pre-Retirement Death

Eligibility

A Member's survivors are eligible to receive different Death benefits dependent on the Member's cause of death and retirement eligibility.

Benefit Amount

In the event the Member's death resulted from injury or illness sustained in connection with the Member's duties, the Death Benefit payable to a surviving spouse or domestic partner will be 50% of the Member's Final Compensation.

In the event the Member was eligible for Service Retirement or Non-Service Connected Disability, the Death Benefit payable to the survivor will be 60% of the survivor benefit based on benefit due on Member's date of death.

In all other cases, the eligible survivor will receive a refund of the Member's contributions with interest plus one month of Final Compensation for each year of service to a maximum of six years.

PEPRA: The Death Benefits for New Members related to Final Compensation will be based on the new definitions of Pensionable Compensation and Final Compensation applicable to New Members.

Form of Benefit

The Service-Connected Death Benefit will be paid monthly beginning at the Member's death and for the life of the surviving spouse or to the age of majority of dependent minor children if there is no spouse.

COLA adjustments (as described for the Service Retirement benefit) are also available.

Withdrawal Benefit

Eligibility

A Member is eligible for a Withdrawal Benefit upon termination of employment.

Benefit Amount

The Withdrawal Benefit is a refund of the Member's accumulated Contributions with interest. Upon receipt of the Withdrawal Benefit the Member forfeits all Credited Service. Alternatively, the Member can leave contributions on deposit and retire at the date first eligible (age 70 for those not vested).

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Form of Benefit

The Withdrawal Benefit is paid in a lump sum upon election by the Member.

Deferred Vested Benefit

Eligibility

A Member is eligible for a Deferred Vested Benefit upon termination of employment after earning five years of Credited Service, including reciprocity service from another system. The Member must leave his or her Member Contributions with interest on deposit with the Plan.

Benefit Amount

The Deferred Vested Benefit is computed in the same manner as the Service Retirement Benefit, but it is based on Credited Service and Final Compensation on the date of termination.

PEPRA: For New Members, the Deferred Vested Benefit will be based on the new benefit formulas, and will be based on the new definitions of Pensionable Compensation and Final Compensation applicable to New Members.

Form of Benefit

The Deferred Vested Benefit will be paid monthly beginning at retirement and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$ 5,000 will be payable upon the death of the member.

PEPRA: For New Members, the Deferred Vested Benefit may commence at the new service retirement eligibility criteria (age 52 for Nonsafety, age 50 for Safety.)

Reciprocal Benefit

Eligibility

A Member is eligible for a Reciprocal Benefit upon termination of employment and entry, within a specified period of time, into another retirement system recognized as

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

a reciprocal system by the Plan. In addition, the Member must leave his or her Member Contributions with interest on deposit with the Plan.

Benefit Amount

The Reciprocal Benefit is computed in the same manner as the Service Retirement Benefit, but it is based on Credited Service on the date of termination and Final Compensation on the date of retirement; Final Compensation is based on the highest of the Compensation earned under this Plan or the reciprocal plan.

PEPRA: For New Members, the Reciprocal Benefit will be based on the new benefit formulas, and will be based on the new definitions of Pensionable Compensation and Final Compensation applicable to New Members.

Form of Benefit

The Reciprocal Benefit will be paid monthly beginning at retirement and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available.

A lump sum benefit may be payable upon the death of a retired Member by the last system the Member worked under.

PEPRA: For New Members, the Reciprocal Benefit may commence at the new service retirement eligibility criteria (age 52 for Nonsafety, age 50 for Safety.)

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Optional Benefit Forms

Prior to retirement, a member may elect to convert his retirement allowance into a benefit of equivalent actuarial value in accordance with one of the optional forms described below.

1. A reduced retirement allowance payable during his life with the provision that on his death the excess, if any, of his accumulated deductions at the time of retirement over the annuity payments made to him will be paid to his designated beneficiary or estate; or,
2. A reduced retirement allowance payable during his life with the provision that after his death the reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement; or,
3. A reduced retirement allowance payable during his life with the provision that after his death an allowance of one-half of his reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement.

PEPRA: No change.

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX D – GLOSSARY

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

2. Actuarial Cost Method

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a Normal Cost and an Actuarial Liability.

3. Actuarial Gain (Loss)

The difference between actual experience and that expected based upon a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

4. Actuarial Liability

The portion of the Actuarial Present Value of Projected Benefits which will not be paid by future Normal Costs. It represents the value of the past Normal Costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The Actuarial Present Value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

6. Actuarial Valuation

The determination, as of a specified date, of the Normal Cost, Actuarial Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

APPENDIX D – GLOSSARY

7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an Actuarial Valuation. The purpose of an Actuarial Value of Assets is generally to smooth out fluctuations in market values. As of the June 30, 2014 valuation, no smoothing of the assets is applied, and the Actuarial Value equals the Market Value.

8. Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date, with each value based on the same set of actuarial assumptions.

9. Amortization Payment

The portion of the pension plan contribution, which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which 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.

11. Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Liability.

12. Normal Cost

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

13. Projected Benefits

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of Actuarial Assumptions, taking into account such items as increases in future compensation and service credits.

14. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

Employee contribution rates vary by member Group and Tier. The basic rates are determined based on Government Code Section 31621 for General members (31621.1 for members under benefit section 31676.11, 31621.8 for members under benefit 31676.19) and Section 31639.25 for Safety members. The COLA rates for members are determined based on 50% of the normal cost associated with the expected COLA benefits, determined for each individual entry age. A cap on the employee COLA contribution rate is applied to the County and Courts members. Some County Safety groups are paying additional employee contributions as a result of bargaining agreements.

The current rates were determined based on an interest rate of 7.25% per annum, an average salary increase of 3.00% per year (plus service-based increases for merit/longevity), and the CalPERS 2014 Post-Retirement Healthy Mortality rates, adjusted by 110% for Safety Males and 95% for Miscellaneous and Safety Females, with a status projection from a base year of 2009 to the year 2037 using Scale MP-2014.

