

Marin County Employees' Retirement Association

Actuarial Valuation Report as of June 30, 2021

Produced by Cheiron

February 2022

TABLE OF CONTENTS

<i>Section</i>	<i>Page</i>
Letter of Transmittal	i
Section I Executive Summary	1
Section II Risk Analysis	14
Section III Assets	24
Section IV Liabilities	31
Section V Contributions.....	34
 <i>Appendices</i>	
Appendix A Membership Information	46
Appendix B Statement of Current Actuarial Assumptions and Methods	89
Appendix C Summary of Plan Provisions.....	100
Appendix D Glossary	114
Appendix E Member Contribution Rates.....	116

February 2, 2022

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, 2021. 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, 2022.

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 No. 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.

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.

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech), to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal, have a basic understanding of it, and have used it in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this report. The deterministic and stochastic projections shown in this report were developed using R-scan, our proprietary stochastic projection tool for assessing probabilities of different outcomes. The projections use standard roll-forward techniques that implicitly assume a stable active population. Changes in the demographic characteristics of the active population will lead to different results. We have relied on Cheiron colleagues who developed the tool, and we have used the tool in accordance with its purpose.

Board of Retirement

February 2, 2022

Page ii

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. 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, 2021**

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,
- Employer and employee contribution rates for Plan Year 2022-2023, and
- An assessment and disclosure of key risks.

The balance of this Executive Summary presents (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, 2022. The employers are divided into three groups: 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.

This valuation was prepared based on the data summarized in Appendix A, the assumptions and methods described in Appendix B, and the Plan provisions summarized in Appendix C. Because the County valuation group has reached full funding, the methodology used to allocate assets among the employers within this group has been modified. A full description of the methodology is included in Section III.

B. Key Findings of this Valuation

Tables I-1 and I-2 summarize the key results of the valuation with respect to the Plan as a whole, contributions by the main valuation groups, and overall membership. The tables compare the results for the current plan year to the results for the prior plan year.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

Table I-1		
Marin County Employees' Retirement Association		
Summary of Key Valuation Results		
(in millions)		
Valuation Date	June 30, 2020	June 30, 2021
Actuarial Liability	\$ 3,124.8	\$ 3,216.9
Valuation Assets	<u>2,625.3</u>	<u>3,361.6</u>
Unfunded Actuarial Liability	\$ 499.5	\$ (144.6)
Funded Ratio	84.0%	104.5%
Net Employer Contribution Rate		
County of Marin	24.99%	22.35%
Novato Fire Protection District	48.35%	43.01%
City of San Rafael	62.57%	58.91%
Total MCERA	30.53%	27.61%

Table I-2			
Membership Total			
Item	June 30, 2020	June 30, 2021	% Change
Actives	2,703	2,682	-0.8%
Current Inactives	727	763	5.0%
Retired Members	<u>3,490</u>	<u>3,592</u>	<u>2.9%</u>
Total Members	6,920	7,037	1.7%
Ratio of Retired Members to Active Members	129.1%	133.9%	
Active Member Payroll (FYE 2021/2022)	\$ 277,816,749	\$ 281,568,629	1.4%
Average Pay per Active	\$ 102,781	\$ 104,985	2.1%

The key results of the June 30, 2021 actuarial valuation are as follows:

- The actuarially determined employer contribution rate decreased for the County from 24.99% to 22.35% of payroll, for Novato from 48.35% to 43.01%, and for San Rafael from 62.57% to 58.91%.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Valuation Assets. The UAL decreased from \$499.5 million to (\$144.6) million.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

This decrease in UAL was primarily due to exceptional investment returns. The Valuation Assets exclude the value of the Contingency Reserves (\$34.0M as of June 30, 2021).

- The Plan's funded ratio, the ratio of Valuation Assets over Actuarial Liability, increased from 84.0% last year to 104.5% as of June 30, 2021.
- During the year ending June 30, 2021, the return on Plan assets was 32.0% net of investment expenses, as compared to the prior year's assumption of 6.75%. 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 dollar-weighting using this simplifying assumption may result in a return that is slightly different from that provided by the investment consultant.
- Total Plan membership and the number of active members increased compared to last year. There were 257 new hires, rehires, and incoming transfers during 2020-2021, and 278 retirements, disabilities, deaths, and other terminations during that same period, resulting in a slight decrease in the total active population of 21 from 2,703 to 2,682. The number of members in pay status and deferred status increased from 4,217 to 4,355. Total projected payroll increased 1.4% from \$277.8 million to \$281.6 million.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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, 2021 for each of the three main groups.

Table I-3			
Assets & Liabilities			
(in millions)			
Item	County	Novato	San Rafael
Actuarial Liability			
Actives	\$ 733.0	\$ 71.7	\$ 125.5
Current Inactives	110.6	4.1	31.5
Retired Members	<u>1,512.4</u>	<u>147.7</u>	<u>480.3</u>
Total Actuarial Liability	\$ 2,356.1	\$ 223.6	\$ 637.2
Valuation Assets	\$ 2,516.1	\$ 235.3	\$ 610.2
Unfunded Actuarial Liability	\$ (160.0)	\$ (11.6)	\$ 27.0
Funded Ratio	106.8%	105.2%	95.8%
Inactive-Only Funded Ratio	68.9%	67.9%	80.3%

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 68.9% or more 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 all three groups exceeds the Inactive-Only Funded Ratio for the current valuation.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

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 2022 Net Employer Contribution Rate	30.53%	24.99%	48.35%	62.57%
Expected change in amortization from prior changes	0.24%	0.24%	1.33%	(0.06%)
Change due to asset (gains)/losses	(3.42%)	(3.03%)	(6.31%)	(5.14%)
Change due to demographic (gains)/losses	0.24%	0.17%	0.38%	0.66%
Change due to PEPRAs new hires	(0.12%)	(0.10%)	(0.43%)	(0.23%)
Change due to salaries	(0.04%)	(0.03%)	(0.05%)	(0.10%)
Change due to effect of payroll on amortization	<u>0.18%</u>	<u>0.11%</u>	<u>(0.26%)</u>	<u>1.21%</u>
Total change from current year's changes	(3.16%)	(2.88%)	(6.67%)	(3.60%)
FYE 2023 Net Employer Contribution Rate	27.61%	22.35%	43.01%	58.91%

Before adjusting for Plan experience during the year, there was an expected change in amortization rates due to the phase-in of payments on prior UAL gains, losses, and assumption changes. This reduced the contribution rates by 0.06% for San Rafael and increased the contribution rates by 0.24% and 1.33% for the County and Novato, respectively.

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 3.16% of pay (the total of the third through seventh rows in the table above):

- Asset experience produced an investment gain.

The 32.0% return, compared to last year's 6.75% assumption, resulted in a gain that decreased the contribution rate by 3.42% of pay in the current year. The amortization payment for this year's investment gains will be phased-in over five years, resulting in similar decreases in the UAL rates in each of the next four years. However, the reduction in the actual contribution rates paid by the employers may be limited by the requirement that they continue to pay their share of the normal cost.

- Demographic experience was close to expectations 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. Rates increased due to demographic changes for the County, Novato, and San Rafael.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

- PEPRA new hires reduced the contribution rates.

PEPRA members make up a growing proportion of the active member population, and they have lower benefits and generally contribute a larger share of their cost. PEPRA new hires decreased the contribution rate by 0.12%. As these changes only affect the normal cost, they are not subject to further phase-in.

- Changes in salaries and total payroll reduced the overall contribution rate for Novato and increased the overall contribution rate for the County and San Rafael.

Liability-weighted salary increases for continuing active members were lower than anticipated for the County, Novato, and San Rafael, decreasing the contribution rates by 0.03% for the County, 0.05% for Novato, and by 0.10% for San Rafael. The amortization of these gains will be phased-in over five years, resulting in similar increases in the contribution rate for each of the next four years.

In addition, the lower-than-expected payroll growth for the County and San Rafael meant that the UAL is being amortized over a smaller than expected payroll base, which increased the contribution rate by 0.11% for the County and 1.21% for San Rafael. The higher than anticipated payroll growth for Novato meant that its UAL is being amortized over a larger than expected payroll base, which further decreased the contribution rate by 0.26%. 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 an increase in the current year contribution rate of 0.08% for the County and 1.11% for San Rafael, and a decrease in the current year contribution rate of 0.31% for Novato.

Changes in UAL

The Unfunded Actuarial Liability (UAL) for MCERA decreased by \$644.1 million, from \$499.5 million to a surplus of \$144.6 million. Table I-5 on the next page presents the specific components of the change in the UAL.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

Table I-5				
Change in Unfunded Actuarial Liability				
(in millions)				
Experience	Total	County	Novato	San Rafael
1. Unfunded actuarial liability, 6/30/2020	\$ 499.5	\$ 316.3	\$ 35.0	\$ 148.2
2. Expected change in unfunded actuarial liability	(9.9)	(4.6)	(0.1)	(5.3)
3. Change due to unexpected contributions	(3.8)	(3.9)	0.1	0.0
4. Change due to investment gain	(620.7)	(461.0)	(43.5)	(116.3)
5. Change due to demographic (gains) / losses	(2.6)	(2.4)	(2.8)	2.7
6. Change due to salary (gains) / losses	(7.1)	(4.4)	(0.3)	(2.3)
7. Total change in unfunded actuarial liability	\$ (644.1)	\$ (476.3)	\$ (46.6)	\$ (121.2)
8. Unfunded actuarial liability, 6/30/2021	\$ (144.6)	\$ (160.0)	\$ (11.6)	\$ 27.0

The dollar amount of contributions was slightly higher than the actuarial cost for the prior year, which reduced the UAL by \$3.8 million (row 3).

The return on the assets was 32.0% during the 2020-21 plan year compared to last year's assumed rate of 6.75%, resulting in a decrease in the UAL of \$620.7 million (row 4).

Net salary gains in addition to other liability gains (rows 5 and 6 above) – including gains due to a greater number of deaths than expected – decreased the UAL by \$9.7 million.

All the above combined with the expected UAL reduction (\$9.9 million) from contributions produced an overall decrease of \$644.1 million in the UAL last year.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

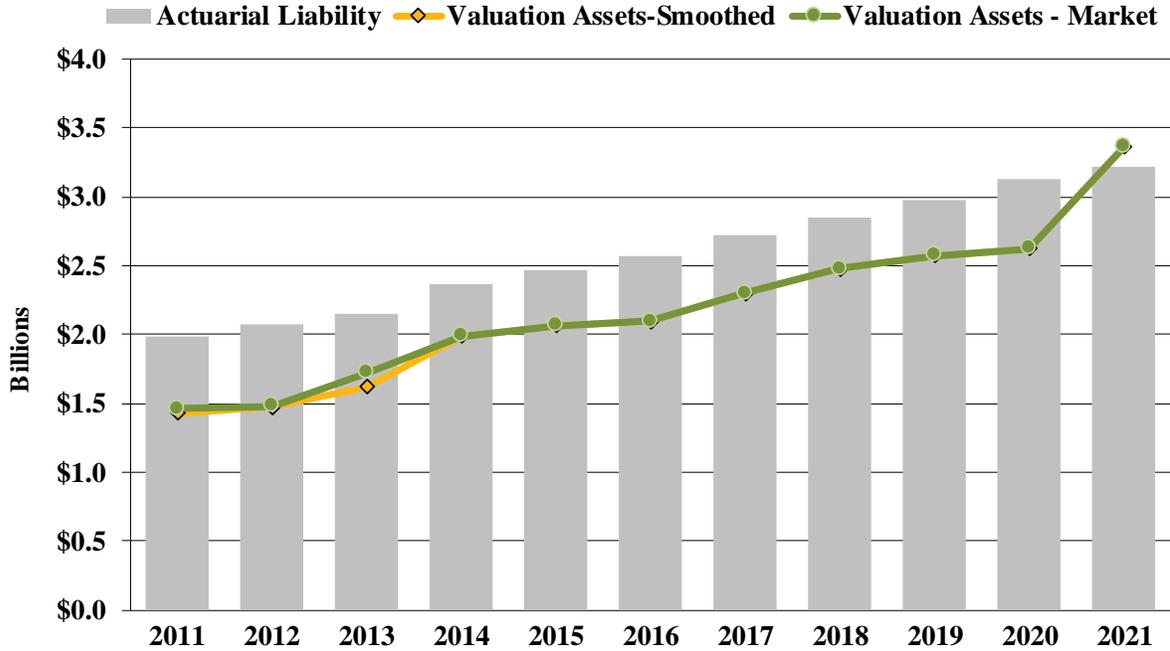
C. Historical Trends

For most retirement plans, the greatest attention is given to the current valuation results, but 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 Valuation Assets to the Actuarial Liability for the overall MCERA Plan. The percentage shown in the table below the graph is the ratio of the Valuation Assets to the Actuarial Liability (the funded ratio). The funded ratio is 104.5% as of June 30, 2021, more than 32% higher than the 72.1% funded ratio in 2011 and calculated under significantly more conservative assumptions.

Chart I-1: Assets and Actuarial Liabilities



Valuation Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Funded Ratio	72.1%	71.3%	75.1%	84.3%	83.7%	81.5%	84.4%	87.1%	86.6%	84.0%	104.5%
UAL (Billions)	\$ 0.55	\$ 0.59	\$ 0.54	\$ 0.37	\$ 0.40	\$ 0.48	\$ 0.42	\$ 0.37	\$ 0.40	\$ 0.50	\$ (0.14)

* Prior to 2014, Valuation Assets were smoothed

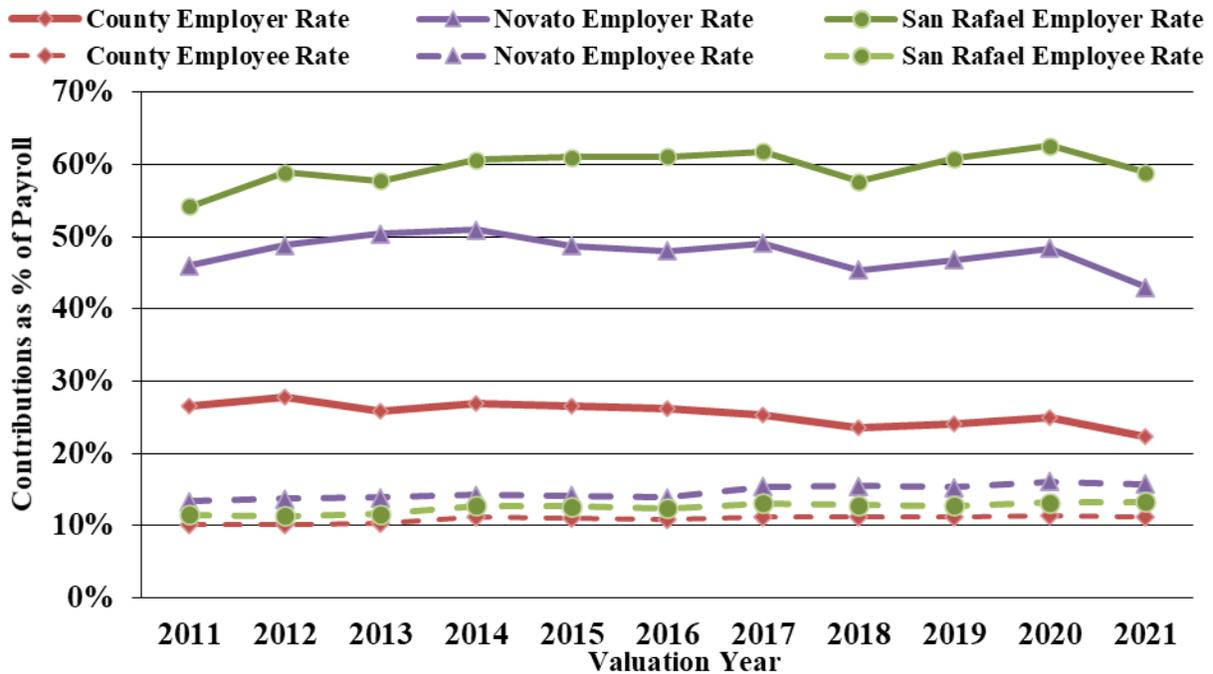
**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

Contribution Trends

Chart I-2 presents the historical trends for the MCERA contribution rates. The employer contribution rates rose steadily from 2008 through 2012, as the investment losses from 2008-2009 were recognized in the smoothed value of assets. Since then, employer contribution rates have remained relatively stable with overall decreases for the County and Novato and some additional increases for San Rafael, partially because of payroll increasing slower than expected. The average employee contribution rates have stayed relatively stable, increasing slightly as the Plan's economic and mortality assumptions have changed.

Chart I-2: Marin County Employees' Retirement Association



MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

SECTION I – EXECUTIVE SUMMARY

D. Future Expected Financial Trends

The analysis of projected financial trends is an important component of this valuation. In this section, we present projections based on the June 30, 2021 valuation results of contributions, assets, and liabilities. All the projections in this section are based on the current investment return assumption of 6.75%, future base salary increases of 3.00% per year, and total payroll growth of 2.75% per year.

The graphs on the following page show the expected employer contribution rates based on achieving the 6.75% assumption **each year** for the next 20 years. This scenario is highly unlikely: even if the Plan does achieve an **average** return of 6.75% over this 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 decrease over the next four years as this year's significant investment gains are recognized. Employer contribution rates for the County and Novato are then expected to remain stable at the level of the employer's share of the normal cost, though there is a moderate longer-term decline projected in the employer normal cost rates, primarily due to the PEPRA members becoming a larger proportion of the active member population over time. A significant reduction in San Rafael contribution rates is projected to occur with the 2030 actuarial valuation, once the bulk of the unfunded liability from the original amortization base established in 2013 has been paid down, and then remain stable at the level of the employer's share of the normal cost, similar to the County and Novato.

Finally, we do show an expected reduction in the employer contributions for Novato and San Rafael below the level of the normal cost at the very end of the projection period. Although currently under PEPRA the employers are required to make a minimum contribution equal to the normal cost, this requirement could be waived if the Plan reaches "super-funded" status (i.e., over 120% funded) and other conditions are met. If all assumptions are met, these groups are expected to have their funded status exceed 120% at the end of the projection period, and thus the employer contributions have been allowed to drop below the normal cost minimum.

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

SECTION I – EXECUTIVE SUMMARY

Chart I-3: Projection of Contributions, 6.75% Return Each Year – County of Marin

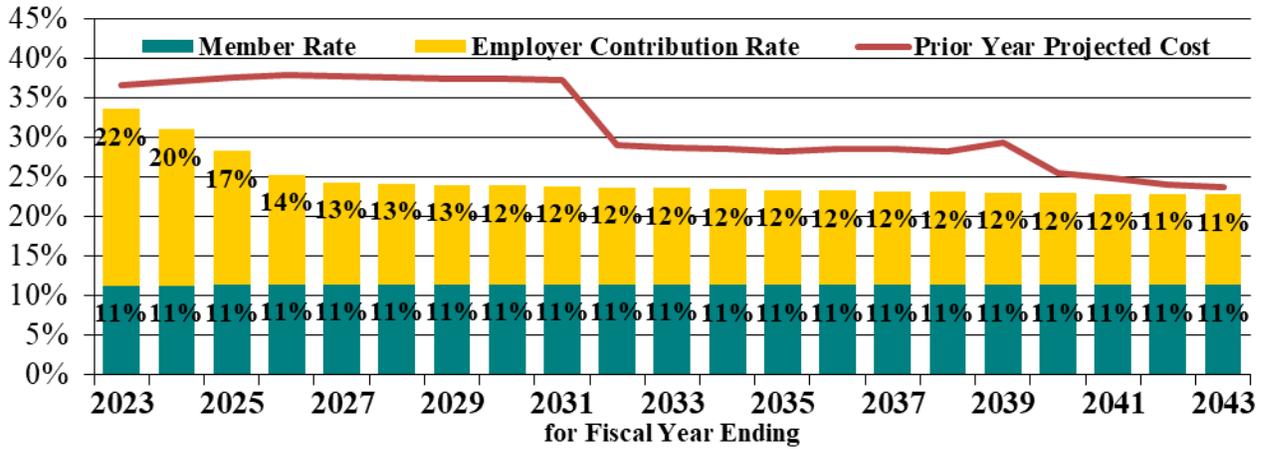


Chart I-4: Projection of Contributions, 6.75% Return Each Year – Novato FPD

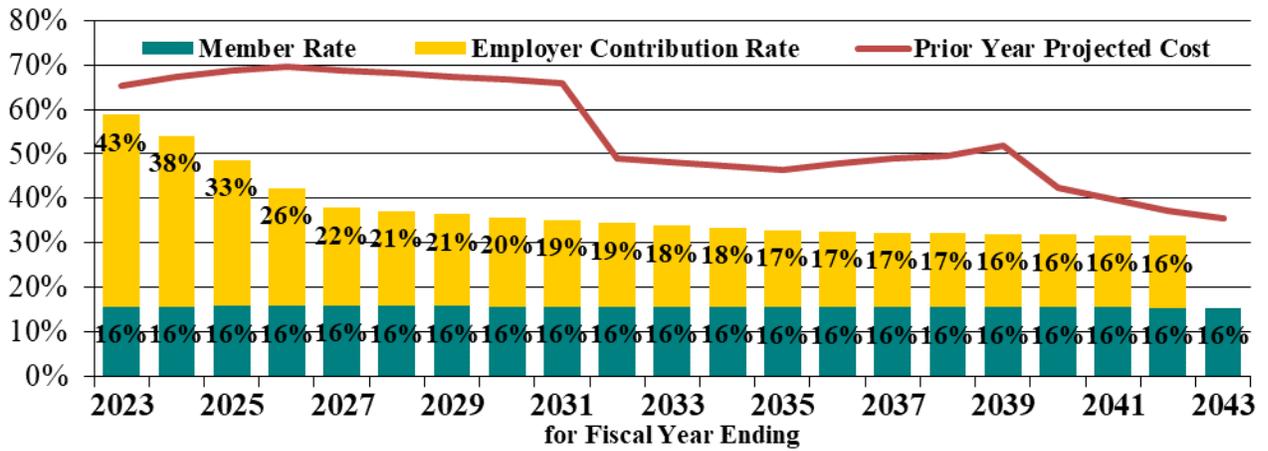
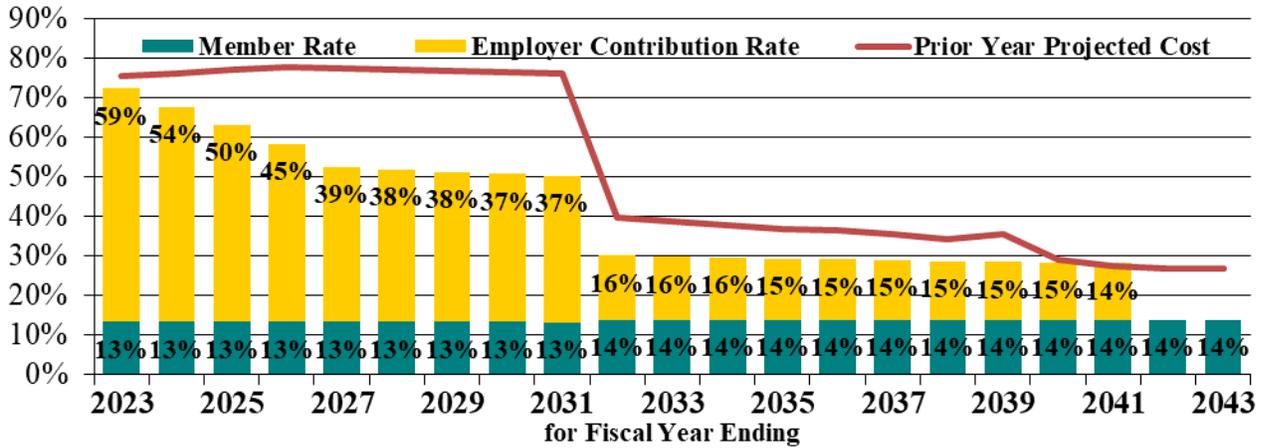


Chart I-5: Projection of Contributions, 6.75% Return Each Year – City of San Rafael



MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

SECTION I – EXECUTIVE SUMMARY

Asset and Liability Projections

The charts on the next page show the projection of assets and liabilities assuming assets will earn the 6.75% assumption each year during the projection period, and the actuarially determined contributions shown in the projections on the previous page are made. The percentages shown at the top of the charts are the ratios of the Valuation Assets to the Actuarial Liability (the funded ratios).