The rates are blended based on a male/female weighting of 40% male/60% female for General members, and 85% male/15% female for Safety members. Basic and COLA rates were determined based on an assumption that members would cease making contributions after 30 years of service.

Employee contribution rates for PEPRA members are determined based on half the Normal Cost for the PEPRA members (computed separately for General and Safety members, and those with 2%, 3% or 4% capped COLAs). Due to the passage of SB13, contribution rates for PEPRA members are not rounded, and are recomputed each year.

A load is added to the employee contributions to cover their share of the expected administrative expenses. For the current valuation, the load is 4.8% of the total unadjusted contribution rate.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous and Courts: Tier 1 (31676.14)				
Entry	COL Limited			
Age	Basic	COL	to 1.58%	Total
20	5.92%	1.98%	1.58%	7.50%
21	5.98%	2.04%	1.58%	7.56%
22	6.01%	2.12%	1.58%	7.59%
23	6.05%	2.18%	1.58%	7.63%
24	6.08%	2.24%	1.58%	7.66%
25	6.11%	2.31%	1.58%	7.69%
26	6.13%	2.38%	1.58%	7.71%
27	6.15%	2.44%	1.58%	7.73%
28	6.17%	2.50%	1.58%	7.75%
29	6.18%	2.57%	1.58%	7.76%
30	6.18%	2.63%	1.58%	7.76%
31	6.30%	2.68%	1.58%	7.88%
32	6.43%	2.73%	1.58%	8.01%
33	6.55%	2.79%	1.58%	8.13%
34	6.68%	2.85%	1.58%	8.26%
35	6.80%	2.91%	1.58%	8.38%
36	6.94%	2.97%	1.58%	8.52%
37	7.08%	3.03%	1.58%	8.66%
38	7.21%	3.09%	1.58%	8.79%
39	7.36%	3.14%	1.58%	8.94%
40	7.51%	3.20%	1.58%	9.09%
41	7.65%	3.25%	1.58%	9.23%
42	7.80%	3.29%	1.58%	9.38%
43	7.96%	3.34%	1.58%	9.54%
44	8.13%	3.40%	1.58%	9.71%
45	8.29%	3.44%	1.58%	9.87%
46	8.46%	3.46%	1.58%	10.04%
47	8.64%	3.50%	1.58%	10.22%
48	8.83%	3.53%	1.58%	10.41%
49	9.02%	3.56%	1.58%	10.60%
50	9.23%	3.56%	1.58%	10.81%
51	9.46%	3.56%	1.58%	11.04%
52	9.71%	3.55%	1.58%	11.29%
53	9.98%	3.44%	1.58%	11.56%
54	10.32%	3.31%	1.58%	11.90%
55	10.59%	3.20%	1.58%	12.17%
56	10.56%	3.07%	1.58%	12.14%
57	10.37%	2.96%	1.58%	11.95%
58	10.19%	2.83%	1.58%	11.77%
59+	10.00%	2.71%	1.58%	11.58%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous and Courts: Tier 2 (31676.1)				
Entry	COL Limited			
Age	Basic	COL	to 1.58%	Total
20	5.63%	0.99%	0.99%	6.62%
21	5.68%	1.02%	1.02%	6.70%
22	5.72%	1.05%	1.05%	6.77%
23	5.76%	1.08%	1.08%	6.84%
24	5.80%	1.11%	1.11%	6.91%
25	5.82%	1.14%	1.14%	6.96%
26	5.85%	1.17%	1.17%	7.02%
27	5.85%	1.22%	1.22%	7.07%
28	5.87%	1.26%	1.26%	7.13%
29	5.88%	1.29%	1.29%	7.17%
30	5.88%	1.33%	1.33%	7.21%
31	6.00%	1.37%	1.37%	7.37%
32	6.13%	1.40%	1.40%	7.53%
33	6.23%	1.45%	1.45%	7.68%
34	6.36%	1.48%	1.48%	7.84%
35	6.49%	1.52%	1.52%	8.01%
36	6.63%	1.55%	1.55%	8.18%
37	6.75%	1.58%	1.58%	8.33%
38	6.93%	1.62%	1.58%	8.51%
39	7.10%	1.66%	1.58%	8.68%
40	7.23%	1.69%	1.58%	8.81%
41	7.38%	1.72%	1.58%	8.96%
42	7.53%	1.75%	1.58%	9.11%
43	7.67%	1.79%	1.58%	9.25%
44	7.83%	1.82%	1.58%	9.41%
45	7.99%	1.86%	1.58%	9.57%
46	8.16%	1.89%	1.58%	9.74%
47	8.34%	1.91%	1.58%	9.92%
48	8.51%	1.94%	1.58%	10.09%
49	8.70%	1.97%	1.58%	10.28%
50	8.90%	1.98%	1.58%	10.48%
51	9.12%	2.00%	1.58%	10.70%
52	9.36%	2.01%	1.58%	10.94%
53	9.59%	1.99%	1.58%	11.17%
54	9.71%	1.95%	1.58%	11.29%
55	9.68%	1.89%	1.58%	11.26%
56	9.53%	1.82%	1.58%	11.11%
57	9.36%	1.76%	1.58%	10.94%
58	9.68%	1.69%	1.58%	11.26%
59+	9.97%	1.62%	1.58%	11.55%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous Tiers 3 and 3A, Courts Tiers 3 and 4 (31676.16)					
Entry Age	Basic	COL	COL Limited to 1.58%	Additional Cost Sharing	Total
20	5.69%	1.23%	1.23%	1.14%	8.06%
21	5.73%	1.27%	1.27%	1.14%	8.14%
22	5.78%	1.30%	1.30%	1.14%	8.22%
23	5.82%	1.34%	1.34%	1.14%	8.30%
24	5.85%	1.38%	1.38%	1.14%	8.37%
25	5.88%	1.41%	1.41%	1.14%	8.43%
26	5.90%	1.45%	1.45%	1.14%	8.49%
27	5.91%	1.48%	1.48%	1.14%	8.53%
28	5.92%	1.52%	1.52%	1.14%	8.58%
29	5.94%	1.55%	1.55%	1.14%	8.63%
30	5.94%	1.58%	1.58%	1.14%	8.66%
31	6.08%	1.61%	1.58%	1.14%	8.80%
32	6.24%	1.65%	1.58%	1.14%	8.96%
33	6.37%	1.68%	1.58%	1.14%	9.09%
34	6.49%	1.72%	1.58%	1.14%	9.21%
35	6.62%	1.75%	1.58%	1.14%	9.34%
36	6.75%	1.78%	1.58%	1.14%	9.47%
37	6.88%	1.82%	1.58%	1.14%	9.60%
38	7.02%	1.86%	1.58%	1.14%	9.74%
39	7.15%	1.89%	1.58%	1.14%	9.87%
40	7.29%	1.92%	1.58%	1.14%	10.01%
41	7.44%	1.94%	1.58%	1.14%	10.16%
42	7.58%	1.97%	1.58%	1.14%	10.30%