These charts show that the projected funded status is expected to continue increasing, assuming the actuarial assumptions are achieved, with San Rafael joining the County and Novato in achieving full funding within the next two to three years. The funded ratios are expected to continue climbing above 100%, based on the normal cost minimum contribution described earlier. However, it is the **actual** return on Plan assets that will determine the future funding status and contribution rate to the Plan.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION I – EXECUTIVE SUMMARY

Chart I-6: Projection of Assets and Liabilities, 6.75% Return – County of Marin

(\$ millions)

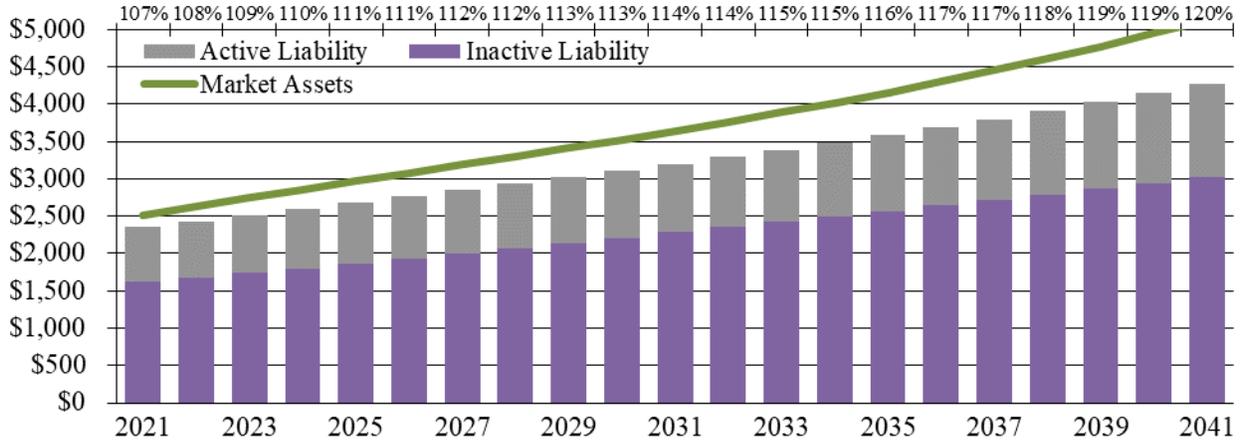


Chart I-7: Projection of Assets and Liabilities, 6.75% Return – Novato FPD

(\$ millions)

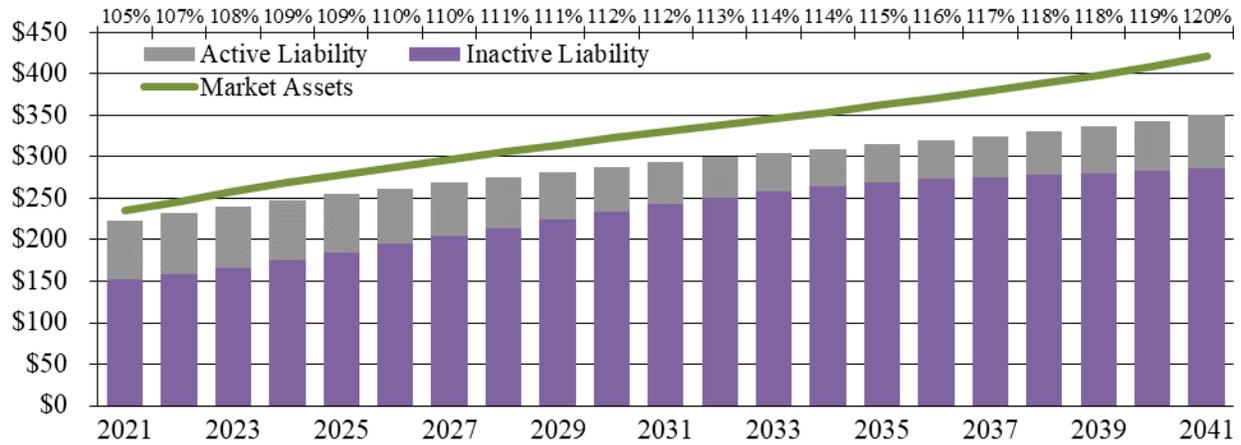
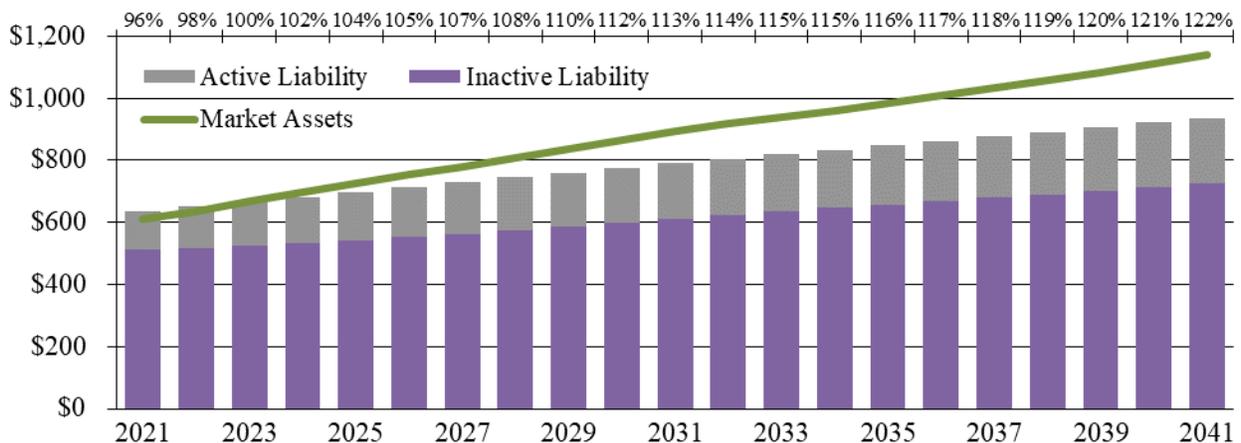


Chart I-8: Projection of Assets and Liabilities, 6.75% Return – City of San Rafael

(\$ millions)



SECTION II – RISK ANALYSIS

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may vary significantly.

Actuarial Standard of Practice No. 51 requires actuaries to identify and assess risks that “may reasonably be anticipated to significantly affect the plan’s future financial condition.” This section of the report identifies the primary risks to the Plan, provides some background information about those risks, and assesses those risks.

Identification of Risks

A fundamental risk to a pension plan is that the contributions needed to pay the benefits become unaffordable. While we believe, it is unlikely that the Plan by itself would become unaffordable, the contributions needed to support the Plan may differ significantly from expectations. While there are a number of factors that could lead to contribution amounts deviating from expectations, we believe the primary risks are:

- Investment risk,
- Assumption change risk, and
- Contribution risk.

Investment Risk is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability necessitating higher contributions in the future unless there are other gains that offset these investment losses. The potential volatility of future investment returns is determined by the Plan’s asset allocation and the affordability of the investment risk is determined by the amount of assets invested relative to the size of the plan sponsors or other contribution base.

Assumption change risk is the potential for the environment to change such that future valuation assumptions are different than the current assumptions. For example, declines in interest rates over the last three decades resulted in higher investment returns for fixed income investments, but lower expected future returns necessitating either a change in investment policy, a reduction in discount rate, or some combination of the two. Assumption change risk is an extension of the other risks identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in environment when the current assumption is no longer reasonable.

Contribution risk is the potential for actual future contributions to deviate from expected future contributions. There are different sources of contribution risk such as the contribution requirement becoming such a financial strain on the sponsor as a result of material changes in the contribution base (e.g., covered employees, covered payroll) that affect the amount of contributions the Plan can collect.

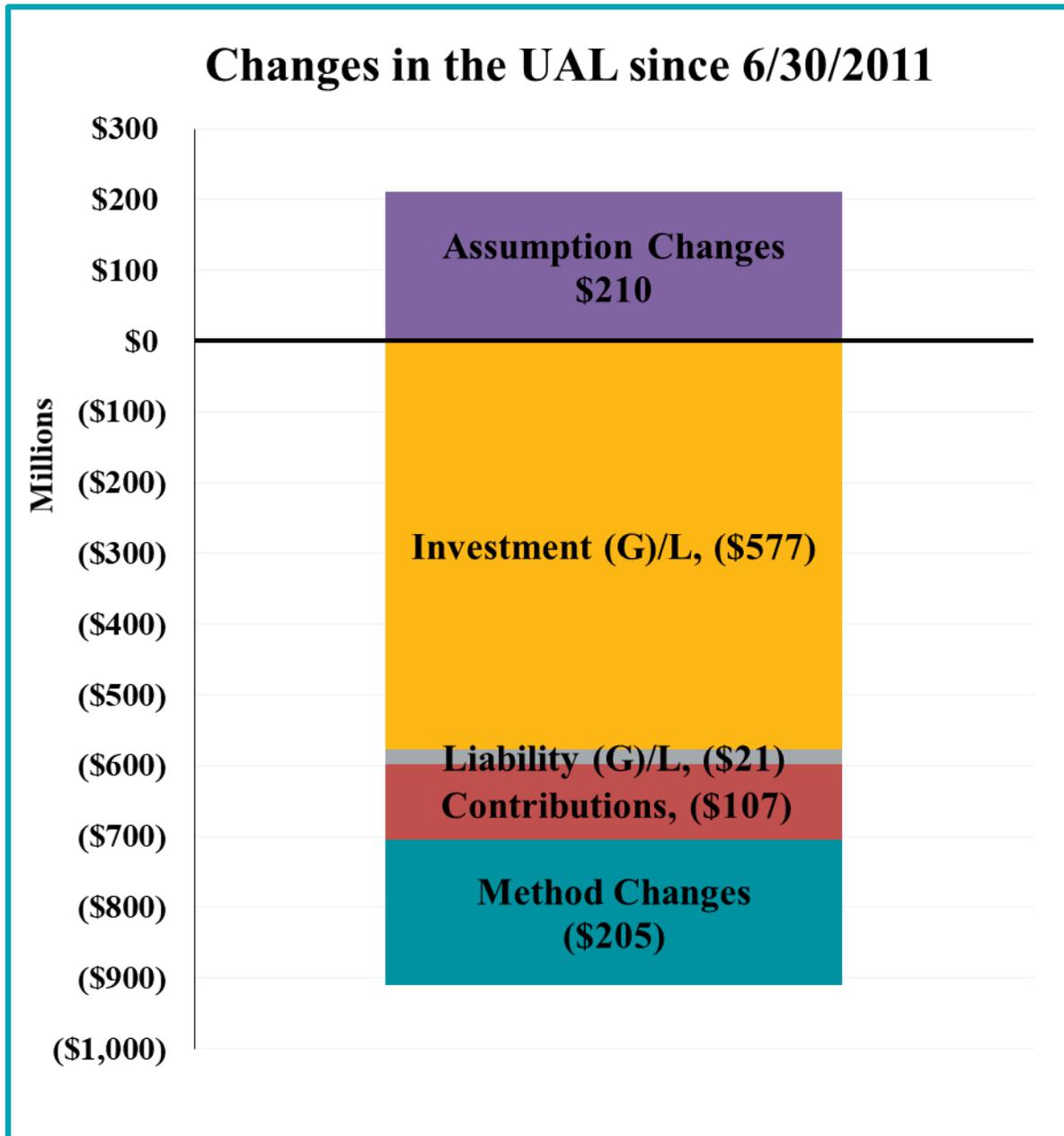
Other risks may also turn out to be important. In particular, unexpected changes in mortality rates and/or inflation may have an impact on the liabilities of the Plan. However, the scale of changes in liabilities from these factors is likely to be substantially less than changes which may result from changes in the investments or assumptions (in particular the assumed rate of return).

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

SECTION II – RISK ANALYSIS

The chart below shows the components contributing to the Unfunded Actuarial Liability (UAL) from June 30, 2011 through June 30, 2021. Over the last 10 years, the UAL has decreased by approximately \$700 million. The decrease is primarily due to investment gains (gold bar) of \$577 million. Method changes (teal bar) also decreased the UAL by about \$205 million, contributions in excess of the “tread water” level (red bar) reduced the UAL by \$107 million, and net liability gains (gray bar) further reduced the UAL by \$21 million. The assumption changes (purple bar) of \$210 million have increased the UAL since June 30, 2011.

Chart II-1

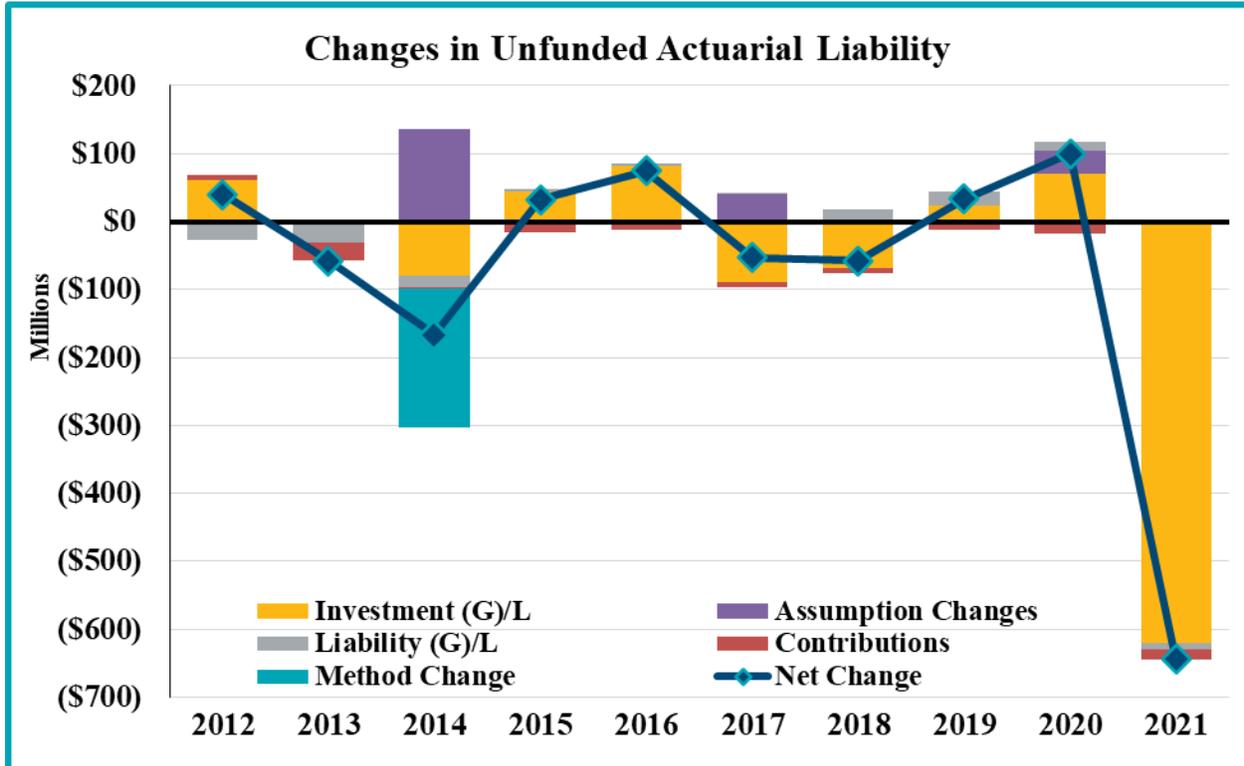


**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION II – RISK ANALYSIS

Chart II-2 below details the annual sources of the UAL change (colored bars) for the plan years ending June 30. The net UAL change for each year is represented by the blue diamonds.

Chart II-2



Effective with the June 30, 2014 valuation, the Board adopted a direct rate smoothing policy. As a result, the smoothed Actuarial Value of Assets was replaced with the Market Value of Assets for valuation purposes, and any unexpected change in the UAL is amortized over a closed period with ramp up and ramp down periods. A full description of these methods can be found in Appendix B. This change in funding policy materially reduced the UAL, as at the time there were significant deferred investment gains not yet reflected in the Actuarial Value of Assets. These deferred gains would have been recognized in subsequent years under the prior method.

On a valuation assets basis, there were losses on investments in 2012, 2015, 2016, 2019, and 2020 offset by gains in 2013, 2014, 2017, 2018, and 2021, resulting in overall UAL gains. Prior to 2014, the investment gains and losses were measured on a smoothed basis; since 2014 investment gains and losses have been measured based on the return on the Market Value of Assets. As noted above, the gain from the 2014 method change was a recognition of investment gains that had been deferred under the asset smoothing method. Adding those investment gains to the total net losses for the last 10 years produces an even larger overall UAL gain due to investment returns.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION II – RISK ANALYSIS

Over the same period, the assumed rate of return decreased from 7.50% to 6.75%. It is important to note that these changes simply reflect a downward revision to the estimate of future investment earnings and ultimately costs will be determined by actual investment earnings. Future expectations of investment returns may continue to decline necessitating further reductions in the discount rate.

The impact of all assumption changes is represented by the purple bars and includes decreases in mortality rates projected in the future which had a significant impact on the measurement of the UAL in 2014. Assumptions changed again in 2017 and 2020 as a result of experience studies.

Each year, the UAL is expected to increase for benefits earned in the current year (the normal cost), administrative expenses, and interest on the UAL. This expected increase is referred to as the tread water cost. If contributions are greater than the tread water cost, the UAL is expected to decrease. Conversely, if contributions are less than the tread water cost, the UAL is expected to increase. The amortization policy (as well as the contribution-timing lag) can impact whether or not the contributions exceed the tread water cost. For example, the Board changed the amortization policy in 2009 to amortize 50% of the extraordinary asset loss over a 30-year period and the remaining UAL over a 17-year period. Initially, the relatively long amortization period resulted in contributions being below the tread water cost.

However, the overall amortization period declined significantly over the past 10 years, and for the last nine years there have been payments made toward principal as well as interest on the current UAL.

Table II-1

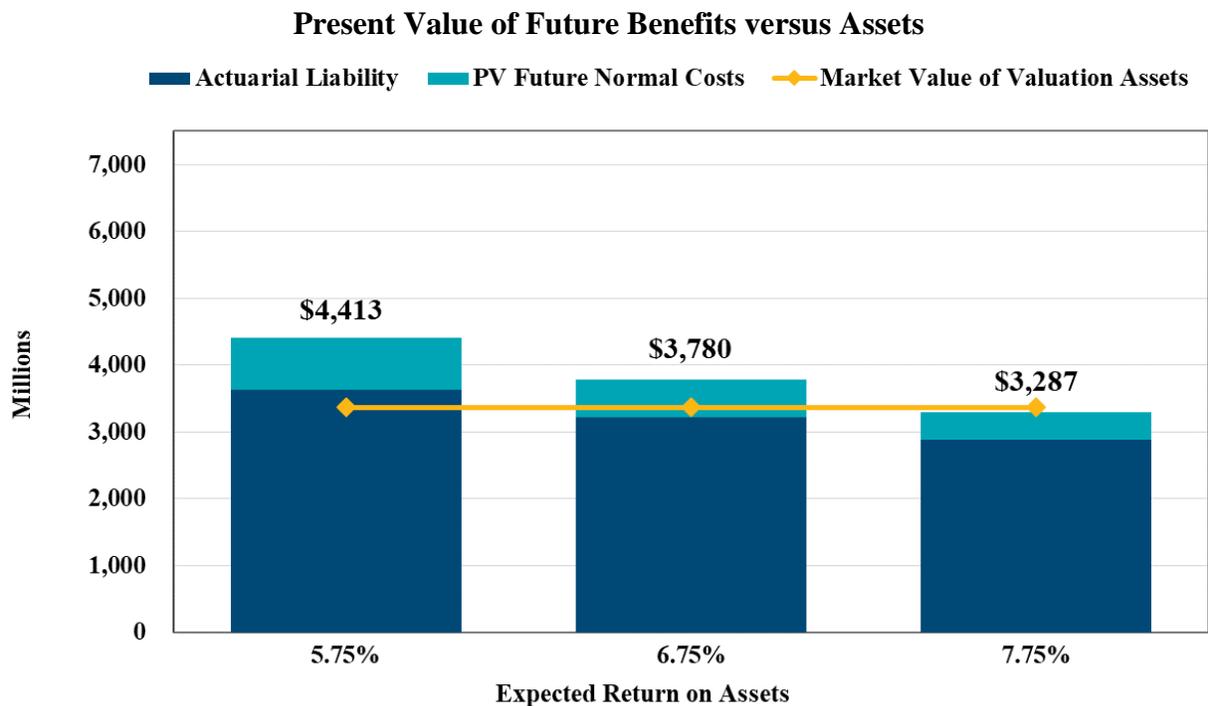
Unfunded Actuarial Liability (UAL) Change by Source						
(in thousands)						
June 30,	Investment	Liability	Assumption	Method	Contributions	Total UAL
Experience	Experience	Experience	Changes	Changes	Changes	Change
2012	60,319	(27,934)	0	0	7,741	40,126
2013	(1,645)	(29,202)	0	0	(27,253)	(58,100)
2014	(78,889)	(16,820)	135,957	(204,619)	(1,830)	(166,201)
2015	44,750	2,581	0	0	(15,152)	32,179
2016	82,195	3,639	0	0	(11,571)	74,263
2017	(88,225)	2,294	40,802	0	(8,217)	(53,346)
2018	(67,931)	18,644	0	0	(8,014)	(57,301)
2019	23,347	20,910	0	0	(11,287)	32,970
2020	69,812	14,150	33,674	0	(17,567)	100,069
2021	(620,708)	(9,681)	0	0	(13,707)	(644,096)
Total	(\$576,975)	(\$21,419)	\$210,433	(\$204,619)	(\$106,857)	(\$699,437)

SECTION II – RISK ANALYSIS

Assessing Costs and Risks

Sensitivity to Investment Returns

The chart below compares assets to the present value of all projected future benefits discounted at the current expected rate of return and at discount rates 100 basis points above and below the expected rate of return. The present value of future benefits is shown as a bar with the portion attributable to past service in dark blue (Actuarial Liability) and the portion attributable to future service in teal (Present Value of Future Normal Costs). The Market Value of Assets is shown by the gold line.



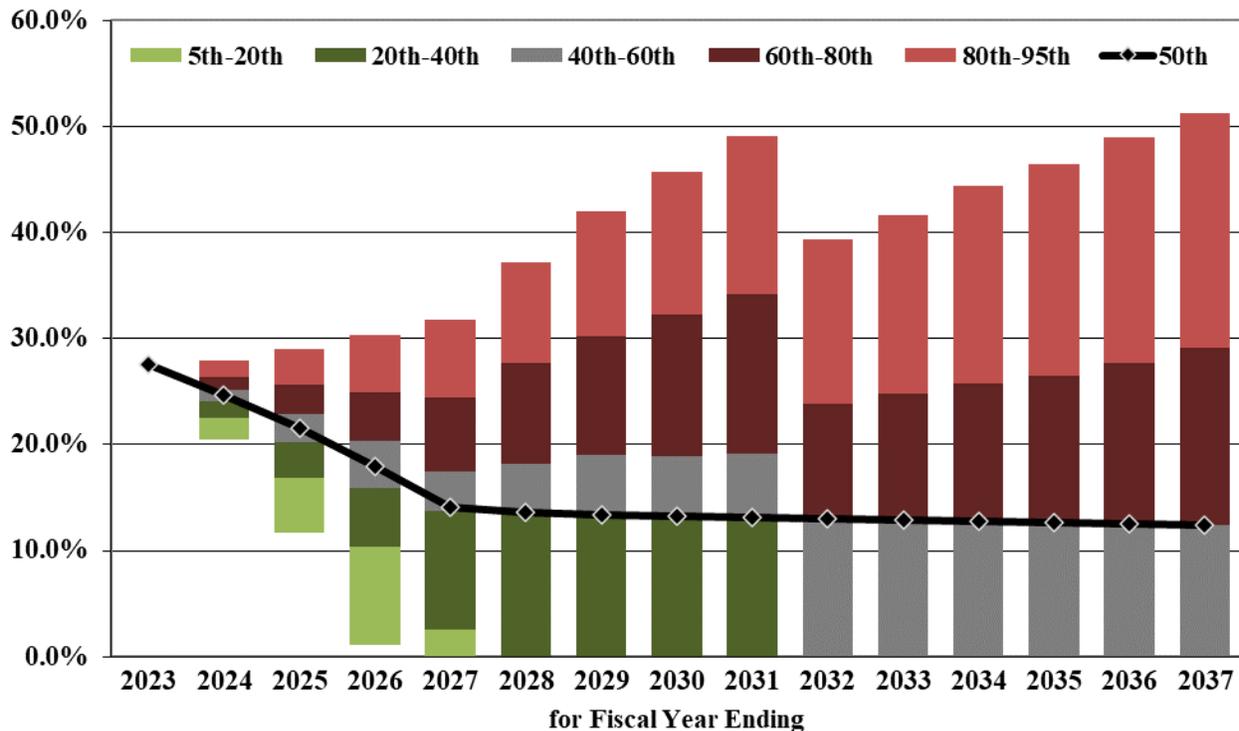
If investments return 6.75% annually, the Plan would need approximately \$3.8 billion in assets today to pay all projected benefits compared to current assets of \$3.4 billion. If investment returns are only 5.75%, the Plan would need approximately \$4.4 billion in assets today, and if investment returns are 7.75%, the Plan would need approximately \$3.3 billion in assets today.

SECTION II – RISK ANALYSIS

Sensitivity to Investment Returns – Stochastic Projections

Stochastic projections show the range of probable outcomes of various measurements. The graph below and on the following page show the projected range of the employer contribution rate (calculated for MCERA in aggregate) and of the funded ratio. The range in both scenarios is driven by the volatility of investment returns, using a 12.6% assumed standard deviation of annual returns (based on the average from various investment consultants reported in the most recent experience study). The stochastic projections of investment returns are based on an assumption that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods.

Stochastic Projection of Employer Contributions as a Percent of Pay

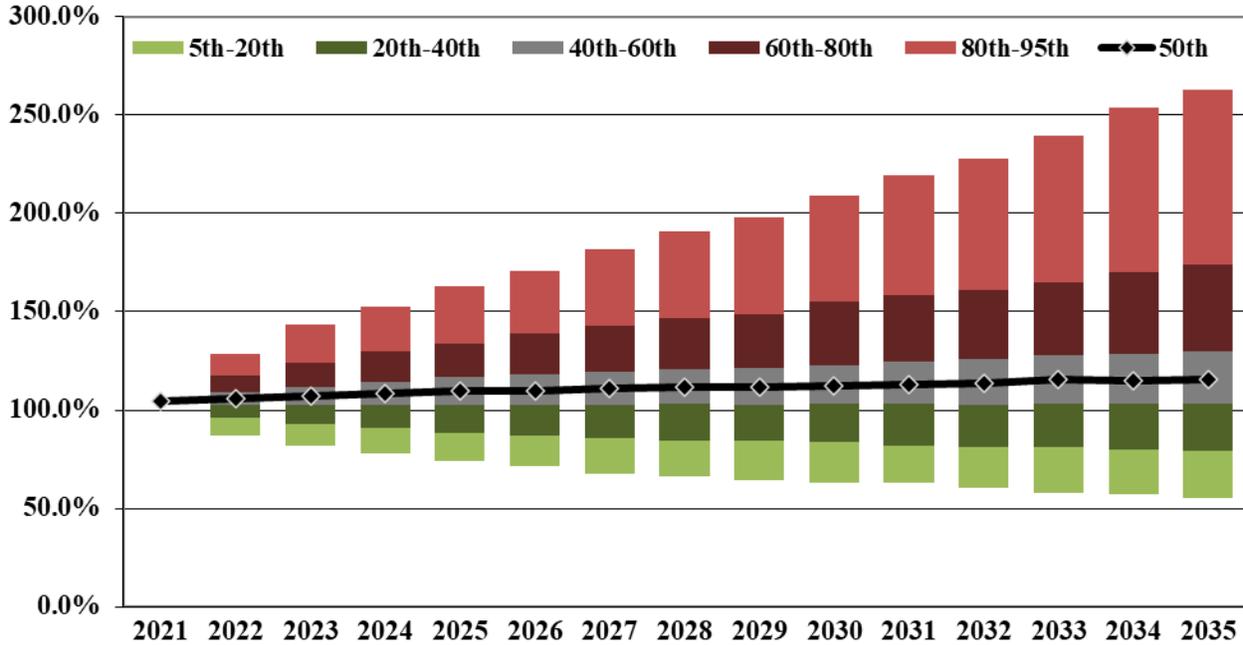


The stochastic projection of employer contributions as a percent of pay shows the probable range of future contribution rates. The baseline contribution rate (black line), which is based on the median of the simulations using an average return of 6.75%, aligns closely with the projections discussed in subsection D. of the Executive Summary of this report. In the most pessimistic scenario shown, the 95th percentile, the projected employer contribution rate nearly reaches 50% of pay in 2030. Conversely, the most optimistic scenario shown, the 5th percentile, the projected employer contribution rate declines to 0% beginning in 2026. We note that these projections allow the employer contribution to drop below the normal cost only if the Plan becomes extremely over-funded (above 120%), as required under PEPR.

SECTION II – RISK ANALYSIS

In addition, as noted above, these projected contributions are calculated as the average across all MCERA employers. The projected contribution rates for some of the individual employers – in particular for the City of San Rafael and for the individual Safety districts – will exhibit significantly more rate volatility due to their higher leverage ratios, as discussed later in this section.

Stochastic Projection of Funded Ratio on a Valuation Assets Basis



The graph above shows the projection of the MCERA funded ratio based on the Valuation Assets. While the baseline-funded ratio (black line) is projected to be more than 100% throughout the 15-year period, there is a wide range of potential outcomes. Good investment returns have the likelihood of bringing the funded ratio well over 100%. Due to the current funding policy of the Plan, even in scenarios with unfavorable investment returns, the Plan is projected to remain over 55% funded, as long as the actuarially determined contributions continue to be made.