43	7.73%	2.00%	1.58%	1.14%	10.45%
44	7.89%	2.02%	1.58%	1.14%	10.61%
45	8.04%	2.04%	1.58%	1.14%	10.76%
46	8.21%	2.05%	1.58%	1.14%	10.93%
47	8.39%	2.06%	1.58%	1.14%	11.11%
48	8.57%	2.09%	1.58%	1.14%	11.29%
49	8.76%	2.11%	1.58%	1.14%	11.48%
50	8.96%	2.11%	1.58%	1.14%	11.68%
51	9.18%	2.11%	1.58%	1.14%	11.90%
52	9.42%	2.10%	1.58%	1.14%	12.14%
53	9.65%	2.03%	1.58%	1.14%	12.37%
54	9.76%	1.97%	1.58%	1.14%	12.48%
55	9.73%	1.90%	1.58%	1.14%	12.45%
56	9.58%	1.82%	1.58%	1.14%	12.30%
57	9.42%	1.76%	1.58%	1.14%	12.14%
58	9.73%	1.69%	1.58%	1.14%	12.45%
59+	10.02%	1.62%	1.58%	1.14%	12.74%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous Tier 4 (31676.1)				
Entry Age	Basic	COL	COL Limited to 1.58%	Total
20	5.63%	0.99%	0.99%	6.62%
21	5.68%	1.02%	1.02%	6.70%
22	5.72%	1.06%	1.06%	6.78%
23	5.76%	1.09%	1.09%	6.85%
24	5.80%	1.12%	1.12%	6.92%
25	5.82%	1.15%	1.15%	6.97%
26	5.85%	1.18%	1.18%	7.03%
27	5.86%	1.23%	1.23%	7.09%
28	5.87%	1.27%	1.27%	7.14%
29	5.88%	1.31%	1.31%	7.19%
30	5.88%	1.34%	1.34%	7.22%
31	6.00%	1.38%	1.38%	7.38%
32	6.13%	1.41%	1.41%	7.54%
33	6.23%	1.46%	1.46%	7.69%
34	6.36%	1.49%	1.49%	7.85%
35	6.49%	1.52%	1.52%	8.01%
36	6.63%	1.55%	1.55%	8.18%
37	6.75%	1.58%	1.58%	8.33%
38	6.92%	1.61%	1.58%	8.50%
39	7.10%	1.66%	1.58%	8.68%
40	7.23%	1.69%	1.58%	8.81%
41	7.38%	1.72%	1.58%	8.96%
42	7.53%	1.75%	1.58%	9.11%
43	7.67%	1.78%	1.58%	9.25%
44	7.83%	1.82%	1.58%	9.41%
45	7.99%	1.86%	1.58%	9.57%
46	8.16%	1.89%	1.58%	9.74%
47	8.34%	1.91%	1.58%	9.92%
48	8.51%	1.94%	1.58%	10.09%
49	8.70%	1.97%	1.58%	10.28%
50	8.90%	1.98%	1.58%	10.48%
51	9.12%	2.00%	1.58%	10.70%
52	9.36%	2.01%	1.58%	10.94%
53	9.59%	1.99%	1.58%	11.17%
54	9.71%	1.95%	1.58%	11.29%
55	9.68%	1.89%	1.58%	11.26%
56	9.53%	1.82%	1.58%	11.11%
57	9.36%	1.76%	1.58%	10.94%
58	9.68%	1.69%	1.58%	11.26%
59+	9.97%	1.62%	1.58%	11.55%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Safety: Tier 1A (31664.2)					
Entry Age	Basic	COL	COL Limited to 3.10%	Additional Cost Sharing	Total
20	8.61%	3.83%	3.10%	3.64%	15.35%
21	8.75%	3.94%	3.10%	3.64%	15.49%
22	8.89%	4.05%	3.10%	3.64%	15.63%
23	9.02%	4.17%	3.10%	3.64%	15.76%
24	9.16%	4.28%	3.10%	3.64%	15.90%
25	9.31%	4.36%	3.10%	3.64%	16.05%
26	9.45%	4.45%	3.10%	3.64%	16.19%
27	9.60%	4.56%	3.10%	3.64%	16.34%
28	9.75%	4.67%	3.10%	3.64%	16.49%
29	9.89%	4.79%	3.10%	3.64%	16.63%
30	10.05%	4.89%	3.10%	3.64%	16.79%
31	10.21%	5.03%	3.10%	3.64%	16.95%
32	10.36%	5.16%	3.10%	3.64%	17.10%
33	10.52%	5.28%	3.10%	3.64%	17.26%
34	10.69%	5.40%	3.10%	3.64%	17.43%
35	10.86%	5.46%	3.10%	3.64%	17.60%
36	11.03%	5.48%	3.10%	3.64%	17.77%
37	11.19%	5.50%	3.10%	3.64%	17.93%
38	11.38%	5.58%	3.10%	3.64%	18.12%
39	11.56%	5.64%	3.10%	3.64%	18.30%
40	11.75%	5.71%	3.10%	3.64%	18.49%
41	11.95%	5.79%	3.10%	3.64%	18.69%
42	12.16%	5.87%	3.10%	3.64%	18.90%
43	12.38%	5.98%	3.10%	3.64%	19.12%
44	12.63%	6.09%	3.10%	3.64%	19.37%
45	12.90%	6.20%	3.10%	3.64%	19.64%
46	13.14%	6.16%	3.10%	3.64%	19.88%
47	13.09%	6.22%	3.10%	3.64%	19.83%
48	13.04%	6.28%	3.10%	3.64%	19.78%
49+	12.99%	6.35%	3.10%	3.64%	19.73%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Safety: Tier 1B (31664.1)					
Entry Age	Basic	COL	COL Limited to 3.10%	Additional Cost Sharing	Total
20	8.61%	4.49%	3.10%	3.64%	15.35%
21	8.75%	4.52%	3.10%	3.64%	15.49%
22	8.89%	4.60%	3.10%	3.64%	15.63%
23	9.02%	4.70%	3.10%	3.64%	15.76%
24	9.16%	4.79%	3.10%	3.64%	15.90%
25	9.31%	4.88%	3.10%	3.64%	16.05%
26	9.45%	4.98%	3.10%	3.64%	16.19%
27	9.60%	5.07%	3.10%	3.64%	16.34%
28	9.75%	5.18%	3.10%	3.64%	16.49%
29	9.89%	5.27%	3.10%	3.64%	16.63%
30	10.05%	5.37%	3.10%	3.64%	16.79%
31	10.21%	5.50%	3.10%	3.64%	16.95%
32	10.36%	5.64%	3.10%	3.64%	17.10%
33	10.52%	5.78%	3.10%	3.64%	17.26%
34	10.69%	5.89%	3.10%	3.64%	17.43%
35	10.86%	6.00%	3.10%	3.64%	17.60%
36	11.03%	6.11%	3.10%	3.64%	17.77%
37	11.19%	6.24%	3.10%	3.64%	17.93%
38	11.38%	6.35%	3.10%	3.64%	18.12%
39	11.56%	6.47%	3.10%	3.64%	18.30%
40	11.75%	6.58%	3.10%	3.64%	18.49%
41	11.95%	6.41%	3.10%	3.64%	18.69%
42	12.16%	6.44%	3.10%	3.64%	18.90%
43	12.38%	6.50%	3.10%	3.64%	19.12%
44	12.63%	6.58%	3.10%	3.64%	19.37%
45	12.90%	6.69%	3.10%	3.64%	19.64%
46	13.14%	6.69%	3.10%	3.64%	19.88%
47	13.09%	6.70%	3.10%	3.64%	19.83%
48	13.04%	6.70%	3.10%	3.64%	19.78%
49+	12.99%	6.72%	3.10%	3.64%	19.73%