Contribution Risk

While investment returns are typically the dominant factor in volatility, contribution rates can also be sensitive to future salary increases and the hiring of new members. When member payroll growth stagnates or even declines, the dollar level of contributions made to the Plan also stagnate or decline since contributions are based on payroll levels, though this will generally be updated with each valuation and only presents a funding issue if there is an extended period of payroll reductions.

SECTION II – RISK ANALYSIS

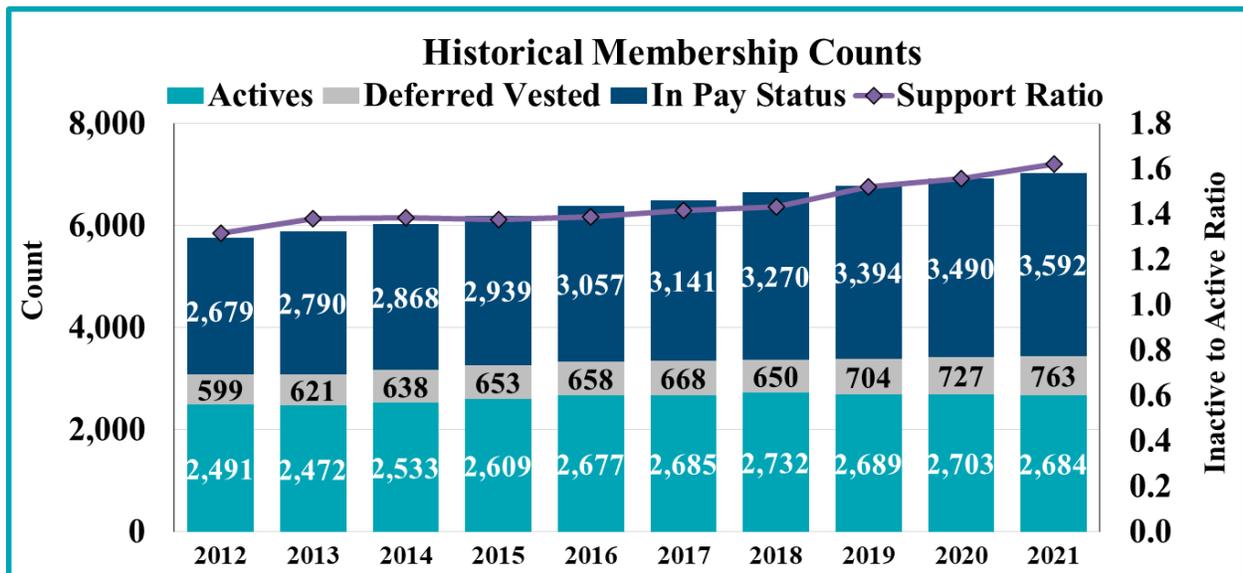
There is also a risk of the contribution rate increasing even higher when payroll decreases since the Plan's funding policy amortizes the UAL as a level percentage of pay. This means that the UAL payments increase at the assumed payroll growth rate of 2.75%, so that the payment is expected to remain constant as a percentage of payroll. If payroll growth is less than the expected 2.75% or there is a decline in payroll, the UAL payments are spread over a smaller payroll base and the contribution rate as a percentage of pay increases, making the Plan less affordable for those sponsors with declining payroll bases (such as was seen in the current valuation for San Rafael).

Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. As part of assessing each of these risks, it is important to understand the maturity of the Plan and how the maturity has changed over time. Plan maturity can be measured in a variety of ways, but they all get at one basic dynamic – the larger the plan is compared to the contribution or revenue base that supports it, the more sensitive the plan will be to risk. The measures below have been selected as the most important in understanding the primary risks identified for the Plan.

Inactives per Active (Support Ratio)

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits and those entitled to a deferred benefit) to the number of active members. The Support Ratio is expected to increase gradually as a plan matures. The chart below shows the growth in the Support Ratio from 2012 to 2021. The Support Ratio was approximately 1.23 in 2012. Over the past 10 years, the growth in retired membership has exceeded the growth in active membership, increasing the Support Ratio to approximately 1.6. That means for 2021, there are approximately 1.6 inactive members per active member.

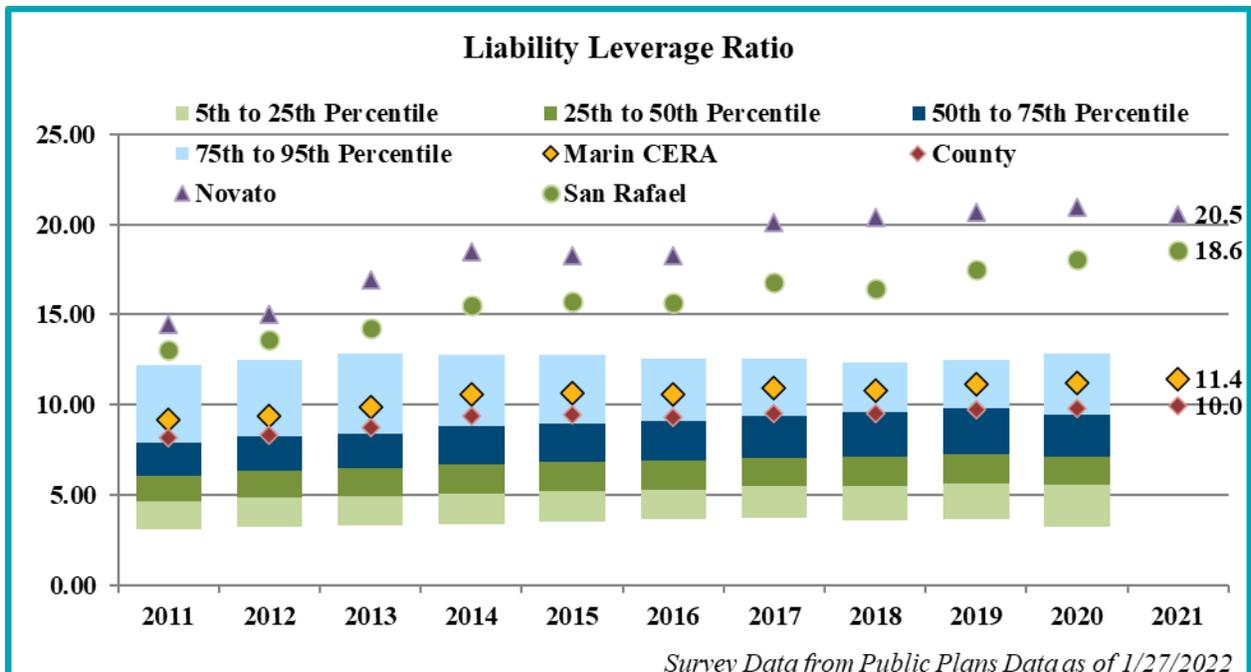
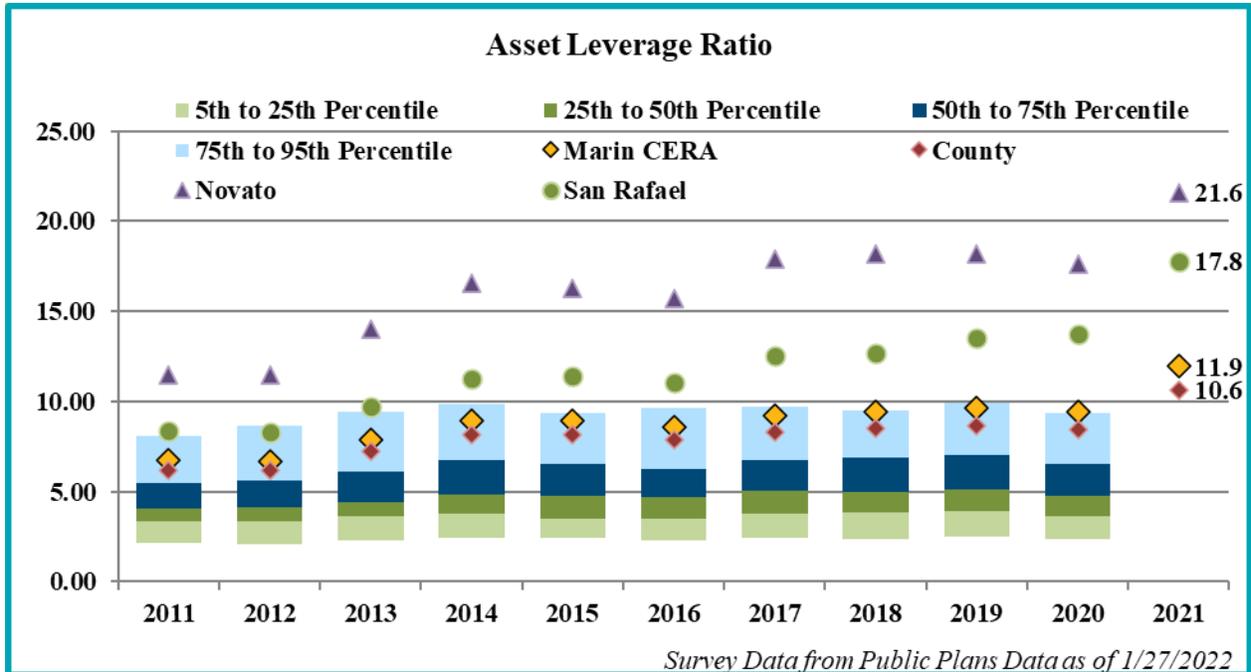


MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

SECTION II – RISK ANALYSIS

Leverage Ratios

Leverage or volatility ratios measure the size of the plan compared to its revenue base more directly. The asset leverage ratio is simply the Market Value of Valuation Assets divided by active member payroll and indicates the sensitivity of the Plan to investment returns. The liability leverage ratio is the plan's Actuarial Liability divided by active member payroll and indicates the sensitivity of the Plan to assumption changes or demographic experience.



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION II – RISK ANALYSIS

The charts on the previous page show the distribution from the 5th to 95th percentile of asset and liability leverage ratios for the plans in Public Plans Data. The gold diamond shows how MCERA compares while the red diamond, green circle and purple triangle show how the County, Novato and San Rafael compare respectively.

For MCERA, the asset leverage ratio has been among the highest compared to the approximately 200 plans tracked by Public Plans Data and with the exceptional investment returns has grown to nearly 12 times payroll. We note that while assets are currently over 10 times payroll for the County, the ratio is nearly 18 for San Rafael, and nearly 22 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 3.25% of their value in a year. Since assets were assumed to earn 6.75%, there is an actuarial loss of 10% of plan assets. Based on the current ratio of assets to payroll (10.6) for the County, that means the loss in assets is about 106% of active County payroll (10.6 times the 10% loss).

There is only one source of funding to make up for this loss: contributions. Consequently, barring future offsetting investment gains, the County and special district employers would have to make up the asset loss in future contributions. In this example of a one-year loss of 10.0%, this shortfall will eventually require an average additional amortization payment of approximately 8.3% of payroll once fully phased-in under the Plan's current amortization policy.

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, and more mature populations. A 10.0% loss for San Rafael would currently translate to a loss of 178% of pay, which would require an eventual 13.9% of pay amortization payment. The same loss for Novato would translate to a loss of 216% of pay, requiring a 16.9% of pay payment once phased-in.

More Detailed Assessment

While a more detailed assessment is always valuable to enhance the understanding of the risks identified above, we believe the scenarios illustrated cover the primary risks facing the Plan at this time. We would be happy to provide the Board with a more in-depth analysis at their request.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION III – 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, 2020 and June 30, 2021,
- 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 Actuarial Value of Assets is equal to the Market 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.

The Valuation Assets are equal to the market/actuarial value, minus any non-valuation reserves that are to be excluded from the calculation of the Unfunded Actuarial Liability. For MCERA, the only non-valuation reserves are the Statutory Contingency Reserves, which are established and maintained in accordance with Government Code section 31592.2 and the Plan's Interest Crediting Policy.

Table III-1 on the next page discloses asset value as of June 30, 2020 and June 30, 2021.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION III – ASSETS

Table III-1		
Statement of Assets at Market Value		
Assets:	June 30, 2020	June 30, 2021
Cash and Cash Equivalents	\$ 81,155,193	\$ 106,826,520
Collateral held for Securities Loaned	<u>38,566,008</u>	<u>35,601,032</u>
Total Cash and Short Term Investments	119,721,201	142,427,552
Receivables:		
Contributions	4,286,708	5,281,118
Interest and Dividends	2,996,029	3,091,284
Due from Brokers for Securities Sold	5,925,680	7,818,052
Other Receivables	<u>1,151,365</u>	<u>2,243,007</u>
Total Receivables	14,359,782	18,433,461
Investments, at Fair Value:		
Domestic Fixed Income	494,927,212	494,083,206
International Fixed Income	59,844,678	70,297,645
Domestic Equities	729,940,946	1,067,027,753
International Equities	558,370,697	727,552,625
Private Equity	301,423,512	444,009,053
Opportunistic	0	29,941,119
Real Estate	271,490,961	294,538,314
Real Assets	<u>122,868,800</u>	<u>161,494,512</u>
Total Investments	2,538,866,806	3,288,944,227
Other Assets:		
Capital Assets	6,117,956	7,083,908
Prepaid Insurance	<u>80,466</u>	<u>177,276</u>
Total Assets	2,679,146,211	3,457,066,424
Liabilities:		
Accounts Payable and Accrued Expenses	1,438,717	649,350
Due to Brokers for Securities Purchased	13,814,596	25,295,755
Retiree Payroll Payable	12,025	0
Obligations Under Securities Lending Program	<u>38,566,008</u>	<u>35,601,033</u>
Total Liabilities	53,831,346	61,546,138
Net Assets Held in Trust for Pension Benefits	\$ 2,625,314,865	\$ 3,395,520,286
Statutory Contingency Reserve (County)	0	25,245,694
Statutory Contingency Reserve (Novato)	0	2,393,842
Statutory Contingency Reserve (San Rafael)	<u>0</u>	<u>6,315,668</u>
Total Non-Valuation Reserves	0	33,955,203
Market Value of Valuation Assets	\$ 2,625,314,865	\$ 3,361,565,083

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION III – 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 III-2 below shows the components of changes in the Market Value of Assets during the fiscal years ending June 30, 2020 and June 30, 2021.

Table III-2 Changes in Market Values		
<u>Additions</u>	Fiscal Year ending <u>June 30, 2020</u>	Fiscal Year ending <u>June 30, 2021</u>
Contributions		
Employers' Contributions	\$ 75,643,075	\$ 80,359,731
Members' Contributions	<u>30,913,997</u>	<u>32,019,007</u>
Total Contributions	106,557,072	112,378,738
Investment Income		
Net Appreciation/(Depreciation) in Fair Value of Investments	56,097,629	804,922,444
Interest and Dividends	30,734,770	28,817,679
Real Estate Operating Income, net	13,773,602	7,966,024
Other Investment Income	<u>797,259</u>	<u>2,005,283</u>
Total Investment Income/(Loss)	101,403,260	843,711,430
Investment Expenses	<u>(12,341,144)</u>	<u>(13,967,090)</u>
Net Investment Income/(Loss)	89,062,116	829,744,340
Securities Lending Activities		
Net Securities Lending Income/(Loss)	211,380	145,984
Total Investment Income/(Loss)	89,273,496	829,890,324
Total Additions/(Declines)	<u>\$ 195,830,568</u>	<u>\$ 942,269,062</u>

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION III – ASSETS

**Table III-2
Changes in Market Values (Continued)**

<u>Deductions</u>	<u>Fiscal Year ending June 30, 2020</u>	<u>Fiscal Year ending June 30, 2021</u>
Benefit payments	157,185,816	166,139,520
Refunds of Members' Contributions	1,107,711	1,540,282
Administrative Costs	3,731,976	3,572,267
Legal Costs & Litigation Settlement	384,080	341,721
Computer Expenses	339,025	279,871
Actuarial Expenses	<u>152,679</u>	<u>189,980</u>
Total Deductions	162,901,287	172,063,641
Net increase (Decrease)	32,929,281	770,205,421
Net Assets Held in Trust for Pension Benefits		
Beginning of Year	2,592,385,584	2,625,314,865
End of Year	2,625,314,865	3,395,520,286
Approximate Return (Net of Investment Expenses)*	3.48%	32.0%

**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, 2021**

SECTION III – ASSETS

Historical Investment Performance

Table III-3 shows the historical annual asset returns on a market value basis, as well as the increase in the Consumer Price Index (CPI) since 2007.

Table III-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*
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%
2017	11.9%	3.5%
2018	9.7%	3.9%
2019	5.5%	3.2%
2020	3.5%	1.6%
2021	32.0%	3.2%
10-Year Compound Average	10.0%	2.9%
5-Year Compound Average	12.1%	3.1%

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

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION III – ASSETS

Asset Allocation by Valuation Subgroup

Table III-4 on the next page shows the allocation of the Valuation Assets between the employers and their valuation subgroups (Miscellaneous vs. Safety). These allocations 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 employer's active members. Prior to the current valuation, the asset allocations for employer subgroup within the County group (the only group with multiple employers) were based on a roll-forward of each subgroup's asset balances from the prior year, adjusted for employee and employer contributions. The assets assigned to the active members of each employer subgroup were then limited to the size of the active liabilities for that group.

Now that the County group as a whole has reached full funding – i.e., the valuation assets exceed the liabilities for all members of the group – a change in the allocation method is needed (since previously the assets were limited to the level of the liabilities). Beginning with the current valuation, the assets for each employer subgroup will be allocated such that all employers within that group (County / Novato / San Rafael) have the same funding ratio.

This methodology simplifies the allocation of the Net Pension Liability across the employer subgroups within the financial statements. It also preserves the concept that those employers with higher leverage ratios will be more impacted by changes in assets and liabilities with respect to their contribution rates. Finally, it should reduce the volatility in contribution rates compared to the prior methodology for some of the smaller employers when they would experience one or more retirements among their senior workforce.

The top portion of the table shows the allocation of assets for each employer and that employer's funded ratio. The bottom portion of the table shows the total asset allocation for each of the three main groups and the funded ratio for the group.

We note that with the change in the asset allocation described above, the funded ratios for all subgroups are now equal to the funded ratio for the group.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION III – ASSETS

Table III-4 Valuation Assets and Funding Ratios					
Plan	Group	Assets 2020	Ratios 2020	Assets 2021	Ratios 2021
County	County Misc	\$ 1,208,586,226	86.8%	\$ 1,523,808,169	106.8%
	County Safety	575,270,715	85.7%	743,544,442	106.8%
	Courts	71,813,016	86.1%	92,800,437	106.8%
	South Marin Fire Misc	2,008,704	91.2%	2,522,163	106.8%
	South Marin Fire Safety	75,728,381	81.3%	104,577,057	106.8%
	Mosquito District	23,444,437	75.3%	35,294,586	106.8%
	LAFCO	1,146,618	100.0%	1,286,868	106.8%
	Tamalpais CSD	9,535,717	95.9%	11,209,080	106.8%
	Marin City CSD	816,678	100.0%	1,016,447	106.8%
Novato	Novato Misc	5,920,840	84.0%	7,675,556	105.2%
	Novato Safety	177,948,019	84.0%	227,588,832	105.2%
San Rafael	San Rafael Misc	172,269,128	73.1%	231,537,822	95.8%
	San Rafael Safety	300,826,385	78.0%	378,703,627	95.8%

Market Value of Valuation Assets and Funding Ratios - Total					
County		\$ 1,968,350,491	86.2%	\$ 2,516,059,248	106.8%
Novato		183,868,859	84.0%	235,264,389	105.2%
San Rafael		473,095,513	76.2%	610,241,449	95.8%

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

SECTION IV – 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 IV-1 on the next page shows the present value of future benefits and Table IV-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 groups.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION IV – LIABILITIES

Table IV-1				
Present Value of Benefits - Active Members Only				
Plan	Group	2020	2021	
County	County Misc Tier 1	\$ 1,826,827	\$ 1,834,273	
	County Misc Tier 2	15,733,317	15,592,095	
	County Misc Tier 3	419,537,524	395,134,067	
	County Misc Tier 3A	35,067,260	36,926,727	
	County Misc Tier 4	44,353,314	47,315,400	
	County Misc Tier 5 (PEPRA)	184,348,983	211,650,086	
	County Safety Tier 1A	3,021,508	3,008,386	
	County Safety Tier 2A	41,808,357	40,447,178	
	County Safety Tier 2B	233,531,027	219,532,878	
	County Safety Tier 3 (PEPRA)	68,159,813	80,639,498	
	Courts Tier 1	1,384,976	0	
	Courts Tier 2	360,258	384,342	
	Courts Tier 3	30,228,572	28,699,691	
	Courts Tier 4	1,009,883	1,128,283	
	Courts Tier 5 (PEPRA)	5,777,640	8,169,917	
	South Marin Fire Misc Tier 1	0	0	
	South Marin Fire Misc Tier 2 (PEPRA)	1,448,702	1,574,421	
	South Marin Fire Safety Tier 1	21,740,352	19,008,068	
	South Marin Fire Safety Tier 2	22,786,087	22,295,057	
	South Marin Fire Safety Tier 2A	4,654,691	5,829,324	
	South Marin Fire Safety Tier 3A (PEPRA)	6,381,157	9,076,872	
	Mosquito District Tier 1	19,485,154	19,616,209	
	Mosquito District Tier 2 (PEPRA)	1,456,697	2,182,331	
	LAFCO Tier 3	0	0	
	LAFCO Tier 4 (PEPRA)	422,279	603,555	
	Tamalpais CSD Tier 1	3,532,986	2,338,467	
	Tamalpais CSD Tier 2 (PEPRA)	1,500,632	1,568,140	
	Marin City CSD Tier 1	183,525	187,045	
	Marin City CSD Tier 2 (PEPRA)	591,948	981,846	
	Novato	Novato Misc Tier 1	4,493,462	4,904,197
		Novato Misc Tier 2A (PEPRA)	1,027,599	1,016,871
		Novato Safety Tier 1	73,805,816	74,302,833
Novato Safety Tier 2		8,625,107	8,785,485	
Novato Safety Tier 3 (PEPRA)		4,083,629	4,404,544	
Novato Safety Tier 3A (PEPRA)		5,283,361	7,655,718	
San Rafael	San Rafael Misc Tier 1	60,852,345	52,560,285	
	San Rafael Misc Tier 2	5,625,362	5,377,921	
	San Rafael Misc Tier 3 (PEPRA)	17,917,414	19,936,955	
	San Rafael Fire Tier 1	48,755,304	45,103,954	
	San Rafael Police Tier 1	44,910,073	43,158,635	
	San Rafael Fire Tier 2	11,597,043	12,286,196	
	San Rafael Police Tier 2	4,329,850	4,314,183	
	San Rafael Safety Tier 3 (PEPRA)	25,279,874	33,843,453	
Total Present Value of Benefits - Active and Inactive Members				
County		\$ 2,717,389,068	\$ 2,798,759,331	
Novato		247,533,860	252,962,323	
San Rafael		709,547,193	728,376,447	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION IV – LIABILITIES

Table IV-2				
Actuarial Liabilities - Active Members Only				
Plan	Group	2020	2021	
County	County Misc Tier 1	\$ 1,712,610	\$ 1,722,157	
	County Misc Tier 2	14,133,565	14,125,107	
	County Misc Tier 3	338,573,061	323,322,807	
	County Misc Tier 3A	20,919,856	23,354,109	
	County Misc Tier 4	18,789,861	21,535,908	
	County Misc Tier 5 (PEPRA)	51,237,485	65,573,544	
	County Safety Tier 1A	3,021,508	3,008,386	
	County Safety Tier 2A	28,653,077	26,500,333	
	County Safety Tier 2B	167,115,371	159,416,624	
	County Safety Tier 3 (PEPRA)	14,573,338	18,147,796	
	Courts Tier 1	1,333,204	0	
	Courts Tier 2	291,326	318,898	
	Courts Tier 3	24,316,354	23,512,171	
	Courts Tier 4	364,236	476,845	
	Courts Tier 5 (PEPRA)	1,348,725	1,970,909	
	South Marin Fire Misc Tier 1	0	0	
	South Marin Fire Misc Tier 2 (PEPRA)	499,931	395,336	
	South Marin Fire Safety Tier 1	18,205,540	16,061,557	
	South Marin Fire Safety Tier 2	12,071,908	12,582,761	
	South Marin Fire Safety Tier 2A	944,011	1,292,103	
	South Marin Fire Safety Tier 3A (PEPRA)	1,604,542	2,049,309	
	Mosquito District Tier 1	14,823,077	15,204,934	
	Mosquito District Tier 2 (PEPRA)	308,051	467,336	
	LAFCO Tier 3	0	0	
	LAFCO Tier 4 (PEPRA)	42,720	96,999	
	Tamalpais CSD Tier 1	2,338,945	1,276,676	
	Tamalpais CSD Tier 2 (PEPRA)	337,085	463,516	
	Marin City CSD Tier 1	0	0	
	Marin City CSD Tier 2 (PEPRA)	49,357	157,987	
	Novato	Novato Misc Tier 1	3,387,168	3,667,765
		Novato Misc Tier 2A (PEPRA)	225,905	311,248
		Novato Safety Tier 1	59,553,462	61,425,151
Novato Safety Tier 2		3,630,292	3,846,916	
Novato Safety Tier 3 (PEPRA)		1,338,151	1,637,547	
Novato Safety Tier 3A (PEPRA)		512,744	848,869	
San Rafael	San Rafael Misc Tier 1	47,743,033	41,794,061	
	San Rafael Misc Tier 2	2,097,429	2,188,680	
	San Rafael Misc Tier 3 (PEPRA)	4,150,901	5,566,712	
	San Rafael Fire Tier 1	33,093,868	30,963,197	
	San Rafael Police Tier 1	33,538,067	32,736,953	
	San Rafael Fire Tier 2	4,176,376	4,908,604	
	San Rafael Police Tier 2	1,524,364	1,158,152	
	San Rafael Safety Tier 3 (PEPRA)	4,661,907	6,136,657	

Total Actuarial Liabilities - Active and Inactive Members		
County	\$ 2,284,664,343	\$ 2,356,069,283
Novato	218,862,608	223,630,171
San Rafael	621,265,873	637,247,881

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – 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 Valuation 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 (17 years remaining as of the current valuation, reduced from 18 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 (9 years as of June 30, 2021), 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 and four year phase-out (three/two years for assumption changes) of the payments/credits for each annual layer.

Administrative expenses are assumed to be \$5.1 million per year as of June 30, 2021, increasing at 2.75% 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, 2021**

SECTION V – CONTRIBUTIONS

Table V-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 V-1						
Development of the Net Employer Contribution Rates as of June 30, 2021 for FYE 2023						
	June 30, 2020			June 30, 2021		
	County	Novato	San Rafael	County	Novato	San Rafael
1. Total Normal Cost Rate	23.40%	37.98%	28.66%	23.26%	37.99%	28.88%
2. Member Contribution Rate	<u>10.95%</u>	<u>15.38%</u>	<u>12.62%</u>	<u>10.75%</u>	<u>15.06%</u>	<u>12.72%</u>
3. Employer Normal Cost Rate (1-2)	12.45%	22.60%	16.04%	12.51%	22.93%	16.16%
4. UAL Amortization	11.48%	23.69%	43.86%	8.76%	18.01%	39.91%
5. Administrative Expense Rate	<u>1.06%</u>	<u>2.06%</u>	<u>2.67%</u>	<u>1.08%</u>	<u>2.07%</u>	<u>2.84%</u>
6. Final Employer Contribution Rate (3+4+5)	24.99%	48.35%	62.57%	22.35%	43.01%	58.91%

Tables V-2 through V-5 on the following pages present the calculations of the UAL payments for this valuation for the main Plan groups.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

**Table V-2
Development of Amortization Payment - MCERA
For the June 30, 2021 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2021 Outstanding Balance	Remaining Amortization Years	Length of Phase In/Out	Current Phase In/Out Percentage	Amortization Amount
Charges / (Credits)								
1. 2009 Extraordinary Loss	6/30/2009	\$ 196,004,629	30	\$ 204,374,228	17	N/A	100%	\$ 16,568,187
2. Initial UAL	6/30/2013	329,672,983	17	255,242,990	9	N/A	100%	33,972,704
3. (Gain)/Loss Base	6/30/2014	(300,327,139)	24	(325,171,681)	17	5	100%	(28,922,250)
4. Assumption Changes	6/30/2014	135,956,758	22	134,717,112	15	3	100%	12,602,377
5. (Gain)/Loss Base	6/30/2015	47,331,467	24	52,101,813	18	5	100%	4,419,323
6. (Gain)/Loss Base	6/30/2016	87,717,930	24	97,770,030	19	5	100%	7,938,682
7. (Gain)/Loss Base	6/30/2017	(83,984,113)	24	(94,437,106)	20	5	100%	(7,365,216)
8. Assumption Changes	6/30/2017	40,801,680	22	42,504,970	18	3	100%	3,447,622
9. (Gain)/Loss Base	6/30/2018	(47,270,380)	24	(52,791,217)	21	5	80%	(3,219,987)
10. Audit Changes	6/30/2018	2,264,341	24	2,528,800	21	5	80%	154,243
11. (Gain)/Loss Base	6/30/2019	46,353,517	24	50,604,819	22	5	60%	2,299,323
12. (Gain)/Loss Base	6/30/2020	80,741,784	24	84,888,410	23	5	40%	2,592,510
13. Assumption Changes	6/30/2020	33,674,497	22	35,074,594	21	3	67%	1,736,233
14. (Gain)/Loss Base	6/30/2021	(632,025,512)	24	(632,025,512)	24	5	20%	(9,875,178)
Total (MCERA)				\$ (144,617,750)				\$ 36,348,575

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

**Table V-3
Development of Amortization Payment - County
For the June 30, 2021 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2021 Outstanding Balance	Remaining Amortization Years	Length of Phase In/Out	Current Phase In/Out Percentage	Amortization Amount
Charges / (Credits)								
1. 2009 Extraordinary Loss	6/30/2009	\$ 146,241,604	30	\$ 152,486,272	17	N/A	100%	\$ 12,361,740
2. Initial UAL	6/30/2013	188,358,828	17	145,833,212	9	N/A	100%	19,410,322
3. (Gain)/Loss Base	6/30/2014	(223,502,748)	24	(241,991,997)	17	5	100%	(21,523,870)
4. Assumption Changes	6/30/2014	99,117,401	22	98,213,654	15	3	100%	9,187,589
5. (Gain)/Loss Base	6/30/2015	36,267,023	24	39,922,229	18	5	100%	3,386,240
6. (Gain)/Loss Base	6/30/2016	62,321,452	24	69,463,224	19	5	100%	5,640,240
7. (Gain)/Loss Base	6/30/2017	(56,402,352)	24	(63,422,410)	20	5	100%	(4,946,358)
8. Assumption Changes	6/30/2017	27,391,858	22	28,535,347	18	3	100%	2,314,531
9. (Gain)/Loss Base	6/30/2018	(45,161,446)	24	(50,435,975)	21	5	80%	(3,076,329)
10. Audit Changes	6/30/2018	1,870,282	24	2,088,717	21	5	80%	127,401
11. (Gain)/Loss Base	6/30/2019	34,582,319	24	37,754,029	22	5	60%	1,715,424
12. (Gain)/Loss Base	6/30/2020	54,612,033	24	57,416,723	23	5	40%	1,753,519
13. Assumption Changes	6/30/2020	32,811,182	22	34,175,385	21	3	67%	1,691,721
14. (Gain)/Loss Base	6/30/2021	(470,028,373)	24	(470,028,373)	24	5	20%	(7,344,029)
Total (County)				\$ (159,989,965)				\$ 20,698,141

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

**Table V-4
Development of Amortization Payment - Novato
For the June 30, 2021 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2021 Outstanding Balance	Remaining Amortization Years	Length of Phase In/Out	Current Phase In/Out Percentage	Amortization Amount
Charges / (Credits)								
1. 2009 Extraordinary Loss	6/30/2009	14,765,994	30	15,396,516	17	N/A	100%	1,248,163
2. Initial UAL	6/30/2013	17,008,202	17	13,168,274	9	N/A	100%	1,752,690
3. (Gain)/Loss Base	6/30/2014	(22,114,107)	24	(23,943,495)	17	5	100%	(2,129,643)
4. Assumption Changes	6/30/2014	6,230,650	22	6,173,839	15	3	100%	577,544
5. (Gain)/Loss Base	6/30/2015	2,876,813	24	3,166,755	18	5	100%	268,607
6. (Gain)/Loss Base	6/30/2016	6,441,310	24	7,179,456	19	5	100%	582,954
7. (Gain)/Loss Base	6/30/2017	(7,837,057)	24	(8,812,488)	20	5	100%	(687,292)
8. Assumption Changes	6/30/2017	4,583,960	22	4,775,320	18	3	100%	387,331
9. (Gain)/Loss Base	6/30/2018	1,668,937	24	1,863,857	21	5	80%	113,685
10. Audit Changes	6/30/2018	14,052	24	15,693	21	5	80%	957
11. (Gain)/Loss Base	6/30/2019	4,098,708	24	4,474,620	22	5	60%	203,313
12. (Gain)/Loss Base	6/30/2020	9,698,977	24	10,197,084	23	5	40%	311,421
13. Assumption Changes	6/30/2020	1,097,329	22	1,142,953	21	3	67%	56,578
14. (Gain)/Loss Base	6/30/2021	(46,432,603)	24	(46,432,603)	24	5	20%	(725,493)
Total (Novato)				\$ (11,634,218)				\$ 1,960,814

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

Table V-5 Development of Amortization Payment - San Rafael For the June 30, 2021 Actuarial Valuation								
Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2021 Outstanding Balance	Remaining Amortization Years	Length of Phase In/Out	Current Phase In/Out Percentage	Amortization Amount
Charges / (Credits)								
1. 2009 Extraordinary Loss	6/30/2009	34,997,031	30	36,491,441	17	N/A	100%	2,958,284
2. Initial UAL	6/30/2013	124,305,953	17	96,241,504	9	N/A	100%	12,809,692
3. (Gain)/Loss Base	6/30/2014	(54,710,285)	24	(59,236,189)	17	5	100%	(5,268,736)
4. Assumption Changes	6/30/2014	30,608,707	22	30,329,619	15	3	100%	2,837,244
5. (Gain)/Loss Base	6/30/2015	8,187,631	24	9,012,829	18	5	100%	764,476
6. (Gain)/Loss Base	6/30/2016	18,955,168	24	21,127,349	19	5	100%	1,715,488
7. (Gain)/Loss Base	6/30/2017	(19,744,705)	24	(22,202,208)	20	5	100%	(1,731,566)
8. Assumption Changes	6/30/2017	8,825,862	22	9,194,303	18	3	100%	745,759
9. (Gain)/Loss Base	6/30/2018	(3,777,871)	24	(4,219,098)	21	5	80%	(257,343)
10. Audit Changes	6/30/2018	380,007	24	424,389	21	5	80%	25,886
11. (Gain)/Loss Base	6/30/2019	7,672,490	24	8,376,171	22	5	60%	380,587
12. (Gain)/Loss Base	6/30/2020	16,430,775	24	17,274,604	23	5	40%	527,570
13. Assumption Changes	6/30/2020	(234,014)	22	(243,744)	21	3	67%	(12,066)
14. (Gain)/Loss Base	6/30/2021	(115,564,537)	24	(115,564,537)	24	5	20%	(1,805,656)
Total (San Rafael)				\$ 27,006,432				\$ 13,689,620

The single equivalent amortization period for San Rafael – 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 rate – is two years. The single amortization period for the County and Novato groups (as well as the Plan as a whole) is no longer calculated, since there is currently no remaining UAL.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

Tables V-6 through V-9 present the calculation of employer contribution rates for each employer and Tier.

**Table V-6
Development of the County Misc/Safety Contribution Rates as of June 30, 2021 for FYE 2023**

	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	24.63%	21.10%	20.24%	22.17%	21.77%	18.67%	19.70%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>0.00%</u>	<u>9.14%</u>	<u>9.14%</u>	<u>10.17%</u>	<u>9.17%</u>	<u>9.33%</u>	9.28%
C. Employer Normal Cost Rate (A-B)	24.63%	11.96%	11.10%	12.00%	12.60%	9.34%	10.42%
D. UAL Amortization Rate	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%
E. Administrative Expense Rate	<u>1.62%</u>	<u>0.97%</u>	<u>0.93%</u>	<u>0.98%</u>	<u>1.01%</u>	<u>0.84%</u>	0.90%
F. Net June 30, 2021 Contribution Rate (C+D+E)	33.55%	20.23%	19.33%	20.28%	20.91%	17.48%	18.62%

	County Safety Tier 2A	County Safety Tier 2B	County Safety Tier 3	County Safety	County Misc / Safety
A. Total Normal Cost Rate	38.85%	37.97%	29.12%	34.71%	22.86%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>16.78%</u>	<u>16.77%</u>	<u>14.62%</u>	<u>15.96%</u>	10.40%
C. Employer Normal Cost Rate (A-B)	22.07%	21.20%	14.50%	18.75%	12.46%
D. UAL Amortization Rate	13.56%	13.56%	13.56%	13.56%	8.61%
E. Administrative Expense Rate	<u>1.80%</u>	<u>1.76%</u>	<u>1.42%</u>	<u>1.63%</u>	1.07%
F. Net June 30, 2021 Contribution Rate (C+D+E)	37.43%	36.52%	29.48%	33.94%	22.14%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

Table V-7 Development of the County Special Districts Contribution Rates as of June 30, 2021 for FYE 2023									
	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	Marin City CSD Tier 2	Mosquito District Tier 1	Mosquito District Tier 2	
A. Total Normal Cost Rate		18.79%	26.40%	19.50%	26.40%	24.54%	24.84%	18.23%	
B. Member Contribution Rate (Excluding Admin Expense Load)		<u>9.87%</u>	<u>11.89%</u>	<u>9.87%</u>	<u>11.73%</u>	<u>9.87%</u>	<u>9.95%</u>	<u>9.87%</u>	
C. Employer Normal Cost Rate (A-B)		8.92%	14.51%	9.63%	14.67%	14.67%	14.89%	8.36%	
D. UAL Amortization Rate		1.60%	10.47%	10.47%	1.05%	1.05%	14.16%	14.16%	
E. Administrative Expense Rate		<u>0.53%</u>	<u>1.26%</u>	<u>1.02%</u>	<u>0.80%</u>	<u>0.80%</u>	<u>1.47%</u>	<u>1.14%</u>	
F. Net June 30, 2021 Contribution Rate (C+D+E)		11.05%	26.24%	21.12%	16.52%	16.52%	30.52%	23.66%	

	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		18.05%	42.52%	43.57%	41.14%	31.66%	31.76%	23.26%
B. Member Contribution Rate (Excluding Admin Expense Load)		<u>9.33%</u>	<u>15.12%</u>	<u>15.83%</u>	<u>14.06%</u>	<u>15.83%</u>	12.92%	10.75%
C. Employer Normal Cost Rate (A-B)		8.72%	27.40%	27.74%	27.08%	15.83%	18.84%	12.51%
D. UAL Amortization Rate		2.35%	10.83%	10.83%	10.83%	10.83%	10.64%	8.76%
E. Administrative Expense Rate		<u>0.56%</u>	<u>1.93%</u>	<u>1.95%</u>	<u>1.92%</u>	<u>1.35%</u>	1.49%	1.08%
F. Net June 30, 2021 Contribution Rate (C+D+E)		11.63%	40.16%	40.52%	39.83%	28.01%	30.97%	22.35%

* Rates for this group have been removed, as there are no longer any active members.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

**Table V-8
Development of the Courts and Novato Contribution Rates as of June 30, 2021 for FYE 2023**

	Courts		Courts		Courts		Courts		Courts	
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total				
A. Total Normal Cost Rate	0.00%	17.26%	20.12%	26.16%	19.27%	20.01%				
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>0.00%</u>	<u>8.41%</u>	<u>8.80%</u>	<u>10.79%</u>	<u>9.33%</u>	9.12%				
C. Employer Normal Cost Rate (A-B)	0.00%	8.85%	11.32%	15.37%	9.94%	10.89%				
D. UAL Amortization Rate	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%				
E. Administrative Expense Rate	<u>0.48%</u>	<u>0.93%</u>	<u>1.05%</u>	<u>1.26%</u>	<u>0.98%</u>	1.03%				
F. Net June 30, 2021 Contribution Rate (C+D+E)	9.98%	19.28%	21.87%	26.13%	20.42%	21.42%				

	Novato Misc	Novato Misc	Novato	Novato Safety	Novato Safety	Novato	Novato	Novato	Novato
	Tier 1	Tier 2A	Misc	Tier 1	Tier 2	Safety	Safety	Safety	Total
A. Total Normal Cost Rate	23.49%	19.27%	21.97%	42.14%	47.35%	34.93%	29.40%	39.81%	37.99%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>10.05%</u>	<u>9.33%</u>	<u>9.79%</u>	<u>15.61%</u>	<u>16.29%</u>	<u>17.46%</u>	<u>14.62%</u>	<u>15.65%</u>	15.06%
C. Employer Normal Cost Rate (A-B)	13.44%	9.94%	12.18%	26.53%	31.06%	17.47%	14.78%	24.16%	22.93%
D. UAL Amortization Rate	5.75%	5.75%	5.75%	19.39%	19.39%	19.39%	19.39%	19.39%	18.01%
E. Administrative Expense Rate	<u>0.97%</u>	<u>0.79%</u>	<u>0.91%</u>	<u>2.32%</u>	<u>2.55%</u>	<u>1.87%</u>	<u>1.73%</u>	<u>2.20%</u>	2.07%
F. Net June 30, 2021 Contribution Rate (C+D+E)	20.16%	16.48%	18.84%	48.24%	53.00%	38.73%	35.90%	45.75%	43.01%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

**Table V-9
Development of the San Rafael Contribution Rates as of June 30, 2021 for FYE 2023**

	San Rafael Misc Tier 1	San Rafael Misc Tier 2	San Rafael Misc Tier 3	San Rafael Misc
A. Total Normal Cost Rate	26.97%	25.17%	18.29%	22.33%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>12.03%</u>	<u>9.49%</u>	<u>9.33%</u>	<u>10.38%</u>
C. Employer Normal Cost Rate (A-B)	14.94%	15.68%	8.96%	11.95%
D. UAL Amortization Rate	34.91%	34.91%	34.91%	34.91%
E. Administrative Expense Rate	<u>2.52%</u>	<u>2.56%</u>	<u>2.22%</u>	<u>2.37%</u>
F. Net June 30, 2021 Contribution Rate (C+D+E)	52.37%	53.15%	46.09%	49.23%

	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	39.29%	38.26%	36.18%	37.87%	29.46%	34.77%	28.88%
B. Member Contribution Rate (Excluding Admin Expense)	<u>15.66%</u>	<u>15.02%</u>	<u>13.54%</u>	<u>13.44%</u>	<u>14.62%</u>	<u>14.82%</u>	<u>12.72%</u>
C. Employer Normal Cost Rate (A-B)	23.63%	23.24%	22.64%	24.43%	14.84%	19.95%	16.16%
D. UAL Amortization Rate	44.47%	44.47%	44.47%	44.47%	44.47%	44.47%	39.91%
E. Administrative Expense Rate	<u>3.45%</u>	<u>3.43%</u>	<u>3.40%</u>	<u>3.49%</u>	<u>3.00%</u>	<u>3.26%</u>	<u>2.84%</u>
F. Net June 30, 2021 Contribution Rate (C+D+E)	71.55%	71.14%	70.51%	72.39%	62.31%	67.68%	58.91%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – 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, 2021. The normal cost rates for these Tiers are based on the pooled demographic profiles of the employers with current active PEPRA members.

Table V-10		
Development of Contribution Rates for New Tiers with No Active Members as of June 30, 2021 for FYE 2023		
	South Marin Fire Safety Tier 3	Novato Misc Tier 2
A. Total Normal Cost Rate	34.93%	19.75%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>17.46%</u>	<u>9.87%</u>
C. Employer Normal Cost Rate (A-B)	17.47%	9.88%
D. UAL Amortization Rate	10.83%	5.75%
E. Administrative Expense Rate	<u>1.43%</u>	<u>0.79%</u>
F. Net June 30, 2021 Contribution Rate (C+D+E)	29.73%	16.42%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

SECTION V – CONTRIBUTIONS

Table V-11 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, 2021.

Table V-11					
Plan	Group	# of Active Members	2020	2021	
County	County Misc Tier 1	2	35.71%	33.55%	
	County Misc Tier 2	26	22.76%	20.23%	
	County Misc Tier 3	537	21.91%	19.33%	
	County Misc Tier 3A	70	22.61%	20.28%	
	County Misc Tier 4	136	23.15%	20.91%	
	County Misc Tier 5 (PEPRA)	935	19.91%	17.48%	
	County Misc	1,706	21.15%	18.62%	
	County Safety Tier 1A	1	18.04%	14.25%	
	County Safety Tier 2A	41	41.12%	37.43%	
	County Safety Tier 2B	159	37.63%	36.52%	
	County Safety Tier 3 (PEPRA)	155	33.34%	29.48%	
	County Safety	356	36.61%	33.94%	
	County Misc/Safety	2,062	24.62%	22.14%	
	Courts Tier 1	0	N/A	N/A	
	Courts Tier 2	1	22.62%	19.28%	
	Courts Tier 3	51	25.34%	21.87%	
	Courts Tier 4	4	29.45%	26.13%	
	Courts Tier 5 (PEPRA)	46	23.11%	20.42%	
	Courts	102	24.86%	21.42%	
	South Marin Fire Misc Tier 1	0	N/A	N/A	
	South Marin Fire Misc Tier 2 (PEPRA)	7	13.07%	11.05%	
	South Marin Fire Safety Tier 1	10	43.87%	40.16%	
	South Marin Fire Safety Tier 2	19	44.76%	40.52%	
	South Marin Fire Safety Tier 2A	7	42.66%	39.83%	
	South Marin Fire Safety Tier 3A (PEPRA)	16	31.23%	28.01%	
	Mosquito District Tier 1	24	34.35%	30.52%	
	Mosquito District Tier 2 (PEPRA)	9	27.78%	23.66%	
	LAFCO Tier 3	0	N/A	N/A	
	LAFCO Tier 4 (PEPRA)	3	14.02%	11.63%	
	Tamalpais CSD Tier 1	4	27.79%	26.24%	
	Tamalpais CSD Tier 2 (PEPRA)	7	24.47%	21.12%	
	Marin City CSD Tier 1	1	16.56%	16.52%	
	Marin City CSD Tier 2 (PEPRA)	6	16.51%	16.52%	
Special Districts	113	35.42%	30.97%		
Total County	2,277	24.99%	22.35%		
Novato	Novato Misc Tier 1	6	20.72%	20.16%	
	Novato Misc Tier 2A (PEPRA)	4	18.12%	16.48%	
	Novato Safety Tier 1	39	53.81%	48.24%	
	Novato Safety Tier 2	9	56.80%	53.00%	
	Novato Safety Tier 3 (PEPRA)	6	44.53%	38.73%	
	Novato Safety Tier 3A (PEPRA)	15	41.63%	35.90%	
	Total Novato	79	48.35%	43.01%	
San Rafael	San Rafael Misc Tier 1	70	54.22%	52.37%	
	San Rafael Misc Tier 2	15	53.61%	53.15%	
	San Rafael Misc Tier 3 (PEPRA)	103	47.73%	46.09%	
	San Rafael Misc	188	51.13%	49.23%	
	San Rafael Fire Tier 1	28	77.38%	71.55%	
	San Rafael Police Tier 1	27	77.56%	71.14%	
	San Rafael Fire Tier 2	12	76.81%	70.51%	
	San Rafael Police Tier 2	5	79.66%	72.39%	
	San Rafael Safety Tier 3 (PEPRA)	66	67.41%	62.31%	
	San Rafael Safety	138	74.18%	67.68%	
	Total San Rafael	326	62.57%	58.91%	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided by MCERA as of June 30, 2021. Cheiron did not audit any of the data; however, it was reviewed to ensure that it complies with generally accepted actuarial standards.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: County of Marin														
	Miscellaneous		Marin County				Miscellaneous		Marin Special Districts				Total County and Special Districts	
	6/30/2020	6/30/2021	6/30/2020	Safety	Total	6/30/2021	6/30/2020	6/30/2021	6/30/2020	Safety	Total	6/30/2021	6/30/2020	6/30/2021
Active Participants														
Number	1,727	1,706	361	356	2,088	2,062	155	163	51	52	206	215	2,294	2,277
Average Age	47.49	47.39	40.47	40.28	46.27	46.16	49.05	47.79	42.71	41.31	47.48	46.23	46.38	46.17
Average Service	9.50	9.55	11.06	10.75	9.77	9.75	11.51	10.44	10.20	9.46	11.18	10.20	9.89	9.80
Average Pay*	\$95,252	\$97,358	\$119,454	\$123,044	\$99,437	\$101,792	\$86,957	\$87,666	\$130,847	\$132,414	\$97,823	\$98,489	\$99,292	\$101,481
Service Retired														
Number	1,664	1,710	269	290	1,933	2,000	135	151	30	34	165	185	2,098	2,185
Average Age	72.63	72.80	64.77	64.61	71.54	71.61	69.58	69.99	63.92	63.87	68.55	68.87	71.30	71.38
Average Total Benefit*	\$39,463	\$40,184	\$71,999	\$72,947	\$43,990	\$44,935	\$38,855	\$39,403	\$73,208	\$72,909	\$45,101	\$45,561	\$44,078	\$44,988
Beneficiaries														
Number	278	283	77	78	355	361	17	17	10	8	27	25	382	386
Average Age	74.71	74.96	70.13	70.16	73.72	73.92	67.36	68.36	68.59	66.33	67.81	67.71	73.30	73.52
Average Total Benefit*	\$27,293	\$27,432	\$42,501	\$45,530	\$30,591	\$31,342	\$26,460	\$26,895	\$46,563	\$52,394	\$33,906	\$35,055	\$30,826	\$31,583
Duty Disabled														
Number	84	83	126	125	210	208	6	6	18	19	24	25	234	233
Average Age	68.97	69.85	63.72	64.39	65.82	66.57	65.88	66.88	66.71	66.72	66.50	66.76	65.89	66.59
Average Total Benefit*	\$40,107	\$40,146	\$62,730	\$63,643	\$53,681	\$54,267	\$34,404	\$34,947	\$62,464	\$64,005	\$55,449	\$57,031	\$53,862	\$54,563
Ordinary Disabled														
Number	28	28	8	8	36	36	2	2	0	0	2	2	38	38
Average Age	71.37	72.37	56.14	57.14	67.98	68.98	65.85	66.85	0.00	0.00	65.85	66.85	67.87	68.87
Average Total Benefit*	\$22,307	\$22,712	\$44,162	\$45,027	\$27,164	\$27,671	\$26,389	\$26,917	\$0	\$0	\$26,389	\$26,917	\$27,123	\$27,631
Total In Pay														
Number	2,054	2,104	480	501	2,534	2,605	160	176	58	61	218	237	2,752	2,842
Average Age	72.75	72.97	65.21	65.30	71.32	71.49	69.16	69.69	65.59	65.08	68.21	68.50	71.07	71.24
Average Total Benefit*	\$37,608	\$38,235	\$64,370	\$65,911	\$42,677	\$43,558	\$37,215	\$37,901	\$65,280	\$67,445	\$44,682	\$45,505	\$42,836	\$43,720
Terminated Vested														
Number	241	261	26	34	267	295	19	20	2	3	21	23	288	318
Average Age	48.34	48.41	45.09	42.43	48.02	47.72	46.69	48.27	53.70	52.40	47.36	48.81	47.97	47.80
Average Service	8.28	8.20	7.65	7.18	8.22	8.08	9.32	9.15	3.50	7.00	8.76	8.87	8.26	8.14
Transfers														
Number	176	170	55	54	231	224	30	28	11	10	41	38	272	262
Average Age	50.20	50.18	45.28	44.66	49.03	48.85	50.22	48.20	47.25	46.84	49.43	47.84	49.09	48.70
Average Service	4.91	4.96	4.00	4.98	4.70	4.97	5.40	5.18	5.18	5.20	5.34	5.18	4.79	5.00
Total Inactive														
Number	417	431	81	88	498	519	49	48	13	13	62	61	560	580
Average Age	49.12	49.11	45.22	43.80	48.49	48.21	48.85	48.23	48.25	48.12	48.73	48.20	48.52	48.21
Average Service	6.86	6.92	5.17	5.83	6.59	6.74	6.92	6.83	4.92	5.62	6.50	6.57	6.58	6.72

*All payroll and benefit figures shown are annual.