Some members who are receiving enhanced benefits under 31664.1 are paying an additional 2.60%, 3.530% or 3.885%, depending on their bargaining agreement.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Safety: Tier 2A (31664.2)					
Entry Age	Basic	COL	COL Limited to 3.10%	Additional Cost Sharing	Total
20	8.13%	2.36%	2.36%	3.64%	14.13%
21	8.26%	2.43%	2.43%	3.64%	14.33%
22	8.39%	2.50%	2.50%	3.64%	14.53%
23	8.52%	2.58%	2.58%	3.64%	14.74%
24	8.66%	2.65%	2.65%	3.64%	14.95%
25	8.79%	2.70%	2.70%	3.64%	15.13%
26	8.92%	2.76%	2.76%	3.64%	15.32%
27	9.07%	2.82%	2.82%	3.64%	15.53%
28	9.21%	2.89%	2.89%	3.64%	15.74%
29	9.35%	2.97%	2.97%	3.64%	15.96%
30	9.50%	3.04%	3.04%	3.64%	16.18%
31	9.66%	3.11%	3.10%	3.64%	16.40%
32	9.90%	3.20%	3.10%	3.64%	16.64%
33	10.11%	3.27%	3.10%	3.64%	16.85%
34	10.27%	3.34%	3.10%	3.64%	17.01%
35	10.43%	3.39%	3.10%	3.64%	17.17%
36	10.59%	3.41%	3.10%	3.64%	17.33%
37	10.75%	3.42%	3.10%	3.64%	17.49%
38	10.93%	3.47%	3.10%	3.64%	17.67%
39	11.11%	3.51%	3.10%	3.64%	17.85%
40	11.29%	3.55%	3.10%	3.64%	18.03%
41	11.48%	3.61%	3.10%	3.64%	18.22%
42	11.68%	3.66%	3.10%	3.64%	18.42%
43	11.90%	3.73%	3.10%	3.64%	18.64%
44	12.10%	3.80%	3.10%	3.64%	18.84%
45	12.20%	3.87%	3.10%	3.64%	18.94%
46	12.20%	3.85%	3.10%	3.64%	18.94%
47	12.16%	3.89%	3.10%	3.64%	18.90%
48	12.57%	3.93%	3.10%	3.64%	19.31%
49+	12.99%	3.97%	3.10%	3.64%	19.73%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Safety: Tier 2B (31664.1)					
Entry Age	Basic	COL	COL Limited to 3.10%	Additional Cost Sharing	Total
20	8.13%	2.77%	2.77%	3.64%	14.54%
21	8.25%	2.79%	2.79%	3.64%	14.68%
22	8.38%	2.84%	2.84%	3.64%	14.86%
23	8.52%	2.90%	2.90%	3.64%	15.06%
24	8.65%	2.97%	2.97%	3.64%	15.26%
25	8.79%	3.02%	3.02%	3.64%	15.45%
26	8.93%	3.07%	3.07%	3.64%	15.64%
27	9.11%	3.13%	3.10%	3.64%	15.85%
28	9.32%	3.21%	3.10%	3.64%	16.06%
29	9.51%	3.27%	3.10%	3.64%	16.25%
30	9.65%	3.32%	3.10%	3.64%	16.39%
31	9.80%	3.41%	3.10%	3.64%	16.54%
32	9.96%	3.49%	3.10%	3.64%	16.70%
33	10.11%	3.57%	3.10%	3.64%	16.85%
34	10.27%	3.65%	3.10%	3.64%	17.01%
35	10.43%	3.71%	3.10%	3.64%	17.17%
36	10.59%	3.78%	3.10%	3.64%	17.33%
37	10.75%	3.87%	3.10%	3.64%	17.49%
38	10.93%	3.94%	3.10%	3.64%	17.67%
39	11.11%	4.01%	3.10%	3.64%	17.85%
40	11.29%	4.08%	3.10%	3.64%	18.03%
41	11.48%	3.98%	3.10%	3.64%	18.22%
42	11.68%	4.00%	3.10%	3.64%	18.42%
43	11.90%	4.05%	3.10%	3.64%	18.64%
44	12.10%	4.10%	3.10%	3.64%	18.84%
45	12.20%	4.16%	3.10%	3.64%	18.94%
46	12.20%	4.17%	3.10%	3.64%	18.94%
47	12.16%	4.18%	3.10%	3.64%	18.90%
48	12.57%	4.19%	3.10%	3.64%	19.31%
49+	12.99%	4.20%	3.10%	3.64%	19.73%

Some members who are receiving enhanced benefits under 31664.1 are paying an additional 2.60%, 3.530% or 3.885%, depending on their bargaining agreement.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire: Miscellaneous Tier 1 (31676.19)			
Entry			
Age	Basic	COL	Total
20	7.60%	2.44%	10.04%
21	7.63%	2.55%	10.18%
22	7.65%	2.63%	10.28%
23	7.67%	2.71%	10.38%
24	7.67%	2.81%	10.48%
25	7.67%	2.88%	10.55%
26	7.83%	2.92%	10.75%
27	7.98%	2.97%	10.95%
28	8.14%	3.01%	11.15%
29	8.30%	3.05%	11.35%
30	8.47%	3.11%	11.58%
31	8.64%	3.15%	11.79%
32	8.81%	3.21%	12.02%
33	8.98%	3.26%	12.24%
34	9.16%	3.33%	12.49%
35	9.34%	3.40%	12.74%
36	9.54%	3.45%	12.99%
37	9.73%	3.51%	13.24%
38	9.93%	3.56%	13.49%
39	10.12%	3.61%	13.73%
40	10.33%	3.66%	13.99%
41	10.54%	3.68%	14.22%
42	10.77%	3.70%	14.47%
43	11.01%	3.73%	14.74%
44	11.26%	3.75%	15.01%
45	11.52%	3.77%	15.29%
46	11.80%	3.73%	15.53%
47	12.12%	3.75%	15.87%
48	12.46%	3.76%	16.22%
49	12.87%	3.77%	16.64%
50	13.23%	3.74%	16.97%
51	13.19%	3.72%	16.91%
52	12.95%	3.70%	16.65%
53	12.73%	3.57%	16.30%
54+	12.49%	3.44%	15.93%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire Safety: Tier 1 (31664.1)			
Entry			
Age	Basic	COL	Total
20	8.29%	4.49%	12.78%
21	8.42%	4.52%	12.94%
22	8.56%	4.60%	13.16%
23	8.69%	4.70%	13.39%
24	8.84%	4.79%	13.63%
25	8.99%	4.88%	13.87%
26	9.13%	4.98%	14.11%
27	9.28%	5.07%	14.35%
28	9.42%	5.18%	14.60%
29	9.57%	5.27%	14.84%
30	9.72%	5.37%	15.09%
31	9.89%	5.50%	15.39%
32	10.04%	5.64%	15.68%
33	10.19%	5.78%	15.97%
34	10.37%	5.89%	16.26%
35	10.53%	6.00%	16.53%
36	10.70%	6.11%	16.81%
37	10.86%	6.24%	17.10%
38	11.06%	6.35%	17.41%
39	11.23%	6.47%	17.70%
40	11.43%	6.58%	18.01%
41	11.63%	6.41%	18.04%
42	11.83%	6.44%	18.27%
43	12.05%	6.50%	18.55%
44	12.31%	6.58%	18.89%
45	12.57%	6.69%	19.26%
46	12.82%	6.69%	19.51%
47	12.76%	6.70%	19.46%
48	12.71%	6.70%	19.41%
49+	12.66%	6.72%	19.38%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire Safety: Tier 2 (31664.2)			
Entry			
Age	Basic	COL	Total
20	8.29%	3.83%	12.12%
21	8.43%	3.94%	12.37%
22	8.56%	4.05%	12.61%
23	8.70%	4.17%	12.87%
24	8.83%	4.28%	13.11%
25	8.98%	4.36%	13.34%
26	9.13%	4.45%	13.58%
27	9.27%	4.56%	13.83%
28	9.43%	4.67%	14.10%
29	9.57%	4.79%	14.36%
30	9.73%	4.89%	14.62%
31	9.88%	5.03%	14.91%
32	10.04%	5.16%	15.20%
33	10.20%	5.28%	15.48%
34	10.36%	5.40%	15.76%
35	10.53%	5.46%	15.99%
36	10.70%	5.48%	16.18%
37	10.87%	5.50%	16.37%
38	11.05%	5.58%	16.63%
39	11.23%	5.64%	16.87%
40	11.43%	5.71%	17.14%
41	11.62%	5.79%	17.41%
42	11.83%	5.87%	17.70%
43	12.06%	5.98%	18.04%
44	12.30%	6.09%	18.39%
45	12.58%	6.20%	18.78%
46	12.82%	6.16%	18.98%
47	12.76%	6.22%	18.98%
48	12.71%	6.28%	18.99%
49+	12.66%	6.35%	19.01%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire Safety: Tier 2A (31664.2)			
Entry			
Age	Basic	COL	Total
20	7.96%	3.49%	11.45%
21	8.09%	3.59%	11.68%
22	8.21%	3.70%	11.91%
23	8.35%	3.80%	12.15%
24	8.48%	3.91%	12.39%
25	8.62%	3.98%	12.60%
26	8.75%	4.07%	12.82%
27	8.90%	4.16%	13.06%
28	9.03%	4.27%	13.30%
29	9.18%	4.37%	13.55%
30	9.32%	4.48%	13.80%
31	9.48%	4.59%	14.07%
32	9.63%	4.71%	14.34%
33	9.79%	4.82%	14.61%
34	9.94%	4.93%	14.87%
35	10.10%	4.99%	15.09%
36	10.26%	5.00%	15.26%
37	10.43%	5.03%	15.46%
38	10.61%	5.09%	15.70%
39	10.78%	5.16%	15.94%
40	10.96%	5.22%	16.18%
41	11.15%	5.28%	16.43%
42	11.35%	5.36%	16.71%
43	11.57%	5.47%	17.04%
44	11.78%	5.57%	17.35%
45	11.88%	5.67%	17.55%
46	11.87%	5.63%	17.50%
47	11.83%	5.68%	17.51%
48	12.25%	5.74%	17.99%
49+	12.66%	5.81%	18.47%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