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: County of Marin												
	Tier 1		Tier 2		Tier 3		Tier 3A		Tier 4		Tier 5	
	Miscellaneous											
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants												
Number	2	2	28	26	606	537	73	70	139	136	879	935
Average Age	73.44	74.44	65.99	66.44	54.67	54.93	49.64	50.61	48.45	49.83	41.56	41.88
Average Service	36.50	37.50	22.54	23.23	18.58	19.37	10.26	11.29	5.85	6.54	3.27	3.77
Average Pay*	\$99,564	\$101,669	\$86,910	\$90,615	\$105,021	\$107,756	\$108,006	\$112,214	\$102,572	\$107,674	\$86,557	\$88,951
Service Retired												
Number	465	441	236	224	922	988	21	25	3	5	17	27
Average Age	79.13	79.77	79.01	79.63	68.00	68.51	65.96	66.65	68.19	67.61	66.60	65.81
Average Total Benefit*	\$57,437	\$59,184	\$24,613	\$25,686	\$35,251	\$36,403	\$19,182	\$18,909	\$12,840	\$19,483	\$12,106	\$12,010
Beneficiaries												
Number	152	149	51	52	74	79	1	2	0	1	0	0
Average Age	80.44	80.66	73.58	74.80	63.92	64.85	60.08	64.90	0.00	52.52	0.00	0.00
Average Total Benefit*	\$33,526	\$34,861	\$16,386	\$17,067	\$22,240	\$20,907	\$9,958	\$10,310	\$0	\$9,218	\$0	\$0
Duty Disabled												
Number	18	17	26	26	40	40	0	0	0	0	0	0
Average Age	76.20	77.06	69.71	70.71	65.24	66.24	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$49,416	\$48,342	\$30,738	\$31,352	\$42,008	\$42,378	\$0	\$0	\$0	\$0	\$0	\$0
Ordinary Disabled												
Number	8	8	11	11	7	7	2	2	0	0	0	0
Average Age	76.29	77.29	74.68	75.68	65.96	66.96	52.39	53.39	0.00	0.00	0.00	0.00
Average Total Benefit*	\$28,904	\$29,338	\$19,138	\$19,521	\$19,503	\$19,893	\$23,169	\$23,632	\$0	\$0	\$0	\$0
Total In Pay												
Number	643	615	324	313	1,043	1,114	24	29	3	6	17	27
Average Age	79.32	79.87	77.26	77.95	67.59	68.16	64.59	65.61	68.19	65.10	66.60	65.81
Average Total Benefit*	\$51,205	\$52,603	\$23,624	\$24,508	\$34,481	\$35,415	\$19,130	\$18,642	\$12,840	\$17,772	\$12,106	\$12,010
Terminated Vested												
Number	1	1	0	0	160	159	32	32	33	40	15	29
Average Age	80.34	81.34	0.00	0.00	50.52	51.21	43.11	42.90	45.25	45.04	40.85	42.64
Average Service	5.00	5.00	0.00	0.00	9.72	9.89	7.13	7.47	4.15	4.38	4.73	5.07
Transfers												
Number	0	1	5	6	132	114	13	12	7	7	19	30
Average Age	0.00	52.48	56.86	57.32	51.86	51.94	46.72	46.25	43.90	44.90	41.64	44.80
Average Service	0.00	3.00	3.00	2.67	5.66	6.04	3.69	3.58	1.86	1.86	2.21	2.67
Total Inactive												
Number	1	2	5	6	292	273	45	44	40	47	34	59
Average Age	80.34	66.91	56.86	57.32	51.13	51.52	44.15	43.81	45.02	45.02	41.29	43.74
Average Service	5.00	4.00	3.00	2.67	7.88	8.29	6.13	6.41	3.75	4.00	3.32	3.85



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: County of Marin										
	Tier 1A Safety		Tier 2A Safety		Tier 1B Safety		Tier 2B Safety		Tier 3 Safety	
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants										
Number	1	1	43	41	0	0	178	159	139	155
Average Age	72.91	73.91	47.74	47.72	0.00	0.00	44.84	45.35	32.40	32.89
Average Service	35.00	36.00	14.77	14.44	0.00	0.00	15.75	16.26	3.72	3.96
Average Pay*	\$255,819	\$256,298	\$115,473	\$120,337	\$0	\$0	\$135,402	\$140,908	\$99,282	\$104,577
Service Retired										
Number	57	54	40	45	27	26	145	164	0	1
Average Age	75.80	76.37	64.88	65.34	66.90	67.93	60.01	60.07	0.00	55.83
Average Total Benefit*	\$89,381	\$94,306	\$52,565	\$57,378	\$110,259	\$111,616	\$63,404	\$63,352	\$0	\$24,348
Beneficiaries										
Number	48	48	7	7	4	4	18	19	0	0
Average Age	76.52	76.15	65.06	66.06	57.78	58.78	57.81	58.92	0.00	0.00
Average Total Benefit*	\$45,712	\$49,340	\$32,315	\$32,941	\$28,907	\$29,341	\$40,922	\$43,950	\$0	\$0
Duty Disabled										
Number	36	34	26	25	8	8	55	57	1	1
Average Age	75.86	76.93	60.91	61.26	65.08	66.08	57.34	58.46	39.57	40.57
Average Total Benefit*	\$58,860	\$57,275	\$40,867	\$42,206	\$130,283	\$132,237	\$66,052	\$67,486	\$47,355	\$48,302
Ordinary Disabled										
Number	1	1	2	2	0	0	5	5	0	0
Average Age	73.72	74.72	58.37	59.37	0.00	0.00	51.73	52.73	0.00	0.00
Average Total Benefit*	\$27,940	\$28,359	\$32,571	\$33,223	\$0	\$0	\$52,042	\$53,083	\$0	\$0
Total In Pay										
Number	142	137	75	79	39	38	223	245	1	2
Average Age	76.04	76.42	63.35	63.96	65.59	66.58	58.99	59.46	39.57	48.20
Average Total Benefit*	\$66,449	\$68,880	\$46,086	\$49,800	\$106,023	\$107,297	\$61,988	\$63,269	\$47,355	\$36,325
Terminated Vested										
Number	0	0	10	10	0	0	14	18	2	6
Average Age	0.00	0.00	47.31	45.42	0.00	0.00	45.76	43.83	29.35	33.23
Average Service	0.00	0.00	10.30	10.00	0.00	0.00	6.14	6.22	5.00	5.33
Transfers										
Number	0	0	6	6	0	0	44	40	5	8
Average Age	0.00	0.00	43.47	45.49	0.00	0.00	47.31	47.33	29.58	30.71
Average Service	0.00	0.00	4.50	6.00	0.00	0.00	4.23	5.43	1.40	2.00
Total Inactive										
Number	0	0	16	16	0	0	58	58	7	14
Average Age	0.00	0.00	45.87	45.45	0.00	0.00	46.94	46.24	29.52	31.79
Average Service	0.00	0.00	8.13	8.50	0.00	0.00	4.69	5.67	2.43	3.43



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: Marin Special Districts												
	Court Tier 1 Miscellaneous		Court Tier 2 Miscellaneous		Court Tier 3 Miscellaneous		Court Tier 4 Miscellaneous		Court Tier 5 Miscellaneous		Total	
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants												
Number	1	0	1	1	57	51	4	4	35	46	98	102
Average Age	63.00	0.00	52.60	53.60	54.01	54.34	55.92	56.91	40.18	41.20	49.23	48.51
Average Service	37.00	0.00	19.00	20.00	18.81	20.02	4.25	5.25	2.66	2.67	12.63	11.62
Average Pay*	\$104,364	\$0	\$59,690	\$61,016	\$80,462	\$81,288	\$89,449	\$93,108	\$73,927	\$76,207	\$78,527	\$79,261
Service Retired												
Number	16	17	11	11	74	84	1	1	0	1	102	114
Average Age	73.13	73.53	78.30	79.30	67.87	68.33	64.83	65.83	0.00	66.52	69.79	70.13
Average Total Benefit*	\$73,406	\$76,363	\$37,253	\$37,998	\$29,836	\$30,258	\$59,530	\$60,721	\$0	\$3,436	\$37,762	\$37,912
Beneficiaries												
Number	1	1	0	0	6	6	0	0	0	0	7	7
Average Age	75.11	76.11	0.00	0.00	72.04	73.04	0.00	0.00	0.00	0.00	72.48	73.48
Average Total Benefit*	\$64,783	\$65,754	\$0	\$0	\$21,469	\$21,898	\$0	\$0	\$0	\$0	\$27,656	\$28,163
Duty Disabled												
Number	0	0	0	0	1	1	0	0	0	0	1	1
Average Age	0.00	0.00	0.00	0.00	75.93	76.93	0.00	0.00	0.00	0.00	75.93	76.93
Average Total Benefit*	\$0	\$0	\$0	\$0	\$31,475	\$32,105	\$0	\$0	\$0	\$0	\$31,475	\$32,105
Ordinary Disabled												
Number	0	0	1	1	1	1	0	0	0	0	2	2
Average Age	0.00	0.00	73.71	74.71	57.98	58.98	0.00	0.00	0.00	0.00	65.85	66.85
Average Total Benefit*	\$0	\$0	\$14,691	\$14,985	\$38,087	\$38,849	\$0	\$0	\$0	\$0	\$26,389	\$26,917
Total In Pay												
Number	17	18	12	12	82	92	1	1	0	1	112	124
Average Age	73.25	73.68	77.92	78.92	68.15	68.63	64.83	65.83	0.00	66.52	69.94	70.32
Average Total Benefit*	\$72,899	\$75,774	\$35,373	\$36,080	\$29,345	\$29,827	\$59,530	\$60,721	\$0	\$3,436	\$36,871	\$37,138
Terminated Vested												
Number	0	0	0	0	13	13	0	0	0	0	13	13
Average Age	0.00	0.00	0.00	0.00	45.84	46.84	0.00	0.00	0.00	0.00	45.84	46.84
Average Service	0.00	0.00	0.00	0.00	9.46	9.46	0.00	0.00	0.00	0.00	9.46	9.46
Transfers												
Number	0	0	1	1	19	16	2	2	5	6	27	25
Average Age	0.00	0.00	62.04	63.04	53.12	51.07	38.66	39.66	43.29	38.26	50.56	47.56
Average Service	0.00	0.00	5.00	5.00	6.84	6.88	2.50	2.50	2.00	2.17	5.56	5.32
Total Inactive												
Number	0	0	1	1	32	29	2	2	5	6	40	38
Average Age	0.00	0.00	62.04	63.04	50.16	49.17	38.66	39.66	43.29	38.26	49.03	47.31
Average Service	0.00	0.00	5.00	5.00	7.91	8.03	2.50	2.50	2.00	2.17	6.83	6.74

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30,2021: 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	
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants																
Number	0	0	5	7	5	7	12	10	22	19	6	7	11	16	51	52
Average Age	0.00	0.00	40.06	37.23	40.06	37.23	50.04	50.37	44.61	44.95	37.05	37.75	33.99	32.87	42.71	41.31
Average Service	0.00	0.00	3.40	2.43	3.40	2.43	20.00	20.40	9.68	10.74	3.67	4.00	4.09	3.50	10.20	9.46
Average Pay*	\$0	\$0	\$105,830	\$88,930	\$105,830	\$88,930	\$151,840	\$156,681	\$129,847	\$140,136	\$112,783	\$119,513	\$119,800	\$113,721	\$130,847	\$132,414
Service Retired																
Number	4	4	0	0	4	4	27	30	3	4	0	0	0	0	30	34
Average Age	70.23	71.23	0.00	0.00	70.23	71.23	64.56	64.71	58.09	57.54	0.00	0.00	0.00	0.00	63.92	63.87
Average Total Benefit*	\$29,410	\$29,851	\$0	\$0	\$29,410	\$29,851	\$79,655	\$80,211	\$15,186	\$18,141	\$0	\$0	\$0	\$0	\$73,208	\$72,909
Beneficiaries																
Number	0	0	0	0	0	0	10	8	0	0	0	0	0	0	10	8
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	68.59	66.33	0.00	0.00	0.00	0.00	0.00	0.00	68.59	66.33
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$46,563	\$52,394	\$0	\$0	\$0	\$0	\$0	\$0	\$46,563	\$52,394
Duty Disabled																
Number	1	1	0	0	1	1	17	17	1	2	0	0	0	0	18	19
Average Age	76.28	77.28	0.00	0.00	76.28	77.28	67.67	68.66	50.51	50.15	0.00	0.00	0.00	0.00	66.71	66.72
Average Total Benefit*	\$4,706	\$4,777	\$0	\$0	\$4,706	\$4,777	\$63,205	\$64,153	\$49,874	\$62,750	\$0	\$0	\$0	\$0	\$62,464	\$64,005
Ordinary Disabled																
Number	0	0	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	0.00	0.00
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay																
Number	5	5	0	0	5	5	54	55	4	6	0	0	0	0	58	61
Average Age	71.44	72.44	0.00	0.00	71.44	72.44	66.29	66.17	56.19	55.07	0.00	0.00	0.00	0.00	65.59	65.08
Average Total Benefit*	\$24,469	\$24,836	\$0	\$0	\$24,469	\$24,836	\$68,348	\$71,202	\$23,858	\$33,010	\$0	\$0	\$0	\$0	\$65,280	\$67,445
Terminated Vested																
Number	1	1	0	1	1	2	0	0	2	3	0	0	0	0	2	3
Average Age	76.85	77.85	0.00	59.23	76.85	68.54	0.00	0.00	53.70	52.40	0.00	0.00	0.00	0.00	53.70	52.40
Average Service	9.00	9.00	0.00	7.00	9.00	8.00	0.00	0.00	3.50	7.00	0.00	0.00	0.00	0.00	3.50	7.00
Transfers																
Number	0	1	1	0	1	1	6	5	5	5	0	0	0	0	11	10
Average Age	0.00	46.95	45.95	0.00	45.95	46.95	52.78	52.06	40.62	41.62	0.00	0.00	0.00	0.00	47.25	46.84
Average Service	0.00	1.00	1.00	0.00	1.00	1.00	6.33	6.60	3.80	3.80	0.00	0.00	0.00	0.00	5.18	5.20
Total Inactive																
Number	1	2	1	1	2	3	6	5	7	8	0	0	0	0	13	13
Average Age	76.85	62.40	45.95	59.23	61.40	61.34	52.78	52.06	44.36	45.66	0.00	0.00	0.00	0.00	48.25	48.12
Average Service	9.00	5.00	1.00	7.00	5.00	5.67	6.33	6.60	3.71	5.00	0.00	0.00	0.00	0.00	4.92	5.62



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: Marin Special Districts														
	Southern Marin Fire		Marin City CSD		Marin City CSD		Total	Total	Mosquito District		Mosquito District		Total	
	Total		Tier 1	Miscellaneous	Tier 2	Miscellaneous			Tier 1	Miscellaneous	Tier 2	Miscellaneous	Total	
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants														
Number	56	59	1	1	4	6	5	7	26	24	6	9	32	33
Average Age	42.47	40.82	40.20	41.20	48.54	56.10	46.87	53.97	53.62	53.64	38.21	36.28	50.73	48.90
Average Service	9.59	8.63	0.00	0.00	1.00	1.33	0.80	1.14	15.96	16.63	2.67	2.44	13.47	12.76
Average Pay*	\$128,614	\$127,255	\$71,802	\$71,802	\$69,714	\$87,349	\$70,132	\$85,128	\$108,581	\$114,640	\$96,765	\$98,570	\$106,366	\$110,257
Service Retired														
Number	34	38	1	1	0	0	1	1	13	15	0	0	13	15
Average Age	64.66	64.64	71.52	72.52	0.00	0.00	71.52	72.52	66.92	67.72	0.00	0.00	66.92	67.72
Average Total Benefit*	\$68,055	\$68,376	\$35,225	\$35,753	\$0	\$0	\$35,225	\$35,753	\$60,756	\$61,044	\$0	\$0	\$60,756	\$61,044
Beneficiaries														
Number	10	8	1	1	0	0	1	1	5	5	0	0	5	5
Average Age	68.59	66.33	59.74	60.74	0.00	0.00	59.74	60.74	72.66	73.66	0.00	0.00	72.66	73.66
Average Total Benefit*	\$46,563	\$52,394	\$3,866	\$3,924	\$0	\$0	\$3,866	\$3,924	\$25,681	\$26,067	\$0	\$0	\$25,681	\$26,067
Duty Disabled														
Number	19	20	0	0	0	0	0	0	3	3	0	0	3	3
Average Age	67.22	67.24	0.00	0.00	0.00	0.00	0.00	0.00	64.92	65.92	0.00	0.00	64.92	65.92
Average Total Benefit*	\$59,424	\$61,044	\$0	\$0	\$0	\$0	\$0	\$0	\$51,429	\$52,201	\$0	\$0	\$51,429	\$52,201
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	63	66	2	2	0	0	2	2	21	23	0	0	21	23
Average Age	66.05	65.63	65.63	66.63	0.00	0.00	65.63	66.63	68.00	68.78	0.00	0.00	68.00	68.78
Average Total Benefit*	\$62,041	\$64,217	\$19,546	\$19,839	\$0	\$0	\$19,546	\$19,839	\$51,073	\$52,287	\$0	\$0	\$51,073	\$52,287
Terminated Vested														
Number	3	5	3	3	0	0	3	3	1	1	0	0	1	1
Average Age	61.41	58.85	42.11	43.11	0.00	0.00	42.11	43.11	37.97	38.97	0.00	0.00	37.97	38.97
Average Service	5.33	7.40	8.00	8.00	0.00	0.00	8.00	8.00	10.00	10.00	0.00	0.00	10.00	10.00
Transfers														
Number	12	11	0	0	0	0	0	0	1	1	0	0	1	1
Average Age	47.15	46.85	0.00	0.00	0.00	0.00	0.00	0.00	54.03	55.03	0.00	0.00	54.03	55.03
Average Service	4.83	4.82	0.00	0.00	0.00	0.00	0.00	0.00	11.00	11.00	0.00	0.00	11.00	11.00
Total Inactive														
Number	15	16	3	3	0	0	3	3	2	2	0	0	2	2
Average Age	50.00	50.60	42.11	43.11	0.00	0.00	42.11	43.11	46.00	47.00	0.00	0.00	46.00	47.00
Average Service	4.93	5.63	8.00	8.00	0.00	0.00	8.00	8.00	10.50	10.50	0.00	0.00	10.50	10.50



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30,2021: 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		
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021		6/30/2020	6/30/2021	6/30/2020	6/30/2021			6/30/2020
Active Participants														
Number	0	0	0	0	2	3	2	3	6	4	7	7	13	11
Average Age	0.00	0.00	0.00	0.00	41.04	35.91	41.04	35.91	55.05	50.66	43.90	40.02	49.05	43.89
Average Service	0.00	0.00	0.00	0.00	1.00	1.67	1.00	1.67	11.83	9.50	3.00	4.00	7.08	6.00
Average Pay*	\$0	\$0	\$0	\$0	\$114,785	\$97,219	\$114,785	\$97,219	\$111,947	\$122,354	\$85,424	\$80,997	\$97,666	\$96,036
Service Retired														
Number	2	2	2	2	0	0	4	4	11	13	0	0	11	13
Average Age	72.38	73.38	61.76	62.76	0.00	0.00	67.07	68.07	71.26	71.43	0.00	0.00	71.26	71.43
Average Total Benefit*	\$29,962	\$30,412	\$6,189	\$6,313	\$0	\$0	\$18,075	\$18,362	\$34,425	\$37,198	\$0	\$0	\$34,425	\$37,198
Beneficiaries														
Number	0	0	0	0	0	0	0	0	4	4	0	0	4	4
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.68	54.68	0.00	0.00	53.68	54.68
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,988	\$31,453	\$0	\$0	\$30,988	\$31,453
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	48.31	49.31	0.00	0.00	48.31	49.31
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,957	\$16,196	\$0	\$0	\$15,957	\$16,196
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	16	18	0	0	16	18
Average Age	72.38	73.38	61.76	62.76	0.00	0.00	67.07	68.07	65.43	66.48	0.00	0.00	65.43	66.48
Average Total Benefit*	\$29,962	\$30,412	\$6,189	\$6,313	\$0	\$0	\$18,075	\$18,362	\$32,412	\$34,754	\$0	\$0	\$32,412	\$34,754
Terminated Vested														
Number	0	0	1	1	0	0	1	1	0	0	0	0	0	0
Average Age	0.00	0.00	50.05	51.04	0.00	0.00	50.05	51.04	0.00	0.00	0.00	0.00	0.00	0.00
Average Service	0.00	0.00	11.00	10.00	0.00	0.00	11.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
Transfers														
Number	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.59	58.57	41.59	58.57
Average Service	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00
Total Inactive														
Number	0	0	1	1	0	0	1	1	0	0	1	1	1	1
Average Age	0.00	0.00	50.05	51.04	0.00	0.00	50.05	51.04	0.00	0.00	41.59	58.57	41.59	58.57
Average Service	0.00	0.00	11.00	10.00	0.00	0.00	11.00	10.00	0.00	0.00	1.00	1.00	1.00	1.00



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: Novato Fire Protection District												
	Tier 1 Miscellaneous		Tier 2A Miscellaneous		Tier 1 Safety		Tier 2 Safety		Tier 3 Safety		Tier 3A Safety	
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants												
Number	5	6	5	4	41	39	9	9	6	6	11	15
Average Age	50.39	50.65	43.15	43.45	47.59	48.42	43.24	44.24	38.92	39.92	33.04	33.92
Average Service	16.80	15.00	2.60	4.25	19.20	20.00	7.22	7.78	6.17	7.17	1.55	1.80
Average Pay*	\$126,150	\$115,257	\$89,213	\$99,038	\$146,359	\$151,471	\$123,419	\$125,148	\$123,630	\$125,810	\$115,753	\$116,591
Service Retired												
Number	6	5	0	0	58	58	0	0	0	0	0	0
Average Age	64.67	67.06	0.00	0.00	68.41	68.78	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$40,297	\$48,044	\$0	\$0	\$112,801	\$115,401	\$0	\$0	\$0	\$0	\$0	\$0
Beneficiaries												
Number	1	1	0	0	19	20	0	0	0	0	0	0
Average Age	57.67	58.67	0.00	0.00	66.77	68.35	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$12,798	\$12,990	\$0	\$0	\$43,558	\$44,783	\$0	\$0	\$0	\$0	\$0	\$0
Duty Disabled												
Number	0	0	0	0	32	32	1	1	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	69.65	70.65	41.95	42.95	0.00	0.00	0.00	0.00
Average Total Benefit*	\$0	\$0	\$0	\$0	\$85,794	\$87,081	\$63,428	\$64,380	\$0	\$0	\$0	\$0
Ordinary Disabled												
Number	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
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay												
Number	7	6	0	0	109	110	1	1	0	0	0	0
Average Age	63.67	65.66	0.00	0.00	68.48	69.24	41.95	42.95	0.00	0.00	0.00	0.00
Average Total Benefit*	\$36,369	\$42,201	\$0	\$0	\$92,802	\$94,323	\$63,428	\$64,380	\$0	\$0	\$0	\$0
Terminated Vested												
Number	1	1	0	0	1	1	0	0	0	0	0	0
Average Age	45.12	46.12	0.00	0.00	48.64	49.63	0.00	0.00	0.00	0.00	0.00	0.00
Average Service	12.00	12.00	0.00	0.00	9.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00
Transfers												
Number	0	0	0	0	10	10	0	0	1	1	0	0
Average Age	0.00	0.00	0.00	0.00	46.71	47.71	0.00	0.00	28.65	29.65	0.00	0.00
Average Service	0.00	0.00	0.00	0.00	4.00	4.40	0.00	0.00	3.00	3.00	0.00	0.00
Total Inactive												
Number	1	1	0	0	11	11	0	0	1	1	0	0
Average Age	45.12	46.12	0.00	0.00	46.89	47.88	0.00	0.00	28.65	29.65	0.00	0.00
Average Service	12.00	12.00	0.00	0.00	4.45	4.82	0.00	0.00	3.00	3.00	0.00	0.00

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: Novato Fire Protection District						
	Miscellaneous		Safety		Total	
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants						
Number	10	10	67	69	77	79
Average Age	46.77	47.77	43.84	43.99	44.22	44.46
Average Service	9.70	10.70	13.52	13.33	13.03	13.00
Average Pay*	\$107,682	\$108,769	\$136,217	\$138,224	\$132,511	\$134,495
Service Retired						
Number	6	5	58	58	64	63
Average Age	64.67	67.06	68.41	68.78	68.06	68.64
Average Total Benefit*	\$40,297	\$48,044	\$112,801	\$115,401	\$106,004	\$110,055
Beneficiaries						
Number	1	1	19	20	20	21
Average Age	57.67	58.67	66.77	68.35	66.31	67.89
Average Total Benefit*	\$12,798	\$12,990	\$43,558	\$44,783	\$42,020	\$43,269
Duty Disabled						
Number	0	0	33	33	33	33
Average Age	0.00	0.00	68.81	69.81	68.81	69.81
Average Total Benefit*	\$0	\$0	\$85,116	\$86,393	\$85,116	\$86,393
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	7	6	110	111	117	117
Average Age	63.67	65.66	68.24	69.01	67.97	68.84
Average Total Benefit*	\$36,369	\$42,201	\$92,535	\$94,053	\$89,175	\$91,394
Terminated Vested						
Number	1	1	1	1	2	2
Average Age	45.12	46.12	48.64	49.63	46.88	47.88
Average Service	12.00	12.00	9.00	9.00	10.50	10.50
Transfers						
Number	0	0	11	11	11	11
Average Age	0.00	0.00	45.07	46.07	45.07	46.07
Average Service	0.00	0.00	3.91	4.27	3.91	4.27
Total Inactive						
Number	1	1	12	12	13	13
Average Age	45.12	46.12	45.37	46.37	45.35	46.35
Average Service	12.00	12.00	4.33	4.67	4.92	5.23

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: City of San Rafael										
	Miscellaneous		Police		Fire		Total Safety		Total	
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants										
Number	205	188	60	68	67	70	127	138	332	326
Average Age	45.01	46.14	39.69	38.38	39.38	39.08	39.53	38.74	42.91	43.01
Average Service	9.07	9.22	10.35	9.26	10.06	9.37	10.20	9.32	9.50	9.26
Average Pay*	\$83,143	\$85,235	\$126,558	\$125,863	\$134,591	\$128,265	\$130,796	\$127,082	\$101,372	\$102,949
Service Retired										
Number	278	289	80	82	86	86	166	168	444	457
Average Age	69.96	70.41	66.91	66.93	68.73	68.95	67.86	67.96	69.18	69.51
Average Total Benefit*	\$39,832	\$41,223	\$73,645	\$77,125	\$97,541	\$101,395	\$86,025	\$89,549	\$57,103	\$58,988
Beneficiaries										
Number	43	43	24	26	22	22	46	48	89	91
Average Age	75.39	74.00	69.04	69.92	74.18	75.18	71.50	72.33	73.38	73.12
Average Total Benefit*	\$22,467	\$23,880	\$35,984	\$39,991	\$41,596	\$42,833	\$38,668	\$41,293	\$30,841	\$33,065
Duty Disabled										
Number	18	18	43	41	24	24	67	65	85	83
Average Age	67.93	68.93	62.16	62.40	68.81	69.81	64.54	65.14	65.26	65.96
Average Total Benefit*	\$30,412	\$31,312	\$63,027	\$65,564	\$97,086	\$99,999	\$75,227	\$78,278	\$65,737	\$68,093
Ordinary Disabled										
Number	3	2	0	0	0	0	0	0	3	2
Average Age	73.53	88.45	0.00	0.00	0.00	0.00	0.00	0.00	73.53	88.45
Average Total Benefit*	\$18,526	\$13,586	\$0	\$0	\$0	\$0	\$0	\$0	\$18,526	\$13,586
Total In Pay										
Number	342	352	147	149	132	132	279	281	621	633
Average Age	70.57	70.88	65.87	66.21	69.65	70.14	67.66	68.06	69.26	69.63
Average Total Benefit*	\$36,966	\$38,440	\$64,390	\$67,464	\$88,134	\$91,381	\$75,624	\$78,699	\$54,334	\$56,312
Terminated Vested										
Number	46	48	20	18	5	6	25	24	71	72
Average Age	48.19	47.93	43.37	45.17	37.29	37.42	42.15	43.23	46.06	46.36
Average Service	6.00	6.50	10.45	10.50	5.60	6.50	9.48	9.50	7.23	7.50
Transfers										
Number	64	78	14	14	5	6	19	20	83	98
Average Age	44.80	43.31	47.11	48.18	42.95	42.23	46.02	46.40	45.08	43.94
Average Service	3.20	2.72	3.64	4.43	3.60	3.67	3.63	4.20	3.30	3.02
Total Inactive										
Number	110	126	34	32	10	12	44	44	154	170
Average Age	46.22	45.07	44.91	46.49	40.12	39.83	43.82	44.67	45.53	44.96
Average Service	4.37	4.16	7.65	7.84	4.60	5.08	6.95	7.09	5.11	4.92