Marin City CSD Tier 1, LAFCO Tier 7, Tamalpais CSD Tier 1 (31676.11)			
Entry Age	Basic	COL	Total
20	6.33%	1.74%	8.07%
21	6.35%	1.79%	8.14%
22	6.38%	1.84%	8.22%
23	6.38%	1.91%	8.29%
24	6.39%	1.96%	8.35%
25	6.40%	2.01%	8.41%
26	6.52%	2.08%	8.60%
27	6.65%	2.15%	8.80%
28	6.79%	2.22%	9.01%
29	6.92%	2.28%	9.20%
30	7.05%	2.35%	9.40%
31	7.20%	2.40%	9.60%
32	7.34%	2.46%	9.80%
33	7.48%	2.53%	10.01%
34	7.64%	2.59%	10.23%
35	7.79%	2.65%	10.44%
36	7.95%	2.70%	10.65%
37	8.10%	2.77%	10.87%
38	8.27%	2.82%	11.09%
39	8.44%	2.88%	11.32%
40	8.61%	2.93%	11.54%
41	8.79%	3.00%	11.79%
42	8.97%	3.05%	12.02%
43	9.17%	3.10%	12.27%
44	9.38%	3.17%	12.55%
45	9.60%	3.22%	12.82%
46	9.83%	3.26%	13.09%
47	10.09%	3.30%	13.39%
48	10.39%	3.34%	13.73%
49	10.73%	3.39%	14.12%
50	11.02%	3.41%	14.43%
51	10.98%	3.43%	14.41%
52	10.79%	3.44%	14.23%
53	10.60%	3.36%	13.96%
54	10.41%	3.28%	13.69%
55	10.32%	3.18%	13.50%
56	10.24%	3.06%	13.30%
57	10.14%	2.93%	13.07%
58	10.04%	2.82%	12.86%
59+	9.93%	2.70%	12.63%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

Mosquito District Tier 1 (31676.14)			
Entry			
Age	Basic	COL	Total
20	5.85%	1.98%	7.83%
21	5.90%	2.04%	7.94%
22	5.93%	2.12%	8.05%
23	5.97%	2.18%	8.15%
24	6.01%	2.24%	8.25%
25	6.03%	2.31%	8.34%
26	6.06%	2.38%	8.44%
27	6.08%	2.44%	8.52%
28	6.09%	2.50%	8.59%
29	6.10%	2.57%	8.67%
30	6.10%	2.63%	8.73%
31	6.23%	2.68%	8.91%
32	6.35%	2.73%	9.08%
33	6.48%	2.79%	9.27%
34	6.60%	2.85%	9.45%
35	6.73%	2.91%	9.64%
36	6.86%	2.97%	9.83%
37	7.00%	3.03%	10.03%
38	7.14%	3.09%	10.23%
39	7.29%	3.14%	10.43%
40	7.43%	3.20%	10.63%
41	7.58%	3.25%	10.83%
42	7.73%	3.29%	11.02%
43	7.89%	3.34%	11.23%
44	8.05%	3.40%	11.45%
45	8.21%	3.44%	11.65%
46	8.38%	3.46%	11.84%
47	8.56%	3.50%	12.06%
48	8.75%	3.53%	12.28%
49	8.94%	3.56%	12.50%
50	9.15%	3.56%	12.71%
51	9.38%	3.56%	12.94%
52	9.64%	3.55%	13.19%
53	9.90%	3.44%	13.34%
54	10.24%	3.31%	13.55%
55	10.51%	3.20%	13.71%
56	10.48%	3.07%	13.55%
57	10.29%	2.96%	13.25%
58	10.11%	2.83%	12.94%
59+	9.93%	2.71%	12.64%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

LAFCO Tier 3 (31676.16)			
Entry Age	Basic	COL	Total
20	5.64%	1.23%	6.87%
21	5.68%	1.27%	6.95%
22	5.72%	1.30%	7.02%
23	5.77%	1.34%	7.11%
24	5.80%	1.38%	7.18%
25	5.82%	1.41%	7.23%
26	5.84%	1.45%	7.29%
27	5.86%	1.48%	7.34%
28	5.87%	1.52%	7.39%
29	5.88%	1.55%	7.43%
30	5.88%	1.58%	7.46%
31	6.00%	1.61%	7.61%
32	6.12%	1.65%	7.77%
33	6.23%	1.68%	7.91%
34	6.36%	1.72%	8.08%
35	6.49%	1.75%	8.24%
36	6.63%	1.78%	8.41%
37	6.75%	1.82%	8.57%
38	6.88%	1.86%	8.74%
39	7.02%	1.89%	8.91%
40	7.16%	1.92%	9.08%
41	7.30%	1.94%	9.24%
42	7.45%	1.97%	9.42%
43	7.60%	2.00%	9.60%
44	7.76%	2.02%	9.78%
45	7.92%	2.04%	9.96%
46	8.09%	2.05%	10.14%
47	8.26%	2.06%	10.32%
48	8.43%	2.09%	10.52%
49	8.62%	2.11%	10.73%
50	8.82%	2.11%	10.93%
51	9.04%	2.11%	11.15%
52	9.28%	2.10%	11.38%
53	9.52%	2.03%	11.55%
54	9.63%	1.97%	11.60%
55	9.60%	1.90%	11.50%
56	9.46%	1.82%	11.28%
57	9.29%	1.76%	11.05%
58	9.60%	1.69%	11.29%
59+	9.93%	1.62%	11.55%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

Novato Miscellaneous Tier 1 (31676.16)			
Entry			
Age	Basic	COL	Total
20	5.85%	2.00%	7.85%
21	5.91%	2.06%	7.97%
22	5.93%	2.13%	8.06%
23	5.97%	2.18%	8.15%
24	6.01%	2.24%	8.25%
25	6.03%	2.31%	8.34%
26	6.06%	2.36%	8.42%
27	6.08%	2.41%	8.49%
28	6.09%	2.46%	8.55%
29	6.10%	2.52%	8.62%
30	6.10%	2.57%	8.67%
31	6.23%	2.62%	8.85%
32	6.35%	2.67%	9.02%
33	6.47%	2.73%	9.20%
34	6.60%	2.78%	9.38%
35	6.73%	2.84%	9.57%
36	6.87%	2.89%	9.76%
37	7.00%	2.95%	9.95%
38	7.14%	3.00%	10.14%
39	7.28%	3.05%	10.33%
40	7.43%	3.10%	10.53%
41	7.58%	3.14%	10.72%
42	7.72%	3.18%	10.90%
43	7.88%	3.23%	11.11%
44	8.05%	3.26%	11.31%
45	8.22%	3.30%	11.52%
46	8.39%	3.30%	11.69%
47	8.57%	3.33%	11.90%
48	8.76%	3.35%	12.11%
49	8.94%	3.39%	12.33%
50	9.15%	3.37%	12.52%
51	9.39%	3.37%	12.76%
52	9.64%	3.36%	13.00%
53	9.90%	3.26%	13.16%
54	10.24%	3.14%	13.38%
55	10.51%	3.03%	13.54%
56	10.48%	2.91%	13.39%
57	10.29%	2.80%	13.09%
58	10.12%	2.68%	12.80%
59+	9.92%	2.58%	12.50%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

Novato Safety: Tier 1 (31664.1)			
Entry			
Age	Basic	COL	Total
20	8.29%	4.55%	12.84%
21	8.43%	4.58%	13.01%
22	8.57%	4.67%	13.24%
23	8.70%	4.77%	13.47%
24	8.84%	4.87%	13.71%
25	8.98%	4.97%	13.95%
26	9.13%	5.06%	14.19%
27	9.27%	5.16%	14.43%
28	9.42%	5.27%	14.69%
29	9.57%	5.37%	14.94%
30	9.73%	5.46%	15.19%
31	9.88%	5.61%	15.49%
32	10.04%	5.74%	15.78%
33	10.20%	5.87%	16.07%
34	10.36%	6.00%	16.36%
35	10.53%	6.10%	16.63%
36	10.70%	6.23%	16.93%
37	10.87%	6.34%	17.21%
38	11.05%	6.47%	17.52%
39	11.24%	6.58%	17.82%
40	11.42%	6.70%	18.12%
41	11.62%	6.53%	18.15%
42	11.83%	6.55%	18.38%
43	12.06%	6.61%	18.67%
44	12.30%	6.70%	19.00%
45	12.58%	6.80%	19.38%
46	12.82%	6.80%	19.62%
47	12.77%	6.81%	19.58%
48	12.72%	6.82%	19.54%
49+	12.66%	6.83%	19.49%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