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2021: City of San Rafael																		
	Tier 1		Tier 2		Tier 3		Tier 1		Tier 2		Tier 3		Tier 1		Tier 2		Tier 3	
	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous	Police	Fire	Fire	Fire	Fire	Fire	Fire							
	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021	6/30/2020	6/30/2021
Active Participants																		
Number	83	70	16	15	106	103	29	27	5	5	26	36	31	28	12	12	24	30
Average Age	52.78	53.19	46.75	52.01	38.67	40.50	47.39	47.82	41.30	38.04	30.80	31.35	45.49	45.90	37.59	38.59	32.40	32.92
Average Service	18.04	18.69	5.13	5.20	2.64	3.37	17.97	18.41	5.80	5.00	2.73	3.00	16.00	16.29	7.50	8.50	3.67	3.27
Average Pay*	\$88,063	\$87,599	\$109,789	\$109,572	\$75,269	\$80,084	\$142,233	\$145,093	\$138,265	\$128,649	\$106,824	\$111,054	\$152,939	\$154,457	\$132,696	\$136,364	\$111,839	\$100,580
Service Retired																		
Number	276	287	1	1	1	1	80	82	0	0	0	0	86	86	0	0	0	0
Average Age	69.95	70.39	76.55	77.55	68.11	69.11	66.91	66.93	0.00	0.00	0.00	0.00	68.73	68.95	0.00	0.00	0.00	0.00
Average Total Benefit*	\$40,094	\$41,483	\$3,882	\$3,960	\$3,669	\$3,779	\$73,645	\$77,125	\$0	\$0	\$0	\$0	\$97,541	\$101,395	\$0	\$0	\$0	\$0
Beneficiaries																		
Number	43	43	0	0	0	0	24	26	0	0	0	0	22	22	0	0	0	0
Average Age	75.39	74.00	0.00	0.00	0.00	0.00	69.04	69.92	0.00	0.00	0.00	0.00	74.18	75.18	0.00	0.00	0.00	0.00
Average Total Benefit*	\$22,467	\$23,880	\$0	\$0	\$0	\$0	\$35,984	\$39,991	\$0	\$0	\$0	\$0	\$41,596	\$42,833	\$0	\$0	\$0	\$0
Duty Disabled																		
Number	18	18	0	0	0	0	43	41	0	0	0	0	24	24	0	0	0	0
Average Age	67.93	68.93	0.00	0.00	0.00	0.00	62.16	62.40	0.00	0.00	0.00	0.00	68.81	69.81	0.00	0.00	0.00	0.00
Average Total Benefit*	\$30,412	\$31,312	\$0	\$0	\$0	\$0	\$63,027	\$65,564	\$0	\$0	\$0	\$0	\$97,086	\$99,999	\$0	\$0	\$0	\$0
Ordinary Disabled																		
Number	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Age	73.53	88.45	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	0.00	0.00
Average Total Benefit*	\$18,526	\$13,586	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay																		
Number	340	350	1	1	1	1	147	149	0	0	0	0	132	132	0	0	0	0
Average Age	70.56	70.87	76.55	77.55	68.11	69.11	65.87	66.21	0.00	0.00	0.00	0.00	69.65	70.14	0.00	0.00	0.00	0.00
Average Total Benefit*	\$37,162	\$38,638	\$3,882	\$3,960	\$3,669	\$3,779	\$64,390	\$67,464	\$0	\$0	\$0	\$0	\$88,134	\$91,381	\$0	\$0	\$0	\$0
Terminated Vested																		
Number	34	35	7	9	5	4	16	14	2	3	2	1	2	2	3	2	0	2
Average Age	49.68	49.41	46.96	44.22	39.76	43.29	45.70	46.26	33.45	42.97	34.61	36.41	42.47	43.47	33.83	35.42	0.00	33.37
Average Service	6.68	7.17	3.29	3.89	5.20	6.50	11.75	11.71	4.50	6.00	6.00	7.00	8.50	8.50	3.67	3.50	0.00	7.50
Transfers																		
Number	44	42	6	7	14	29	13	13	0	0	1	1	4	4	0	1	1	1
Average Age	49.21	49.23	42.93	41.36	31.75	35.20	47.84	49.21	0.00	0.00	37.57	34.81	45.44	46.44	0.00	33.66	32.98	33.98
Average Service	4.11	4.24	2.50	2.14	0.64	0.66	3.85	4.38	0.00	0.00	1.00	5.00	4.00	4.00	0.00	4.00	2.00	2.00
Total Inactive																		
Number	78	77	13	16	19	33	29	27	2	3	3	2	6	6	3	3	1	3
Average Age	49.42	49.31	45.10	42.97	33.86	36.18	46.66	47.68	33.45	42.97	35.60	35.61	44.45	45.45	33.83	34.83	32.98	33.57
Average Service	5.23	5.57	2.92	3.13	1.84	1.36	8.21	8.19	4.50	6.00	4.33	6.00	5.50	5.50	3.67	3.67	2.00	5.67



**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN COUNTY
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	7	7	0	3	2	0	0	0	0	0	0	0	0	19
25 to 29	30	26	29	9	6	8	0	0	0	0	0	0	0	108
30 to 34	22	33	45	20	23	55	2	1	0	0	0	0	0	201
35 to 39	21	26	16	24	25	76	20	5	0	0	0	0	0	213
40 to 44	21	23	13	15	14	58	32	28	3	0	0	0	0	207
45 to 49	8	20	14	13	6	53	29	39	18	3	0	0	0	203
50 to 54	11	12	13	7	14	46	40	36	32	16	2	0	0	229
55 to 59	16	11	13	11	12	45	31	44	33	20	14	3	0	253
60 to 64	6	5	5	8	6	39	15	29	28	12	5	2	0	160
65 to 69	0	1	2	4	5	16	10	18	12	5	5	2	0	80
70 & up	0	0	1	1	0	2	5	9	8	4	2	1	0	33
Total	142	164	151	115	113	398	184	209	134	60	28	8	0	1,706

Though

**MARIN COUNTY
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	63,046	67,456	0	65,734	72,199	0	0	0	0	0	0	0	0	66,059
25 to 29	64,833	77,763	75,112	86,408	95,570	77,094	0	0	0	0	0	0	0	75,120
30 to 34	71,026	84,886	83,839	93,464	83,486	92,316	98,187	93,795	0	0	0	0	0	86,038
35 to 39	76,309	83,187	82,118	94,339	102,416	94,984	106,471	100,863	0	0	0	0	0	92,752
40 to 44	82,191	99,275	105,391	99,718	96,548	101,080	111,593	109,142	110,497	0	0	0	0	101,681
45 to 49	72,996	84,599	90,928	93,034	100,137	100,432	109,719	110,296	113,232	101,493	0	0	0	101,025
50 to 54	102,079	101,670	93,586	109,258	91,447	93,860	108,460	118,179	115,682	115,735	100,316	0	0	105,979
55 to 59	98,201	105,922	93,488	102,758	107,858	106,423	92,823	105,716	92,052	114,135	112,248	146,273	0	102,866
60 to 64	112,438	87,789	82,521	100,863	92,659	100,285	115,041	102,930	101,545	91,601	186,302	81,881	0	103,428
65 to 69	0	132,995	78,531	108,165	120,348	91,367	94,073	101,324	102,746	99,543	124,734	132,744	0	102,134
70 & up	0	0	155,251	56,882	0	57,962	122,333	92,361	89,938	84,628	93,128	89,681	0	94,088
Total	79,085	87,747	86,522	95,696	96,311	97,221	106,373	107,663	103,768	106,239	125,484	119,718	0	97,358

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN COUNTY
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	3	1	0	0	0	0	0	0	0	0	0	0	9
25 to 29	8	9	14	6	10	6	0	0	0	0	0	0	0	53
30 to 34	10	5	0	2	7	29	4	0	0	0	0	0	0	57
35 to 39	1	1	4	3	5	28	16	3	0	0	0	0	0	61
40 to 44	1	0	0	1	1	11	11	30	5	0	0	0	0	60
45 to 49	3	1	2	2	0	2	9	17	16	2	0	0	0	54
50 to 54	2	0	1	1	1	0	5	10	11	12	0	0	0	43
55 to 59	1	0	0	0	0	2	1	3	3	1	0	0	0	11
60 to 64	0	0	0	0	0	1	2	0	1	0	0	0	0	4
65 to 69	0	0	0	1	0	0	0	1	0	0	0	0	0	2
70 & up	0	0	0	0	0	0	1	0	0	0	0	0	1	2
Total	31	19	22	16	24	79	49	64	36	15	0	1		356

**MARIN COUNTY
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	93,272	97,663	100,755	0	0	0	0	0	0	0	0	0	0	95,567
25 to 29	97,942	93,777	98,085	112,156	108,261	118,523	0	0	0	0	0	0	0	103,159
30 to 34	104,863	112,024	0	99,601	106,111	114,249	134,318	0	0	0	0	0	0	112,302
35 to 39	102,734	96,117	96,255	102,160	121,129	114,220	132,271	129,314	0	0	0	0	0	118,007
40 to 44	189,509	0	0	79,997	111,051	106,435	130,134	136,378	138,689	0	0	0	0	129,460
45 to 49	128,035	76,190	122,703	158,423	0	118,314	139,371	136,300	150,398	165,560	0	0	0	140,150
50 to 54	126,516	0	189,509	134,971	124,461	0	135,165	118,281	138,778	147,950	0	0	0	136,339
55 to 59	122,782	0	0	0	0	106,912	90,917	139,145	129,499	128,821	0	0	0	123,843
60 to 64	0	0	0	0	0	125,151	180,209	0	193,017	0	0	0	0	169,646
65 to 69	0	0	0	145,163	0	0	0	90,917	0	0	0	0	0	118,040
70 & up	0	0	0	0	0	0	145,163	0	0	0	0	0	256,298	200,731
Total	108,087	98,390	104,268	115,975	111,106	113,530	134,933	132,618	144,664	149,023	0	256,298		123,044

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	1	0	0	0	0	0	0	0	0	0	0	0	7
25 to 29	1	3	3	0	1	2	0	0	0	0	0	0	0	10
30 to 34	4	1	4	1	0	2	0	0	0	0	0	0	0	12
35 to 39	4	3	3	2	1	0	0	1	0	0	0	0	0	14
40 to 44	3	0	3	1	1	3	4	6	3	0	0	0	0	24
45 to 49	2	1	3	2	4	2	2	6	4	0	0	0	0	26
50 to 54	2	1	0	1	0	0	3	3	4	1	0	0	0	15
55 to 59	3	3	1	0	0	2	1	10	2	3	1	1	1	27
60 to 64	0	0	1	0	2	3	3	9	3	1	1	1	1	24
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	1	0	0	0	1	0	0	0	1	1	0	0	4
Total	25	14	18	7	9	15	13	35	16	6	3	2	163	

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	63,034	40,209	0	0	0	0	0	0	0	0	0	0	0	59,773
25 to 29	85,845	51,376	81,117	0	97,015	62,312	0	0	0	0	0	0	0	70,496
30 to 34	55,377	51,480	78,611	55,127	0	66,084	0	0	0	0	0	0	0	64,561
35 to 39	74,085	75,266	104,431	115,538	60,060	0	0	68,582	0	0	0	0	0	85,368
40 to 44	85,011	0	87,975	81,846	51,480	126,493	82,475	81,587	101,354	0	0	0	0	89,802
45 to 49	58,317	164,653	120,724	121,358	137,773	127,028	72,177	93,319	89,513	0	0	0	0	105,909
50 to 54	94,148	85,488	0	68,582	0	0	112,342	103,036	81,055	106,704	0	0	0	94,628
55 to 59	82,876	99,847	52,000	0	0	104,764	53,520	98,737	91,016	97,603	108,576	68,582	0	92,688
60 to 64	0	0	80,746	0	91,997	116,954	76,163	81,439	83,768	106,704	61,016	68,582	0	86,027
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	72,800	0	0	0	61,016	0	0	0	85,488	81,494	0	0	75,199
Total	71,619	78,150	90,552	97,049	104,849	100,782	84,099	89,927	88,729	98,618	83,695	68,582	87,666	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	1	0	1	0	0	0	0	0	0	0	0	0	0	2
25 to 29	2	0	2	0	0	0	0	0	0	0	0	0	0	4
30 to 34	2	0	0	0	0	6	0	0	0	0	0	0	0	8
35 to 39	1	0	2	0	0	6	3	0	0	0	0	0	0	12
40 to 44	0	0	0	0	0	4	1	2	0	0	0	0	0	7
45 to 49	0	0	0	0	0	2	1	4	1	0	0	0	0	8
50 to 54	0	0	0	0	0	4	0	1	1	1	0	0	0	7
55 to 59	0	0	0	0	0	0	1	1	1	0	0	0	0	3
60 to 64	0	0	0	0	0	1	0	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	6	0	5	0	0	23	6	8	3	1	0	0	0	52

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	87,836	0	98,542	0	0	0	0	0	0	0	0	0	0	93,189
25 to 29	96,931	0	109,025	0	0	0	0	0	0	0	0	0	0	102,978
30 to 34	98,769	0	0	0	0	117,140	0	0	0	0	0	0	0	112,547
35 to 39	113,094	0	115,574	0	0	124,811	138,250	0	0	0	0	0	0	125,654
40 to 44	0	0	0	0	0	127,620	122,988	132,772	0	0	0	0	0	128,430
45 to 49	0	0	0	0	0	153,363	134,553	163,953	128,596	0	0	0	0	153,211
50 to 54	0	0	0	0	0	139,152	0	182,954	185,016	149,979	0	0	0	153,508
55 to 59	0	0	0	0	0	0	155,319	150,037	154,665	0	0	0	0	153,340
60 to 64	0	0	0	0	0	219,731	0	0	0	0	0	0	0	219,731
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	98,722	0	109,548	0	0	132,402	137,935	156,793	156,093	149,979	0	0	0	132,414

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	1	0	0	1	0	0	0	0	0	0	2
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	1	0	0	0	0	1	1	0	0	0	0	3
50 to 54	0	0	1	0	0	0	0	2	0	0	0	0	3
55 to 59	0	0	0	0	0	1	0	0	1	0	0	0	2
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	1	2	0	0	2	1	3	1	0	0	0	10

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	98,721	0	0	58,658	0	0	0	0	0	0	78,689
35 to 39	0	0	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0	0	0	0	0	0
45 to 49	0	56,849	0	0	0	0	162,745	90,691	0	0	0	0	103,429
50 to 54	0	0	159,688	0	0	0	0	112,064	0	0	0	0	127,939
55 to 59	0	0	0	0	0	79,085	0	0	157,128	0	0	0	118,106
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	56,849	129,204	0	0	68,871	162,745	104,940	157,128	0	0	0	108,769

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	1	1	0	0	0	1	0	0	0	0	0	0	0	3
30 to 34	3	1	2	1	0	2	0	0	0	0	0	0	0	9
35 to 39	1	1	2	2	0	0	1	0	0	0	0	0	0	7
40 to 44	0	1	1	0	0	1	0	5	3	0	0	0	0	11
45 to 49	0	1	0	0	0	1	4	15	4	0	0	0	0	25
50 to 54	1	0	0	0	0	0	0	2	6	2	0	0	0	11
55 to 59	0	0	0	0	0	1	0	0	0	1	0	0	0	2
60 to 64	0	0	0	0	0	0	0	0	1	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	6	5	5	3	0	6	5	22	14	3	0	0	0	69

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	108,207	116,040	0	0	0	123,174	0	0	0	0	0	0	0	115,807
30 to 34	108,207	116,593	122,679	123,174	0	122,970	0	0	0	0	0	0	0	117,299
35 to 39	108,207	115,399	122,373	122,563	0	0	128,930	0	0	0	0	0	0	120,344
40 to 44	0	116,593	122,563	0	0	123,407	0	138,396	168,700	0	0	0	0	141,876
45 to 49	0	123,952	0	0	0	122,184	123,880	141,502	166,618	0	0	0	0	141,227
50 to 54	140,158	0	0	0	0	0	0	123,701	141,381	226,275	0	0	0	153,491
55 to 59	0	0	0	0	0	140,156	0	0	0	249,497	0	0	0	194,826
60 to 64	0	0	0	0	0	0	0	0	122,567	0	0	0	0	122,567
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	113,532	117,716	122,534	122,767	0	125,810	124,890	139,178	153,102	234,016	0	0	0	138,224

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	2	1	2	0	0	0	0	0	0	0	0	0	0	5
25 to 29	1	3	2	2	4	2	0	0	0	0	0	0	0	14
30 to 34	4	3	2	3	2	7	0	0	0	0	0	0	0	21
35 to 39	3	1	5	4	2	3	0	2	0	0	0	0	0	20
40 to 44	0	3	4	2	4	9	4	2	0	0	0	0	0	28
45 to 49	2	2	3	0	2	3	7	3	4	0	0	0	0	26
50 to 54	3	1	1	2	0	2	2	4	8	2	1	0	0	26
55 to 59	1	1	1	2	2	3	3	4	5	2	1	0	0	25
60 to 64	0	0	1	1	0	5	1	1	3	1	0	0	0	13
65 to 69	0	0	1	0	0	2	4	2	0	0	0	1	1	10
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	16	15	22	16	16	36	21	18	20	5	2	1	0	188

**CITY OF SAN RAFAEL
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	57,948	63,882	66,300	0	0	0	0	0	0	0	0	0	0	62,476
25 to 29	60,768	66,956	60,908	91,738	76,878	61,071	0	0	0	0	0	0	0	71,184
30 to 34	108,338	74,660	112,515	87,432	62,108	85,760	0	0	0	0	0	0	0	89,009
35 to 39	65,402	156,741	72,359	97,206	73,710	85,182	0	89,532	0	0	0	0	0	84,280
40 to 44	0	58,248	86,707	72,989	106,226	76,733	95,304	52,377	0	0	0	0	0	81,036
45 to 49	60,122	63,258	84,637	0	72,277	114,154	84,810	82,009	78,279	0	0	0	0	82,327
50 to 54	23,426	64,350	73,560	154,645	0	97,046	171,275	62,502	81,014	101,538	93,927	0	0	86,509
55 to 59	95,795	65,384	77,571	93,571	65,686	114,653	106,277	85,378	95,791	78,418	94,361	0	0	91,668
60 to 64	0	0	149,526	180,863	0	109,372	168,864	111,872	76,114	88,320	0	0	0	113,434
65 to 69	0	0	33,384	0	0	86,122	80,876	64,877	0	0	0	0	76,382	73,527
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	68,284	71,764	80,728	103,617	79,998	90,784	101,364	75,722	83,426	89,646	94,144	76,382	0	85,235

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF POLICE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	1	0	1	1	0	0	0	0	0	0	0	0	0	3
25 to 29	5	2	2	2	3	1	0	0	0	0	0	0	0	15
30 to 34	2	3	1	2	0	4	0	0	0	0	0	0	0	12
35 to 39	1	1	2	1	2	1	3	0	0	0	0	0	0	11
40 to 44	0	0	0	0	0	1	0	5	0	0	0	0	0	6
45 to 49	0	0	0	0	0	0	1	5	3	0	0	0	0	9
50 to 54	1	1	0	0	0	0	4	1	2	2	0	0	0	11
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	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	1	0	0	0	0	0	1
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	10	7	6	6	5	7	8	12	5	2	0	0	0	68

**CITY OF SAN RAFAEL
DISTRIBUTION OF POLICE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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	85,283	0	101,071	98,721	0	0	0	0	0	0	0	0	0	95,025
25 to 29	88,695	94,030	104,836	112,855	114,779	124,555	0	0	0	0	0	0	0	102,387
30 to 34	89,651	102,007	96,370	134,269	0	123,630	0	0	0	0	0	0	0	112,063
35 to 39	114,280	118,648	122,162	99,698	121,310	137,794	138,220	0	0	0	0	0	0	124,729
40 to 44	0	0	0	0	0	130,520	0	164,545	0	0	0	0	0	158,874
45 to 49	0	0	0	0	0	0	123,900	130,405	150,331	0	0	0	0	136,324
50 to 54	193,830	193,830	0	0	0	0	143,600	132,722	152,111	157,953	0	0	0	155,901
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	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	125,964	0	0	0	0	0	125,964
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	101,617	115,223	108,573	115,444	117,391	126,770	139,120	144,453	151,043	157,953	0	0	0	125,863

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF FIRE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2021**

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
20 to 24	2	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	2	2	0	2	0	1	0	0	0	0	0	0	0
30 to 34	2	1	0	2	2	6	1	0	0	0	0	0	0
35 to 39	2	0	0	0	0	11	4	1	0	0	0	0	0
40 to 44	1	1	0	1	0	4	5	1	1	0	0	0	0
45 to 49	0	0	0	0	0	0	1	3	2	0	0	0	0
50 to 54	0	0	0	0	0	0	1	4	2	1	0	0	0
55 to 59	0	0	0	0	0	0	0	1	0	0	0	0	0
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	9	4	0	5	2	22	12	10	5	1	0	0	70

**CITY OF SAN RAFAEL
DISTRIBUTION OF FIRE ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2021**

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	81,984	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	88,854	95,729	0	99,870	0	114,277	0	0	0	0	0	0	0
30 to 34	82,461	99,636	0	100,643	109,477	116,953	156,242	0	0	0	0	0	0
35 to 39	82,461	0	0	0	0	132,524	145,779	140,078	0	0	0	0	0
40 to 44	79,381	91,761	0	96,979	0	132,328	152,403	204,066	184,890	0	0	0	0
45 to 49	0	0	0	0	0	0	185,480	158,167	145,721	0	0	0	0
50 to 54	0	0	0	0	0	0	153,551	145,073	149,372	153,609	0	0	0
55 to 59	0	0	0	0	0	0	0	156,772	0	0	0	0	0
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	83,433	95,714	0	99,601	109,477	127,412	153,367	155,571	155,015	153,609	0	0	128,265

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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, 2020	1,727	176	387	241	28	84	1,664	278	4,585
New Entrants	141	0	0	0	0	0	0	0	141
Rehires	9	0	(6)	(3)	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	(68)	(15)	(2)	(11)	0	0	92	4	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(40)	0	0	40	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(1)	0	0	0	0	0	(14)	15	0
Non-Vested Terminations and Death without beneficiary	(48)	(3)	43	0	0	(1)	(35)	0	(44)
Transfers	(2)	16	(7)	(3)	0	0	0	0	4
Beneficiary Deaths	0	0	0	0	0	0	0	(14)	(14)
Domestic Relations Orders	0	0	0	2	0	0	0	0	2
Withdrawals Paid	(12)	(2)	(11)	(4)	0	0	0	0	(29)
Data Corrections	0	(2)	8	(1)	0	0	3	0	8
June 30, 2021	1,706	170	412	261	28	83	1,710	283	4,653

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	361	55	36	26	8	126	269	77	958
New Entrants	33	0	0	0	0	0	0	0	33
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	(18)	(6)	0	(1)	0	0	25	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(9)	(1)	0	10	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(2)	(4)	6	0
Non-Vested Terminations and Death without beneficiary	(6)	0	6	0	0	(1)	(1)	0	(2)
Transfers	(5)	7	0	(1)	0	0	0	0	1
Beneficiary Deaths	0	0	0	0	0	0	0	(3)	(3)
Domestic Relations Orders	0	0	0	1	0	0	0	0	1
Withdrawals Paid	0	0	(2)	(1)	0	0	0	0	(3)
Data Corrections	0	(1)	1	0	0	2	1	(2)	1
June 30, 2021	356	54	41	34	8	125	290	78	986

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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, 2020	155	30	47	19	2	6	135	17	411
New Entrants	29	0	0	0	0	0	0	0	29
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	(10)	(5)	0	0	0	0	15	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	(5)	0	5	0	0	0	0	0	0
Transfers	(4)	4	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	(1)	0	(3)	0	0	0	0	0	(4)
Data Corrections	0	(1)	0	0	0	0	1	0	0
June 30, 2021	163	28	49	20	2	6	151	17	436

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	51	11	1	2	0	18	30	10	123
New Entrants	6	0	0	0	0	0	0	0	6
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	(3)	(1)	0	0	0	0	4	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	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2021	52	10	1	3	0	19	34	8	127

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	2,294	272	471	288	38	234	2,098	382	6,077
New Entrants	209	0	0	0	0	0	0	0	209
Rehires	9	0	(6)	(3)	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	(99)	(27)	(2)	(12)	0	0	136	4	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(51)	(1)	0	52	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(1)	0	0	0	0	(2)	(18)	21	0
Non-Vested Terminations and Death without beneficiary	(59)	(3)	54	0	0	(2)	(36)	0	(46)
Transfers	(11)	27	(7)	(4)	0	0	0	0	5
Beneficiary Deaths	0	0	0	0	0	0	0	(19)	(19)
Domestic Relations Orders	0	0	0	3	0	0	0	0	3
Withdrawals Paid	(13)	(2)	(16)	(5)	0	0	0	0	(36)
Data Corrections	0	(4)	9	(1)	0	2	5	(2)	9
June 30, 2021	2,277	262	503	318	38	233	2,185	386	6,202

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	10	0	1	1	0	0	6	1	19
New Entrants	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	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	(1)	0	(1)
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, 2021	10	0	1	1	0	0	5	1	18

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	67	11	3	1	0	33	58	19	192
New Entrants	5	0	0	0	0	0	0	0	5
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	(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	(1)	1	0
Non-Vested Terminations and Death without beneficiary	(1)	0	1	0	0	0	(1)	0	(1)
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, 2021	69	11	4	1	0	33	58	20	196

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	77	11	4	2	0	33	64	20	211
New Entrants	5	0	0	0	0	0	0	0	5
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	(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	(1)	1	0
Non-Vested Terminations and Death without beneficiary	(1)	0	1	0	0	0	(2)	0	(2)
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, 2021	79	11	5	2	0	33	63	21	214

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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, 2020	205	64	85	46	3	18	278	43	742
New Entrants	23	0	0	0	0	0	0	0	23
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	(10)	(2)	(1)	(2)	0	0	14	1	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(7)	0	0	7	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	(1)	0	0	1	0
Non-Vested Terminations and Death without beneficiary	(13)	(1)	14	0	0	0	(3)	0	(3)
Transfers	(10)	17	(4)	(2)	0	0	0	0	1
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	0	0	(5)	(2)	0	0	0	0	(7)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2021	188	78	89	48	2	18	289	43	755

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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, 2020	60	14	13	20	0	43	80	24	254
New Entrants	3	0	0	0	0	0	0	0	3
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)	(2)	0	(1)	0	0	5	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)	(3)	4	0
Non-Vested Terminations and Death without beneficiary	0	0	0	0	0	(1)	0	0	(1)
Transfers	7	2	0	(2)	0	0	0	0	7
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	0	0	(1)	0	0	0	0	0	(1)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2021	68	14	11	18	0	41	82	26	260

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	67	5	10	5	0	24	86	22	219
New Entrants	9	0	0	0	0	0	0	0	9
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	(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	(2)	0	0	2	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	(2)	0	1	0	0	0	(2)	0	(3)
Transfers	0	1	0	(1)	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, 2021	70	6	10	6	0	24	86	22	224

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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, 2020	332	83	108	71	3	85	444	89	1,215
New Entrants	35	0	0	0	0	0	0	0	35
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	(14)	(4)	(1)	(3)	0	0	21	1	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(10)	0	0	10	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	(1)	(1)	(3)	5	0
Non-Vested Terminations and Death without beneficiary	(15)	(1)	15	0	0	(1)	(5)	0	(7)
Transfers	(3)	20	(4)	(5)	0	0	0	0	8
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	0	0	(7)	(2)	0	0	0	0	(9)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2021	326	98	110	72	2	83	457	91	1,239

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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	61	3	5	0	69
Option 2 - J&S 100%	86	25	11	7	129
Option 3 - J&S 50%	10	2	0	1	13
Option 4	1	0	0	0	1
Unmodified Benefit Option	1,552	260	135	25	1,972
Unmodified Option - Service Connected Disability (missing)	0	0	0	1	1
	0	0	0	0	0
Total Service Retired	1,710	290	151	34	2,185
Ordinary Disability					
Option 1 - Cash Refund Annuity	3	0	0	0	3
Option 2 - J&S 100%	3	1	0	0	4
Option 3 - J&S 50%	0	0	0	0	0
Option 4	0	0	0	0	0
Unmodified Benefit Option	22	7	2	0	31
Unmodified Option - Service Connected Disability (missing)	0	0	0	0	0
	0	0	0	0	0
Total Ordinary Disability	28	8	2	0	38
Duty Disability					
Option 1 - Cash Refund Annuity	1	2	1	0	4
Option 2 - J&S 100%	0	1	0	1	2
Option 3 - J&S 50%	1	1	0	0	2
Option 4	0	0	0	0	0
Unmodified Benefit Option	1	1	0	0	2
Unmodified Option - Service Connected Disability (missing)	80	120	5	18	223
	0	0	0	0	0
Total Duty Disability	83	125	6	19	233
Total	1,821	423	159	53	2,456

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

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	2	2
Option 3 - J&S 50%	1	0	1
Option 4	0	0	0
Unmodified Benefit Option	4	56	60
Unmodified Option - Service Connected Disability	0	0	0
(missing)	0	0	0
Total Service Retired	5	58	63
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	0	0	0
(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	0	0
Unmodified Option - Service Connected Disability	0	33	33
(missing)	0	0	0
Total Duty Disability	0	33	33
Total	5	91	96

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Benefit Form Elections: City of San Rafael				
	Miscellaneous	Police	Fire	Total
Service Retired				
Option 1 - Cash Refund Annuity	7	1	0	8
Option 2 - J&S 100%	28	12	6	46
Option 3 - J&S 50%	2	0	1	3
Option 4	0	0	0	0
Unmodified Benefit Option	252	68	79	399
Unmodified Option - Service Connected Disability (missing)	0	0	0	0
	0	1	0	1
Total Service Retired	289	82	86	457
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 (missing)	0	0	0	0
	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 (missing)	16	40	24	80
	0	0	0	0
Total Duty Disability	18	41	24	83
Total	309	123	110	542

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	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	2	\$56,346	0	\$0	0	\$0	2	\$56,346
50 to 54	22	\$17,340	44	\$58,664	1	\$15,774	3	\$44,592	70	\$44,461
55 to 59	97	\$27,735	52	\$65,703	10	\$14,803	8	\$55,840	167	\$40,129
60 to 64	204	\$36,368	63	\$71,952	26	\$47,949	9	\$86,693	302	\$46,288
65 to 69	318	\$42,762	55	\$81,734	44	\$39,283	9	\$69,680	426	\$48,003
70 to 74	436	\$41,266	30	\$79,037	31	\$39,658	2	\$99,229	499	\$43,669
75 to 79	289	\$43,902	27	\$71,488	27	\$36,216	2	\$60,505	345	\$45,556
80 to 84	183	\$44,602	14	\$113,254	10	\$54,337	1	\$171,585	208	\$50,302
85 to 89	106	\$33,865	2	\$30,199	2	\$30,172	0	\$0	110	\$33,731
90 to 94	42	\$44,521	1	\$68,605	0	\$0	0	\$0	43	\$45,081
95+	13	\$24,902	0	\$0	0	\$0	0	\$0	13	\$24,902
<Total>	1,710	\$40,184	290	\$72,947	151	\$39,403	34	\$72,909	2,185	\$44,988

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	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	\$53,257	0	\$0	0	\$0	1	\$53,257
40 to 44	0	\$0	4	\$51,552	0	\$0	0	\$0	4	\$51,552
45 to 49	2	\$33,142	5	\$54,516	1	\$16,196	1	\$74,878	9	\$47,771
50 to 54	3	\$26,238	13	\$55,034	0	\$0	2	\$61,011	18	\$50,899
55 to 59	6	\$30,449	26	\$55,996	1	\$49,329	1	\$62,864	34	\$51,494
60 to 64	12	\$41,389	19	\$73,748	1	\$67,210	3	\$65,117	35	\$61,727
65 to 69	20	\$34,804	23	\$76,458	0	\$0	4	\$70,170	47	\$58,198
70 to 74	15	\$42,818	8	\$62,653	0	\$0	3	\$54,691	26	\$50,291
75 to 79	14	\$37,476	14	\$74,300	3	\$25,648	4	\$68,270	35	\$54,711
80 to 84	8	\$69,453	8	\$49,026	0	\$0	1	\$43,149	17	\$58,293
85 to 89	3	\$29,698	2	\$42,551	0	\$0	0	\$0	5	\$34,839
90 to 94	0	\$0	1	\$37,692	0	\$0	0	\$0	1	\$37,692
95+	0	\$0	1	\$35,811	0	\$0	0	\$0	1	\$35,811
<Total>	83	\$40,146	125	\$63,643	6	\$34,947	19	\$64,005	233	\$54,563

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	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	\$2,481	0	\$0	0	\$0	1	\$2,481
40 to 44	1	\$25,277	1	\$38,745	0	\$0	0	\$0	2	\$32,011
45 to 49	1	\$2,430	0	\$0	0	\$0	0	\$0	1	\$2,430
50 to 54	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
55 to 59	0	\$0	3	\$42,936	1	\$38,849	0	\$0	4	\$41,915
60 to 64	1	\$23,992	1	\$61,732	0	\$0	0	\$0	2	\$42,862
65 to 69	7	\$26,552	1	\$100,091	0	\$0	0	\$0	8	\$35,745
70 to 74	5	\$19,398	1	\$28,359	1	\$14,985	0	\$0	7	\$20,048
75 to 79	9	\$22,141	0	\$0	0	\$0	0	\$0	9	\$22,141
80 to 84	2	\$17,910	0	\$0	0	\$0	0	\$0	2	\$17,910
85 to 89	1	\$3,164	0	\$0	0	\$0	0	\$0	1	\$3,164
90 to 94	1	\$63,138	0	\$0	0	\$0	0	\$0	1	\$63,138
95+	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	28	\$22,712	8	\$45,027	2	\$26,917	0	\$0	38	\$27,631

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	Number	Average Annual Benefit		
0 to 24	1	\$16,473	0	\$0	0	\$0	0	\$0	1	\$16,473
25 to 29	1	\$47,610	0	\$0	0	\$0	0	\$0	1	\$47,610
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	2	\$19,772	1	\$32,351	0	\$0	0	\$0	3	\$23,965
45 to 49	4	\$21,405	0	\$0	1	\$16,196	1	\$49,554	6	\$25,228
50 to 54	5	\$16,499	5	\$28,404	2	\$17,558	0	\$0	12	\$21,636
55 to 59	15	\$19,130	12	\$55,338	1	\$14,226	1	\$38,679	29	\$34,617
60 to 64	22	\$23,114	9	\$37,862	3	\$47,512	2	\$68,881	36	\$31,377
65 to 69	35	\$26,104	11	\$46,486	1	\$39,045	1	\$66,425	48	\$31,885
70 to 74	58	\$27,894	12	\$56,193	3	\$25,897	1	\$28,091	74	\$32,405
75 to 79	38	\$28,204	12	\$50,289	3	\$30,742	1	\$55,806	54	\$33,764
80 to 84	41	\$27,726	7	\$35,129	2	\$17,533	1	\$42,834	51	\$28,639
85 to 89	36	\$32,431	7	\$35,622	1	\$5,111	0	\$0	44	\$32,318
90 to 94	18	\$32,615	1	\$25,520	0	\$0	0	\$0	19	\$32,241
95+	7	\$28,777	1	\$62,218	0	\$0	0	\$0	8	\$32,957
<Total>	283	\$27,432	78	\$45,530	17	\$26,895	8	\$52,394	386	\$31,583

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	\$130,447	1	\$130,447
50 to 54	0	\$0	4	\$87,447	4	\$87,447
55 to 59	1	\$11,131	5	\$173,627	6	\$146,544
60 to 64	1	\$8,834	9	\$84,913	10	\$77,305
65 to 69	2	\$52,887	11	\$134,265	13	\$121,746
70 to 74	0	\$0	12	\$113,053	12	\$113,053
75 to 79	1	\$114,479	11	\$118,892	12	\$118,524
80 to 84	0	\$0	5	\$87,863	5	\$87,863
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>	5	\$48,044	58	\$115,401	63	\$110,055

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	1	\$64,380	1	\$64,380
45 to 49	0	\$0	0	\$0	0	\$0
50 to 54	0	\$0	2	\$178,151	2	\$178,151
55 to 59	0	\$0	5	\$88,062	5	\$88,062
60 to 64	0	\$0	0	\$0	0	\$0
65 to 69	0	\$0	6	\$79,673	6	\$79,673
70 to 74	0	\$0	5	\$92,558	5	\$92,558
75 to 79	0	\$0	12	\$76,309	12	\$76,309
80 to 84	0	\$0	2	\$66,723	2	\$66,723
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	33	\$86,393	33	\$86,393

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	0	\$0	0	\$0
50 to 54	0	\$0	1	\$83,210	1	\$83,210
55 to 59	1	\$12,990	3	\$23,794	4	\$21,093
60 to 64	0	\$0	3	\$43,057	3	\$43,057
65 to 69	0	\$0	2	\$44,636	2	\$44,636
70 to 74	0	\$0	8	\$44,376	8	\$44,376
75 to 79	0	\$0	3	\$55,876	3	\$55,876
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>	1	\$12,990	20	\$44,783	21	\$43,269

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	3	\$11,364	6	\$21,607	4	\$91,873	13	\$40,864
55 to 59	30	\$40,029	14	\$64,227	9	\$84,446	53	\$53,963
60 to 64	46	\$46,700	14	\$68,255	22	\$96,964	82	\$63,866
65 to 69	70	\$44,681	14	\$81,136	17	\$130,095	101	\$64,111
70 to 74	68	\$48,227	19	\$117,534	14	\$115,436	101	\$70,581
75 to 79	38	\$36,850	11	\$67,353	7	\$89,652	56	\$49,442
80 to 84	16	\$23,210	3	\$37,258	7	\$78,089	26	\$39,606
85 to 89	11	\$22,142	1	\$118,135	4	\$85,878	16	\$44,076
90 to 94	4	\$25,419	0	\$0	1	\$51,088	5	\$30,553
95+	3	\$2,071	0	\$0	1	\$62,781	4	\$17,249
<Total>	289	\$41,223	82	\$77,125	86	\$101,395	457	\$58,988

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	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	6	\$65,400	0	\$0	6	\$65,400
45 to 49	0	\$0	4	\$66,468	0	\$0	4	\$66,468
50 to 54	2	\$21,478	4	\$54,775	1	\$55,269	7	\$45,332
55 to 59	2	\$42,155	3	\$65,002	2	\$79,501	7	\$62,617
60 to 64	1	\$11,488	4	\$60,218	2	\$137,374	7	\$75,301
65 to 69	2	\$16,941	4	\$102,264	6	\$108,385	12	\$91,104
70 to 74	4	\$36,910	8	\$74,651	6	\$95,772	18	\$73,304
75 to 79	5	\$35,936	3	\$59,178	7	\$98,001	15	\$69,548
80 to 84	2	\$31,828	5	\$38,213	0	\$0	7	\$36,389
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>	18	\$31,312	41	\$65,564	24	\$99,999	83	\$68,093

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	0	\$0	0	\$0	0	\$0	0	\$0
75 to 79	1	\$17,943	0	\$0	0	\$0	1	\$17,943
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	0	\$0	0	\$0	0	\$0	0	\$0
95+	1	\$9,228	0	\$0	0	\$0	1	\$9,228
<Total>	2	\$13,586	0	\$0	0	\$0	2	\$13,586

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	1	\$18,043	0	\$0	0	\$0	1	\$18,043
50 to 54	2	\$11,180	2	\$33,163	1	\$16,555	5	\$21,048
55 to 59	5	\$15,076	3	\$40,829	1	\$19,824	9	\$24,188
60 to 64	4	\$20,350	3	\$23,755	3	\$32,519	10	\$25,022
65 to 69	6	\$16,550	5	\$26,314	4	\$74,709	15	\$35,313
70 to 74	3	\$42,915	6	\$40,901	1	\$107,793	10	\$48,194
75 to 79	8	\$31,773	2	\$42,318	3	\$31,710	13	\$33,381
80 to 84	4	\$16,410	2	\$76,700	3	\$37,888	9	\$36,967
85 to 89	4	\$30,516	3	\$54,891	4	\$31,000	11	\$37,340
90 to 94	6	\$26,617	0	\$0	2	\$34,479	8	\$28,582
95+	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	43	\$23,880	26	\$39,991	22	\$42,833	91	\$33,065

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX A – MEMBERSHIP INFORMATION

Plan	Retirement Eligibility								
	Number Reaching Service Retirement Eligibility								
	As Defined in Section 1.1 in Year(s)								
	Current Actives	0	1	2	3	4	5	6-10	Total
County									
Miscellaneous Tier 1	2	2	0	0	0	0	0	0	2
Miscellaneous Tier 2	26	26	0	0	0	0	0	0	26
Miscellaneous Tier 3	537	374	24	22	17	15	14	54	520
Miscellaneous Tier 3A	70	19	7	5	0	4	4	9	48
Miscellaneous Tier 4	136	8	12	13	6	10	5	39	93
Miscellaneous Tier 5	935	84	31	40	39	47	37	123	401
Safety Tier 1A	1	1	0	0	0	0	0	0	1
Safety Tier 2A	41	23	1	2	0	3	1	9	39
Safety Tier 2B	159	58	15	11	12	8	7	29	140
Safety Tier 3	155	2	0	2	3	1	5	6	19
Total County	2,062	597	90	95	77	88	73	269	1,289
Courts									
Courts Tier 1	0	0	0	0	0	0	0	0	0
Courts Tier 2	1	1	0	0	0	0	0	0	1
Courts Tier 3	51	33	3	0	4	0	0	10	50
Courts Tier 4	4	2	0	0	0	0	0	2	4
Courts Tier 5	46	5	0	0	0	4	3	7	19
Total Courts	102	41	3	0	4	4	3	19	74
Special Districts									
South Marin Fire Miscellaneous	7	0	0	0	0	0	1	1	2
South Marin Fire Safety	52	14	2	1	1	3	2	7	30
Mosquito District	33	13	2	0	1	1	2	7	26
LAFCO	3	0	0	0	0	1	0	0	1
Tamalpais CSD	11	2	1	0	0	0	0	4	7
Marin CSD	7	0	0	0	1	3	1	1	6
Total Special Districts	113	29	5	1	3	8	6	20	72
Total County and Special Districts	2,277	667	98	96	84	100	82	308	1,435
Novato									
Miscellaneous	10	3	0	0	0	2	2	1	8
Safety	69	25	6	2	10	2	1	5	51
Total Novato	79	28	6	2	10	4	3	6	59
San Rafael									
Miscellaneous Tier 1	70	45	5	3	1	4	1	8	67
Miscellaneous Tier 2	15	2	3	1	0	0	1	4	11
Miscellaneous Tier 3	103	9	1	2	6	4	8	11	41
Fire Tier 1	28	12	2	1	1	0	4	8	28
Fire Tier 2	12	0	0	0	0	0	0	4	4
Fire Tier 3	30	0	0	0	0	0	0	4	4
Safety Tier 1	27	16	3	1	4	0	1	2	27
Safety Tier 2	5	0	0	0	0	0	0	1	1
Safety Tier 3	36	0	0	0	0	1	1	0	2
Total San Rafael	326	84	14	8	12	9	16	42	185

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the actuarial valuation as of June 30, 2021 are based on an experience study covering the period from July 1, 2017 through June 30, 2020, as adopted by the Board at a meeting on January 13, 2021. Please refer to the experience study report for the rationale for each assumption.

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 (9 years remaining as of June 30, 2021), except for the additional UAL attributable to the extraordinary loss from 2008-2009, which is being amortized over a separate closed period (17 years as of June 30, 2021). Surplus Funding is only amortized if the Plan's Funded Ratio exceeds 120% and other conditions are met.

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 and four-year phase-out (three/two 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

1. Rate of Return

Assets are assumed to earn 6.75% net of investment expenses.

2. Administrative Expenses

Administrative expenses are assumed to be \$5,137,500 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 2.75% per year.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

3. Cost-of-Living

The cost-of-living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.50% per year.

4. Post Retirement COLA

COLAs are assumed at the rate of 2.5% for members with a 4% COLA cap, 2.4% for members with a 3% COLA cap, and 1.9% for members with a 2% COLA cap.

5. 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.

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

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is reflected in the valuation to project compensation and benefits. The limit is expected to increase by 2.50% in future years.

7. 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 2.50% in future years.

8. Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 6.75%.

9. 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
Non-PEPRA	
Marin County	1.50%
Marin Courts	1.50%
Marin Special Districts	1.50%
Novato Fire Protection District	4.00%
City of San Rafael	1.50%
PEPRA	1.50%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

10. 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 two years younger than their spouses.

Percentage Married	
Class and Gender	Percentage
Miscellaneous Males	75%
Miscellaneous Females	55%
Safety Males	85%
Safety Females	55%

11. Increases in Pay

Wage inflation component: 3.00%

Additional longevity and promotion component:

Service	Miscellaneous	Safety
0	6.00%	5.00%
1	6.00%	5.00%
2	5.00%	4.50%
3	4.00%	4.00%
4	3.00%	3.50%
5	2.25%	3.00%
6	1.75%	2.50%
7	1.40%	2.20%
8	1.20%	1.90%
9	1.00%	1.70%
10	0.85%	1.50%
11	0.75%	1.40%
12	0.75%	1.30%
13+	0.75%	1.25%

12. Overall Pensionable Compensation Growth

Overall pensionable compensation – used in the calculation of the UAL amortization payments – is expected to increase by 2.75% in future years.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

13. Rates of Termination (All Types)

Rates of termination are shown in the following tables below, with sample rates shown for those with at least five years of service. Note that termination rates do not apply once a member is eligible for retirement.

Service	Miscellaneous	Service	Miscellaneous
0	14.00%	11	4.75%
1	13.00%	12	4.50%
2	12.00%	13	4.25%
3	9.50%	14	4.00%
4	8.25%	15	3.50%
5	7.50%	16	3.25%
6	6.75%	17	3.00%
7	6.25%	18	2.75%
8	5.75%	19	2.50%
9	5.25%	20+	0.00%
10	5.00%		

Service	Safety
0	9.00%
1	7.00%
2	5.00%
3	5.00%
4	5.00%

Age	Safety 5-19 Years of Service
20	2.06%
25	2.24%
30	3.53%
35	3.41%
40	1.14%
45	1.70%
50	0.27%
55	0.09%
60	0.00%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

14. Withdrawal, Reciprocal Transfers, and Vested Termination

The following rates apply to active members who terminate their employment. Members, who withdraw their member contributions, forfeit entitlement to future Plan benefits.

Service	Miscellaneous			Safety		
	Withdrawal	Reciprocal	Vested Term	Withdrawal	Reciprocal	Vested Term
0	40.00%	24.00%	36.00%	20.00%	68.00%	12.00%
1	35.00%	26.00%	39.00%	20.00%	68.00%	12.00%
2	20.00%	32.00%	48.00%	20.00%	68.00%	12.00%
3	20.00%	32.00%	48.00%	20.00%	68.00%	12.00%
4	20.00%	32.00%	48.00%	20.00%	68.00%	12.00%
5	10.00%	36.00%	54.00%	20.00%	68.00%	12.00%
6	10.00%	36.00%	54.00%	20.00%	68.00%	12.00%
7	10.00%	36.00%	54.00%	20.00%	68.00%	12.00%
8	10.00%	36.00%	54.00%	20.00%	68.00%	12.00%
9	10.00%	36.00%	54.00%	20.00%	68.00%	12.00%
10+	10.00%	36.00%	54.00%	15.00%	72.25%	12.75%

15. Reciprocal Transfers and Vested Termination Deferral Age

Miscellaneous members who terminate employment and do not withdraw their member contributions are assumed to retire at age 59. Safety members who terminate employment and do not withdraw their member contributions are assumed to retire at age 50 if their benefits are calculated under CERL section 31664.1 and are not currently working in reciprocal service, age 53 if their benefits are calculated under CERL section 31664.1 and they are in reciprocal service, and age 55 otherwise.

16. Projected Pay for Reciprocal Transfers

Members who terminate and transfer to a reciprocal employer are expected to have their wages increase from their date of termination to their assumed retirement age by 3.00% wage inflation and either 0.75% for Miscellaneous members or 1.25% for Safety members.

Members who have terminated and transferred to a reciprocal employer or have transferred within MCERA are assumed to have the same salary increases, and are exposed to the same rates of mortality and retirement as if they were active. No other decrements are assumed.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

17. Rates of Disability

The rates of disability for Miscellaneous members are based on the 2017 CalPERS Public Agency Miscellaneous Ordinary Disability rates for males and females without adjustment.

The rates of disability for Safety members are based on adjusted 2020 CalPERS Peace Officers and Fire Fighter (POFF) Industrial and Ordinary Disability rates (multiplied by 120%).

75% of all Miscellaneous and 100% of all Safety disabilities are assumed to be service-connected. Sample *service-connected* disability rates of active participants are shown below.

Age	Miscellaneous		Safety
	Male	Female	
20	0.0128%	0.0075%	0.0828%
25	0.0128%	0.0075%	0.1404%
30	0.0143%	0.0180%	0.2364%
35	0.0293%	0.0533%	0.3828%
40	0.0765%	0.1013%	0.6048%
45	0.1133%	0.1410%	0.9192%
50	0.1185%	0.1493%	1.3500%
55	0.1185%	0.1119%	1.9020%
60	0.1148%	0.0780%	2.5848%
65	0.0960%	0.0660%	3.4164%

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

Age	Miscellaneous		Safety
	Male	Female	
20	0.0042%	0.0025%	0.0000%
25	0.0042%	0.0025%	0.0000%
30	0.0047%	0.0600%	0.0000%
35	0.0097%	0.0178%	0.0000%
40	0.0255%	0.0338%	0.0000%
45	0.0377%	0.0470%	0.0000%
50	0.0395%	0.0498%	0.0000%
55	0.0395%	0.0373%	0.0000%
60	0.0382%	0.0263%	0.0000%
65	0.0320%	0.0220%	0.0000%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

18. Rates of Mortality for Active Lives

Mortality rates for Miscellaneous active members are based on the sex distinct Public General 2010 Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2020, with no adjustments.

Mortality rates for Safety active members are based on the sex distinct Public Safety 2010 Above-Median Income Employee Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2020, with no adjustments. 10% of Safety member active deaths are assumed to occur in the line of duty.

19. Rates of Mortality for Retired Healthy Lives

Mortality rates for Miscellaneous retired members are based on the sex distinct Public General 2010 Healthy Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2020, with no adjustments.

Mortality rates for Safety retired members are based on the sex distinct Public Safety 2010 Above-Median Income Healthy Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2020, with no adjustments.

20. Rates of Mortality for Retired Disabled Lives

Rates of mortality for Miscellaneous disabled members are based on the sex distinct Public General 2010 Disabled Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2020, with no adjustments.

Rates of mortality for Safety disabled members are based on the sex distinct Public Safety 2010 Disabled Retiree Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2020, adjusted by 95% for males with no adjustment for females.

21. Rates of Mortality for Beneficiaries

Rates of mortality for members' beneficiaries once their benefits commence are given by sex distinct Public 2010 Contingent Survivor Mortality Table, using General 2010 Healthy Retiree Mortality Table before age 45, with generational mortality improvements projected from 2010 using Projection Scale MP-2020, adjusted by 105% for females and no adjustments to males. Prior to the death of the member, the mortality of the beneficiaries is assumed to use the same sex distinct assumptions as the retired healthy members.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

22. Mortality Improvement

Mortality is assumed to improve in future years in accordance with the MP-2020 generational improvement tables.

23. Rates of Retirement

Rates of retirement are based on age according to the following table below and on the following pages.

Miscellaneous Rates

Age	<20 Years of Service	20-29 Years of Service	30+ Years of Service
50-52	3.00%	3.00%	3.00%
53	5.00%	5.00%	10.00%
54	5.00%	5.00%	15.00%
55-59	5.00%	10.00%	15.00%
60	10.00%	10.00%	30.00%
61	10.00%	10.00%	30.00%
62	12.00%	20.00%	30.00%
63	14.00%	20.00%	30.00%
64	16.00%	20.00%	30.00%
65	18.00%	20.00%	30.00%
66-69	20.00%	30.00%	30.00%
70-79	25.00%	30.00%	30.00%
80	100.00%	100.00%	100.00%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

PEPRA Miscellaneous Rates

2017 CalPERS 2.0% @ 62 Public Agency			
Age	Miscellaneous Sample Rates		
	15 Years of Service	20 Years of Service	25 Years of Service
52	1.20%	1.50%	1.90%
55	2.80%	3.60%	6.10%
60	7.10%	9.10%	11.10%
61	7.90%	10.00%	12.10%
62	10.40%	13.40%	16.40%
63	13.40%	16.30%	19.20%
64	12.90%	15.80%	18.70%
65	17.30%	20.60%	23.90%
66	21.20%	25.20%	29.20%
67	21.20%	25.20%	29.20%
68-74	19.30%	22.90%	26.50%
75+	100.00%	100.00%	100.00%

Non-PEPRA Safety Rates

Age	3% @ 50	3% @ 50	3% @ 50
	<20 Years of Service	20-29 Years of Service	30+ Years of Service
40-44	0.00%	3.00%	3.00%
45-48	0.00%	3.00%	3.00%
49	0.00%	15.00%	15.00%
50	5.00%	15.00%	50.00%
51-52	5.00%	10.00%	20.00%
53-54	10.00%	10.00%	20.00%
55	10.00%	25.00%	50.00%
56	10.00%	30.00%	50.00%
57	10.00%	35.00%	50.00%
58	10.00%	40.00%	50.00%
59	10.00%	45.00%	50.00%
60-64	50.00%	50.00%	50.00%
65	100.00%	100.00%	100.00%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

2017 CalPERS 3.0% @ 55 Public Agency			
Age	Safety Police Sample Rates		
	15 Years of Service	20 Years of Service	25 Years of Service
50	3.50%	3.50%	7.00%
51	2.80%	2.90%	6.50%
52	3.20%	3.90%	6.60%
53	2.80%	4.30%	7.50%
54	3.80%	7.40%	11.80%
55	7.00%	12.00%	17.50%
56	6.00%	11.00%	16.50%
57	6.00%	11.00%	16.50%
58	8.00%	10.00%	18.50%
59	9.50%	13.00%	18.50%
60	15.00%	15.00%	18.50%
61	12.00%	12.00%	16.00%
62	15.00%	15.00%	20.00%
63	15.00%	15.00%	20.00%
64	15.00%	15.00%	17.50%
65	100.00%	100.00%	100.00%

PEPRA Safety Rates

2017 CalPERS 2.7% @ 57 Public Agency			
Age	Safety Police Sample Rates		
	15 Years of Service	20 Years of Service	25 Years of Service
50	5.00%	5.00%	5.00%
51	4.00%	4.00%	5.75%
52	3.80%	3.80%	5.80%
53	3.80%	3.80%	7.74%
54	3.80%	4.37%	9.31%
55	6.84%	9.12%	13.40%
56	6.27%	8.36%	12.28%
57	6.00%	8.00%	11.75%
58	8.00%	8.80%	13.75%
59	8.00%	9.20%	14.00%
60	15.00%	15.00%	15.00%
61	14.40%	14.40%	14.40%
62	15.00%	15.00%	15.00%
63	15.00%	15.00%	15.00%
64	15.00%	15.00%	15.00%
65	100.00%	100.00%	100.00%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

24. Changes Since Last Valuation

No assumptions have been changed since the previous valuation.