Novato Safety: Tier 2 (31664.2)			
Entry			
Age	Basic	COL	Total
20	8.29%	3.89%	12.18%
21	8.43%	3.99%	12.42%
22	8.56%	4.11%	12.67%
23	8.70%	4.23%	12.93%
24	8.83%	4.34%	13.17%
25	8.99%	4.43%	13.42%
26	9.13%	4.53%	13.66%
27	9.28%	4.63%	13.91%
28	9.42%	4.75%	14.17%
29	9.57%	4.87%	14.44%
30	9.73%	4.99%	14.72%
31	9.89%	5.11%	15.00%
32	10.04%	5.24%	15.28%
33	10.19%	5.38%	15.57%
34	10.37%	5.49%	15.86%
35	10.54%	5.55%	16.09%
36	10.70%	5.58%	16.28%
37	10.87%	5.60%	16.47%
38	11.06%	5.67%	16.73%
39	11.24%	5.74%	16.98%
40	11.42%	5.82%	17.24%
41	11.62%	5.89%	17.51%
42	11.84%	5.97%	17.81%
43	12.05%	6.09%	18.14%
44	12.31%	6.20%	18.51%
45	12.58%	6.31%	18.89%
46	12.82%	6.27%	19.09%
47	12.77%	6.33%	19.10%
48	12.72%	6.39%	19.11%
49+	12.66%	6.46%	19.12%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Miscellaneous Tier 1 (31676.19)			
Entry			
Age	Basic	COL	Total
20	7.60%	2.35%	9.95%
21	7.63%	2.44%	10.07%
22	7.65%	2.54%	10.19%
23	7.66%	2.62%	10.28%
24	7.68%	2.70%	10.38%
25	7.67%	2.78%	10.45%
26	7.83%	2.82%	10.65%
27	7.99%	2.86%	10.85%
28	8.15%	2.90%	11.05%
29	8.30%	2.95%	11.25%
30	8.47%	3.00%	11.47%
31	8.64%	3.05%	11.69%
32	8.82%	3.09%	11.91%
33	8.99%	3.15%	12.14%
34	9.16%	3.22%	12.38%
35	9.35%	3.28%	12.63%
36	9.54%	3.33%	12.87%
37	9.72%	3.40%	13.12%
38	9.92%	3.44%	13.36%
39	10.12%	3.48%	13.60%
40	10.34%	3.53%	13.87%
41	10.55%	3.55%	14.10%
42	10.78%	3.57%	14.35%
43	11.00%	3.61%	14.61%
44	11.25%	3.63%	14.88%
45	11.52%	3.65%	15.17%
46	11.80%	3.62%	15.42%
47	12.11%	3.63%	15.74%
48	12.46%	3.64%	16.10%
49	12.87%	3.65%	16.52%
50	13.22%	3.63%	16.85%
51	13.19%	3.59%	16.78%
52	12.96%	3.58%	16.54%
53	12.72%	3.46%	16.18%
54+	12.50%	3.32%	15.82%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Miscellaneous Tier 2 (31676.16)			
Entry			
Age	Basic	COL	Total
20	5.64%	1.25%	6.89%
21	5.68%	1.29%	6.97%
22	5.72%	1.33%	7.05%
23	5.77%	1.37%	7.14%
24	5.80%	1.41%	7.21%
25	5.81%	1.45%	7.26%
26	5.85%	1.48%	7.33%
27	5.86%	1.51%	7.37%
28	5.87%	1.54%	7.41%
29	5.88%	1.56%	7.44%
30	5.88%	1.59%	7.47%
31	6.00%	1.62%	7.62%
32	6.12%	1.66%	7.78%
33	6.23%	1.69%	7.92%
34	6.36%	1.72%	8.08%
35	6.49%	1.75%	8.24%
36	6.63%	1.78%	8.41%
37	6.75%	1.81%	8.56%
38	6.89%	1.84%	8.73%
39	7.02%	1.87%	8.89%
40	7.16%	1.90%	9.06%
41	7.30%	1.93%	9.23%
42	7.45%	1.96%	9.41%
43	7.60%	2.00%	9.60%
44	7.76%	2.03%	9.79%
45	7.91%	2.08%	9.99%
46	8.08%	2.08%	10.16%
47	8.26%	2.10%	10.36%
48	8.43%	2.12%	10.55%
49	8.62%	2.13%	10.75%
50	8.82%	2.13%	10.95%
51	9.04%	2.13%	11.17%
52	9.28%	2.13%	11.41%
53	9.52%	2.06%	11.58%
54	9.63%	1.99%	11.62%
55	9.60%	1.92%	11.52%
56	9.45%	1.86%	11.31%
57	9.29%	1.78%	11.07%
58	9.60%	1.71%	11.31%
59+	9.92%	1.65%	11.57%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Safety Tier 1 (31664.2)			
Entry			
Age	Basic	COL	Total
20	8.29%	3.69%	11.98%
21	8.43%	3.78%	12.21%
22	8.56%	3.90%	12.46%
23	8.70%	4.01%	12.71%
24	8.83%	4.12%	12.95%
25	8.99%	4.20%	13.19%
26	9.13%	4.30%	13.43%
27	9.28%	4.39%	13.67%
28	9.42%	4.51%	13.93%
29	9.57%	4.61%	14.18%
30	9.72%	4.73%	14.45%
31	9.89%	4.85%	14.74%
32	10.04%	4.97%	15.01%
33	10.20%	5.09%	15.29%
34	10.36%	5.20%	15.56%
35	10.54%	5.27%	15.81%
36	10.70%	5.28%	15.98%
37	10.87%	5.31%	16.18%
38	11.05%	5.38%	16.43%
39	11.24%	5.44%	16.68%
40	11.43%	5.51%	16.94%
41	11.62%	5.59%	17.21%
42	11.83%	5.66%	17.49%
43	12.05%	5.78%	17.83%
44	12.30%	5.88%	18.18%
45	12.58%	5.98%	18.56%
46	12.82%	5.94%	18.76%
47	12.76%	6.01%	18.77%
48	12.71%	6.07%	18.78%
49+	12.66%	6.13%	18.79%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Safety Tier 2 (31664.2)			
Entry			
Age	Basic	COL	Total
20	7.95%	2.39%	10.34%
21	8.08%	2.46%	10.54%
22	8.20%	2.53%	10.73%
23	8.34%	2.61%	10.95%
24	8.48%	2.67%	11.15%
25	8.61%	2.74%	11.35%
26	8.75%	2.79%	11.54%
27	8.90%	2.86%	11.76%
28	9.04%	2.93%	11.97%
29	9.18%	3.01%	12.19%
30	9.33%	3.07%	12.40%
31	9.48%	3.15%	12.63%
32	9.63%	3.24%	12.87%
33	9.79%	3.31%	13.10%
34	9.94%	3.39%	13.33%
35	10.10%	3.43%	13.53%
36	10.26%	3.45%	13.71%
37	10.43%	3.47%	13.90%
38	10.61%	3.51%	14.12%
39	10.79%	3.55%	14.34%
40	10.96%	3.61%	14.57%
41	11.15%	3.65%	14.80%
42	11.35%	3.70%	15.05%
43	11.57%	3.77%	15.34%
44	11.78%	3.85%	15.63%
45	11.87%	3.92%	15.79%
46	11.87%	3.90%	15.77%
47	11.83%	3.94%	15.77%
48	12.24%	3.98%	16.22%
49+	12.67%	4.02%	16.69%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2016**

APPENDIX E – MEMBER CONTRIBUTION RATES

PEPRA Rates					
All Ages	Basic	COLA	Total	Prior Total	
PEPRA Misc 2% COLA	7.53%	1.53%	9.06%	9.18%	
PEPRA Misc 4% COLA	7.57%	2.44%	10.01%	8.23%	
PEPRA Safety 2% COLA	10.50%	2.57%	13.07%	13.53%	
PEPRA Safety 3% COLA	12.35%	4.37%	16.72%	17.59%	
PEPRA Safety 4% COLA	10.79%	4.02%	14.81%	13.74%	



Classic Values, Innovative Advice