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 (\$128,059 for 2021) 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 (\$153,671 for 2021). 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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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 6.75%.

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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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 for Non-PEPRA Members may not exceed 100%.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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 ²	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%
Novato Safety Tier 3A	Safety	3	2	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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	1.00%
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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Safety

Age	Safety 2% at Age 50 CERL §: 31664		Safety 3% at Age 50 CERL §: 31664.1		Safety 3% at Age 55 CERL §: 31664.2		Safety 2.7% at Age 57 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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

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.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Nonservice-Connected Disability

Eligibility

Members are eligible 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.

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

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 Nonservice-Connected Disability Retirement 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).

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

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.)

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021

APPENDIX C – SUMMARY OF PLAN PROVISIONS

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 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
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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.

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.

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.

APPENDIX D – GLOSSARY

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, 2021**

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 and 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 6.75% per annum, an average salary increase of 3.00% per year (plus service-based increases for merit/longevity), and the Pub-2010 General and above-median Safety mortality rates, projected from 2010 to 2044 for Miscellaneous members and 2047 for Safety members using Scale MP-2020.

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). 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 4.4% of the total unadjusted contribution rate.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous and Courts: Tier 1 (31676.14)				
Entry Age	Basic	COL	COL Limited to 1.58%	Total
20	7.02%	2.10%	1.58%	8.60%
21	7.04%	2.15%	1.58%	8.62%
22	7.07%	2.21%	1.58%	8.65%
23	7.08%	2.27%	1.58%	8.66%
24	7.08%	2.33%	1.58%	8.66%
25	7.08%	2.39%	1.58%	8.66%
26	7.08%	2.44%	1.58%	8.66%
27	7.07%	2.51%	1.58%	8.65%
28	7.04%	2.56%	1.58%	8.62%
29	7.02%	2.62%	1.58%	8.60%
30	6.99%	2.67%	1.58%	8.57%
31	7.11%	2.73%	1.58%	8.69%
32	7.23%	2.77%	1.58%	8.81%
33	7.35%	2.83%	1.58%	8.93%
34	7.47%	2.89%	1.58%	9.05%
35	7.60%	2.95%	1.58%	9.18%
36	7.72%	3.02%	1.58%	9.30%
37	7.86%	3.08%	1.58%	9.44%
38	7.99%	3.14%	1.58%	9.57%
39	8.13%	3.21%	1.58%	9.71%
40	8.27%	3.27%	1.58%	9.85%
41	8.41%	3.33%	1.58%	9.99%
42	8.56%	3.38%	1.58%	10.14%
43	8.71%	3.40%	1.58%	10.29%
44	8.86%	3.44%	1.58%	10.44%
45	9.03%	3.47%	1.58%	10.61%
46	9.20%	3.51%	1.58%	10.78%
47	9.37%	3.53%	1.58%	10.95%
48	9.55%	3.55%	1.58%	11.13%
49	9.74%	3.58%	1.58%	11.32%
50	9.93%	3.60%	1.58%	11.51%
51	10.11%	3.60%	1.58%	11.69%
52	10.29%	3.59%	1.58%	11.87%
53	10.46%	3.55%	1.58%	12.04%
54	10.60%	3.50%	1.58%	12.18%
55	10.70%	3.42%	1.58%	12.28%
56	10.73%	3.33%	1.58%	12.31%
57	10.68%	3.23%	1.58%	12.26%
58	10.56%	3.10%	1.58%	12.14%
59+	10.45%	2.99%	1.58%	12.03%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous and Courts: Tier 2 (31676.1)				
Entry	COL Limited			Total
Age	Basic	COL	to 1.58%	
20	6.70%	1.17%	1.17%	7.87%
21	6.72%	1.19%	1.19%	7.91%
22	6.74%	1.22%	1.22%	7.96%
23	6.76%	1.25%	1.25%	8.01%
24	6.76%	1.28%	1.28%	8.04%
25	6.75%	1.32%	1.32%	8.07%
26	6.75%	1.35%	1.35%	8.10%
27	6.74%	1.38%	1.38%	8.12%
28	6.72%	1.42%	1.42%	8.14%
29	6.70%	1.45%	1.45%	8.15%
30	6.67%	1.48%	1.48%	8.15%
31	6.79%	1.52%	1.52%	8.31%
32	6.90%	1.56%	1.56%	8.46%
33	7.03%	1.60%	1.58%	8.61%
34	7.20%	1.64%	1.58%	8.78%
35	7.33%	1.67%	1.58%	8.91%
36	7.45%	1.71%	1.58%	9.03%
37	7.58%	1.76%	1.58%	9.16%
38	7.71%	1.81%	1.58%	9.29%
39	7.84%	1.85%	1.58%	9.42%
40	7.97%	1.90%	1.58%	9.55%
41	8.11%	1.93%	1.58%	9.69%
42	8.26%	1.96%	1.58%	9.84%
43	8.40%	1.99%	1.58%	9.98%
44	8.55%	2.02%	1.58%	10.13%
45	8.70%	2.04%	1.58%	10.28%
46	8.87%	2.07%	1.58%	10.45%
47	9.04%	2.09%	1.58%	10.62%
48	9.21%	2.11%	1.58%	10.79%
49	9.36%	2.13%	1.58%	10.94%
50	9.53%	2.15%	1.58%	11.11%
51	9.68%	2.16%	1.58%	11.26%
52	9.81%	2.17%	1.58%	11.39%
53	9.92%	2.17%	1.58%	11.50%
54	9.98%	2.16%	1.58%	11.56%
55	9.98%	2.13%	1.58%	11.56%
56	9.92%	2.08%	1.58%	11.50%
57	9.81%	2.03%	1.58%	11.39%
58	10.12%	1.96%	1.58%	11.70%
59+	10.45%	1.90%	1.58%	12.03%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	6.75%	1.41%	1.41%	1.14%	9.30%
21	6.78%	1.45%	1.45%	1.14%	9.37%
22	6.79%	1.48%	1.48%	1.14%	9.41%
23	6.81%	1.52%	1.52%	1.14%	9.47%
24	6.80%	1.56%	1.56%	1.14%	9.50%
25	6.81%	1.59%	1.58%	1.14%	9.53%
26	6.84%	1.62%	1.58%	1.14%	9.56%
27	6.86%	1.65%	1.58%	1.14%	9.58%
28	6.84%	1.68%	1.58%	1.14%	9.56%
29	6.82%	1.72%	1.58%	1.14%	9.54%
30	6.79%	1.75%	1.58%	1.14%	9.51%
31	6.91%	1.79%	1.58%	1.14%	9.63%
32	7.02%	1.82%	1.58%	1.14%	9.74%
33	7.14%	1.86%	1.58%	1.14%	9.86%
34	7.26%	1.90%	1.58%	1.14%	9.98%
35	7.38%	1.94%	1.58%	1.14%	10.10%
36	7.50%	1.97%	1.58%	1.14%	10.22%
37	7.63%	2.02%	1.58%	1.14%	10.35%
38	7.76%	2.06%	1.58%	1.14%	10.48%
39	7.89%	2.10%	1.58%	1.14%	10.61%
40	8.02%	2.13%	1.58%	1.14%	10.74%
41	8.16%	2.17%	1.58%	1.14%	10.88%
42	8.31%	2.20%	1.58%	1.14%	11.03%
43	8.45%	2.22%	1.58%	1.14%	11.17%
44	8.60%	2.23%	1.58%	1.14%	11.32%
45	8.75%	2.24%	1.58%	1.14%	11.47%
46	8.92%	2.27%	1.58%	1.14%	11.64%
47	9.09%	2.28%	1.58%	1.14%	11.81%
48	9.26%	2.29%	1.58%	1.14%	11.98%
49	9.41%	2.31%	1.58%	1.14%	12.13%
50	9.58%	2.32%	1.58%	1.14%	12.30%
51	9.73%	2.32%	1.58%	1.14%	12.45%
52	9.86%	2.31%	1.58%	1.14%	12.58%
53	9.97%	2.29%	1.58%	1.14%	12.69%
54	10.03%	2.26%	1.58%	1.14%	12.75%
55	10.03%	2.21%	1.58%	1.14%	12.75%
56	9.97%	2.15%	1.58%	1.14%	12.69%
57	9.86%	2.08%	1.58%	1.14%	12.58%
58	10.17%	2.00%	1.58%	1.14%	12.89%
59+	10.50%	1.93%	1.58%	1.14%	13.22%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous Tier 4 (31676.1)				
Entry Age	Basic	COL	COL Limited to 1.58%	Total
20	6.70%	1.17%	1.17%	7.87%
21	6.72%	1.19%	1.19%	7.91%
22	6.74%	1.22%	1.22%	7.96%
23	6.76%	1.24%	1.24%	8.00%
24	6.76%	1.27%	1.27%	8.03%
25	6.75%	1.31%	1.31%	8.06%
26	6.75%	1.34%	1.34%	8.09%
27	6.74%	1.38%	1.38%	8.12%
28	6.72%	1.41%	1.41%	8.13%
29	6.70%	1.44%	1.44%	8.14%
30	6.67%	1.47%	1.47%	8.14%
31	6.79%	1.50%	1.50%	8.29%
32	6.91%	1.53%	1.53%	8.44%
33	7.01%	1.57%	1.57%	8.58%
34	7.17%	1.61%	1.58%	8.75%
35	7.32%	1.64%	1.58%	8.90%
36	7.45%	1.67%	1.58%	9.03%
37	7.58%	1.71%	1.58%	9.16%
38	7.71%	1.75%	1.58%	9.29%
39	7.84%	1.80%	1.58%	9.42%
40	7.97%	1.84%	1.58%	9.55%
41	8.11%	1.88%	1.58%	9.69%
42	8.26%	1.93%	1.58%	9.84%
43	8.40%	1.96%	1.58%	9.98%
44	8.55%	2.00%	1.58%	10.13%
45	8.70%	2.04%	1.58%	10.28%
46	8.87%	2.07%	1.58%	10.45%
47	9.04%	2.09%	1.58%	10.62%
48	9.21%	2.11%	1.58%	10.79%
49	9.36%	2.13%	1.58%	10.94%
50	9.53%	2.15%	1.58%	11.11%
51	9.68%	2.16%	1.58%	11.26%
52	9.81%	2.17%	1.58%	11.39%
53	9.92%	2.17%	1.58%	11.50%
54	9.98%	2.16%	1.58%	11.56%
55	9.98%	2.13%	1.58%	11.56%
56	9.92%	2.08%	1.58%	11.50%
57	9.81%	2.03%	1.58%	11.39%
58	10.12%	1.96%	1.58%	11.70%
59+	10.45%	1.90%	1.58%	12.03%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	10.25%	4.46%	3.10%	3.64%	16.99%
21	10.39%	4.56%	3.10%	3.64%	17.13%
22	10.53%	4.70%	3.10%	3.64%	17.27%
23	10.68%	4.81%	3.10%	3.64%	17.42%
24	10.82%	4.94%	3.10%	3.64%	17.56%
25	10.97%	5.03%	3.10%	3.64%	17.71%
26	11.11%	5.15%	3.10%	3.64%	17.85%
27	11.27%	5.23%	3.10%	3.64%	18.01%
28	11.43%	5.31%	3.10%	3.64%	18.17%
29	11.58%	5.41%	3.10%	3.64%	18.32%
30	11.75%	5.48%	3.10%	3.64%	18.49%
31	11.92%	5.55%	3.10%	3.64%	18.66%
32	12.10%	5.62%	3.10%	3.64%	18.84%
33	12.27%	5.69%	3.10%	3.64%	19.01%
34	12.45%	5.75%	3.10%	3.64%	19.19%
35	12.65%	5.82%	3.10%	3.64%	19.39%
36	12.85%	5.88%	3.10%	3.64%	19.59%
37	13.05%	5.93%	3.10%	3.64%	19.79%
38	13.25%	5.98%	3.10%	3.64%	19.99%
39	13.45%	6.06%	3.10%	3.64%	20.19%
40	13.64%	6.15%	3.10%	3.64%	20.38%
41	13.83%	6.23%	3.10%	3.64%	20.57%
42	13.99%	6.33%	3.10%	3.64%	20.73%
43	14.13%	6.43%	3.10%	3.64%	20.87%
44	14.23%	6.54%	3.10%	3.64%	20.97%
45	14.28%	6.63%	3.10%	3.64%	21.02%
46	14.29%	6.68%	3.10%	3.64%	21.03%
47	14.25%	6.77%	3.10%	3.64%	20.99%
48	14.15%	6.87%	3.10%	3.64%	20.89%
49+	14.06%	6.95%	3.10%	3.64%	20.80%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	10.25%	5.25%	3.10%	3.64%	16.99%
21	10.39%	5.23%	3.10%	3.64%	17.13%
22	10.53%	5.34%	3.10%	3.64%	17.27%
23	10.68%	5.45%	3.10%	3.64%	17.42%
24	10.82%	5.57%	3.10%	3.64%	17.56%
25	10.97%	5.67%	3.10%	3.64%	17.71%
26	11.11%	5.75%	3.10%	3.64%	17.85%
27	11.27%	5.85%	3.10%	3.64%	18.01%
28	11.43%	5.94%	3.10%	3.64%	18.17%
29	11.58%	6.05%	3.10%	3.64%	18.32%
30	11.75%	6.06%	3.10%	3.64%	18.49%
31	11.92%	6.10%	3.10%	3.64%	18.66%
32	12.10%	6.18%	3.10%	3.64%	18.84%
33	12.27%	6.28%	3.10%	3.64%	19.01%
34	12.45%	6.40%	3.10%	3.64%	19.19%
35	12.65%	6.53%	3.10%	3.64%	19.39%
36	12.85%	6.60%	3.10%	3.64%	19.59%
37	13.05%	6.66%	3.10%	3.64%	19.79%
38	13.25%	6.71%	3.10%	3.64%	19.99%
39	13.45%	6.78%	3.10%	3.64%	20.19%
40	13.64%	6.84%	3.10%	3.64%	20.38%
41	13.83%	6.91%	3.10%	3.64%	20.57%
42	13.99%	7.00%	3.10%	3.64%	20.73%
43	14.13%	7.09%	3.10%	3.64%	20.87%
44	14.23%	7.13%	3.10%	3.64%	20.97%
45	14.28%	7.18%	3.10%	3.64%	21.02%
46	14.29%	7.26%	3.10%	3.64%	21.03%
47	14.25%	7.34%	3.10%	3.64%	20.99%
48	14.15%	7.44%	3.10%	3.64%	20.89%
49+	14.06%	7.56%	3.10%	3.64%	20.80%

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, 2021**

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	9.71%	3.04%	3.04%	3.64%	16.39%
21	9.86%	3.11%	3.10%	3.64%	16.60%
22	10.08%	3.19%	3.10%	3.64%	16.82%
23	10.26%	3.28%	3.10%	3.64%	17.00%
24	10.39%	3.37%	3.10%	3.64%	17.13%
25	10.54%	3.42%	3.10%	3.64%	17.28%
26	10.68%	3.51%	3.10%	3.64%	17.42%
27	10.83%	3.57%	3.10%	3.64%	17.57%
28	10.98%	3.62%	3.10%	3.64%	17.72%
29	11.13%	3.69%	3.10%	3.64%	17.87%
30	11.29%	3.75%	3.10%	3.64%	18.03%
31	11.45%	3.80%	3.10%	3.64%	18.19%
32	11.62%	3.84%	3.10%	3.64%	18.36%
33	11.78%	3.88%	3.10%	3.64%	18.52%
34	11.96%	3.94%	3.10%	3.64%	18.70%
35	12.15%	3.98%	3.10%	3.64%	18.89%
36	12.33%	4.02%	3.10%	3.64%	19.07%
37	12.51%	4.06%	3.10%	3.64%	19.25%
38	12.69%	4.09%	3.10%	3.64%	19.43%
39	12.86%	4.15%	3.10%	3.64%	19.60%
40	13.01%	4.21%	3.10%	3.64%	19.75%
41	13.15%	4.27%	3.10%	3.64%	19.89%
42	13.25%	4.33%	3.10%	3.64%	19.99%
43	13.33%	4.41%	3.10%	3.64%	20.07%
44	13.36%	4.48%	3.10%	3.64%	20.10%
45	13.35%	4.54%	3.10%	3.64%	20.09%
46	13.30%	4.58%	3.10%	3.64%	20.04%
47	13.22%	4.65%	3.10%	3.64%	19.96%
48	13.63%	4.71%	3.10%	3.64%	20.37%
49+	14.06%	4.77%	3.10%	3.64%	20.80%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

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	9.85%	3.57%	3.10%	3.64%	16.59%
21	9.99%	3.56%	3.10%	3.64%	16.73%
22	10.12%	3.63%	3.10%	3.64%	16.86%
23	10.26%	3.71%	3.10%	3.64%	17.00%
24	10.39%	3.79%	3.10%	3.64%	17.13%
25	10.54%	3.86%	3.10%	3.64%	17.28%
26	10.68%	3.92%	3.10%	3.64%	17.42%
27	10.83%	3.98%	3.10%	3.64%	17.57%
28	10.98%	4.05%	3.10%	3.64%	17.72%
29	11.13%	4.12%	3.10%	3.64%	17.87%
30	11.29%	4.12%	3.10%	3.64%	18.03%
31	11.45%	4.16%	3.10%	3.64%	18.19%
32	11.62%	4.22%	3.10%	3.64%	18.36%
33	11.78%	4.28%	3.10%	3.64%	18.52%
34	11.96%	4.36%	3.10%	3.64%	18.70%
35	12.15%	4.46%	3.10%	3.64%	18.89%
36	12.33%	4.50%	3.10%	3.64%	19.07%
37	12.51%	4.54%	3.10%	3.64%	19.25%
38	12.69%	4.58%	3.10%	3.64%	19.43%
39	12.86%	4.63%	3.10%	3.64%	19.60%
40	13.01%	4.67%	3.10%	3.64%	19.75%
41	13.15%	4.72%	3.10%	3.64%	19.89%
42	13.25%	4.78%	3.10%	3.64%	19.99%
43	13.33%	4.84%	3.10%	3.64%	20.07%
44	13.36%	4.88%	3.10%	3.64%	20.10%
45	13.35%	4.92%	3.10%	3.64%	20.09%
46	13.30%	4.96%	3.10%	3.64%	20.04%
47	13.22%	5.02%	3.10%	3.64%	19.96%
48	13.63%	5.10%	3.10%	3.64%	20.37%
49+	14.06%	5.18%	3.10%	3.64%	20.80%

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, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire: Miscellaneous Tier 1 (31676.19)			
Entry			
Age	Basic	COL	Total
20	8.89%	2.46%	11.35%
21	8.88%	2.55%	11.43%
22	8.87%	2.63%	11.50%
23	8.85%	2.70%	11.55%
24	8.81%	2.77%	11.58%
25	8.78%	2.80%	11.58%
26	8.93%	2.86%	11.79%
27	9.08%	2.91%	11.99%
28	9.23%	2.97%	12.20%
29	9.38%	3.03%	12.41%
30	9.55%	3.09%	12.64%
31	9.71%	3.14%	12.85%
32	9.88%	3.18%	13.06%
33	10.04%	3.26%	13.30%
34	10.22%	3.33%	13.55%
35	10.40%	3.40%	13.80%
36	10.57%	3.45%	14.02%
37	10.76%	3.50%	14.26%
38	10.95%	3.55%	14.50%
39	11.15%	3.61%	14.76%
40	11.36%	3.66%	15.02%
41	11.57%	3.71%	15.28%
42	11.80%	3.76%	15.56%
43	12.03%	3.77%	15.80%
44	12.27%	3.77%	16.04%
45	12.50%	3.77%	16.27%
46	12.74%	3.79%	16.53%
47	12.96%	3.79%	16.75%
48	13.18%	3.80%	16.98%
49	13.36%	3.81%	17.17%
50	13.48%	3.84%	17.32%
51	13.51%	3.82%	17.33%
52	13.46%	3.80%	17.26%
53	13.31%	3.75%	17.06%
54+	13.16%	3.69%	16.85%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire Safety: Tier 1 (31664.1)			
Entry			
Age	Basic	COL	Total
20	9.95%	5.25%	15.20%
21	10.10%	5.23%	15.33%
22	10.23%	5.34%	15.57%
23	10.38%	5.45%	15.83%
24	10.52%	5.57%	16.09%
25	10.67%	5.67%	16.34%
26	10.82%	5.75%	16.57%
27	10.97%	5.85%	16.82%
28	11.13%	5.94%	17.07%
29	11.28%	6.05%	17.33%
30	11.45%	6.06%	17.51%
31	11.62%	6.10%	17.72%
32	11.80%	6.18%	17.98%
33	11.97%	6.28%	18.25%
34	12.15%	6.40%	18.55%
35	12.35%	6.53%	18.88%
36	12.55%	6.60%	19.15%
37	12.75%	6.66%	19.41%
38	12.96%	6.71%	19.67%
39	13.15%	6.78%	19.93%
40	13.34%	6.84%	20.18%
41	13.53%	6.91%	20.44%
42	13.68%	7.00%	20.68%
43	13.83%	7.09%	20.92%
44	13.93%	7.13%	21.06%
45	13.98%	7.18%	21.16%
46	13.99%	7.26%	21.25%
47	13.95%	7.34%	21.29%
48	13.86%	7.44%	21.30%
49+	13.76%	7.56%	21.32%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire Safety: Tier 2 (31664.2)			
Entry			
Age	Basic	COL	Total
20	9.95%	4.46%	14.41%
21	10.10%	4.56%	14.66%
22	10.23%	4.70%	14.93%
23	10.38%	4.81%	15.19%
24	10.52%	4.94%	15.46%
25	10.67%	5.03%	15.70%
26	10.81%	5.15%	15.96%
27	10.97%	5.23%	16.20%
28	11.13%	5.31%	16.44%
29	11.29%	5.41%	16.70%
30	11.46%	5.48%	16.94%
31	11.63%	5.55%	17.18%
32	11.80%	5.62%	17.42%
33	11.98%	5.69%	17.67%
34	12.16%	5.75%	17.91%
35	12.35%	5.82%	18.17%
36	12.55%	5.88%	18.43%
37	12.75%	5.93%	18.68%
38	12.96%	5.98%	18.94%
39	13.15%	6.06%	19.21%
40	13.34%	6.15%	19.49%
41	13.53%	6.23%	19.76%
42	13.69%	6.33%	20.02%
43	13.84%	6.43%	20.27%
44	13.92%	6.54%	20.46%
45	13.98%	6.63%	20.61%
46	13.99%	6.68%	20.67%
47	13.94%	6.77%	20.71%
48	13.86%	6.87%	20.73%
49+	13.76%	6.95%	20.71%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

South Marin Fire Safety: Tier 2A (31664.2)			
Entry			
Age	Basic	COL	Total
20	9.56%	4.06%	13.62%
21	9.68%	4.16%	13.84%
22	9.83%	4.27%	14.10%
23	9.97%	4.37%	14.34%
24	10.10%	4.49%	14.59%
25	10.25%	4.57%	14.82%
26	10.38%	4.68%	15.06%
27	10.54%	4.76%	15.30%
28	10.69%	4.83%	15.52%
29	10.84%	4.92%	15.76%
30	11.00%	4.99%	15.99%
31	11.15%	5.05%	16.20%
32	11.31%	5.12%	16.43%
33	11.48%	5.18%	16.66%
34	11.66%	5.23%	16.89%
35	11.85%	5.29%	17.14%
36	12.02%	5.35%	17.37%
37	12.21%	5.40%	17.61%
38	12.39%	5.44%	17.83%
39	12.56%	5.51%	18.07%
40	12.71%	5.59%	18.30%
41	12.85%	5.67%	18.52%
42	12.96%	5.75%	18.71%
43	13.03%	5.85%	18.88%
44	13.06%	5.94%	19.00%
45	13.06%	6.02%	19.08%
46	13.00%	6.08%	19.08%
47	12.93%	6.15%	19.08%
48	13.34%	6.24%	19.58%
49+	13.76%	6.32%	20.08%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

Marin City CSD Tier 1, Tamalpais CSD Tier 1 Entry (31676.11)			
Age	Basic	COL	Total
20	7.40%	1.86%	9.26%
21	7.40%	1.91%	9.31%
22	7.39%	1.95%	9.34%
23	7.38%	2.00%	9.38%
24	7.35%	2.06%	9.41%
25	7.32%	2.11%	9.43%
26	7.44%	2.16%	9.60%
27	7.57%	2.21%	9.78%
28	7.69%	2.28%	9.97%
29	7.82%	2.33%	10.15%
30	7.96%	2.38%	10.34%
31	8.09%	2.43%	10.52%
32	8.23%	2.48%	10.71%
33	8.37%	2.55%	10.92%
34	8.52%	2.61%	11.13%
35	8.67%	2.67%	11.34%
36	8.81%	2.74%	11.55%
37	8.97%	2.81%	11.78%
38	9.14%	2.87%	12.01%
39	9.30%	2.94%	12.24%
40	9.47%	3.01%	12.48%
41	9.65%	3.06%	12.71%
42	9.83%	3.12%	12.95%
43	10.03%	3.15%	13.18%
44	10.23%	3.19%	13.42%
45	10.42%	3.24%	13.66%
46	10.61%	3.28%	13.89%
47	10.81%	3.31%	14.12%
48	10.97%	3.34%	14.31%
49	11.13%	3.37%	14.50%
50	11.24%	3.40%	14.64%
51	11.27%	3.41%	14.68%
52	11.22%	3.42%	14.64%
53	11.09%	3.41%	14.50%
54	10.97%	3.38%	14.35%
55	10.86%	3.33%	14.19%
56	10.74%	3.25%	13.99%
57	10.63%	3.15%	13.78%
58	10.50%	3.05%	13.55%
59+	10.38%	2.94%	13.32%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

Mosquito District Tier 1 (31676.14)			
Entry			
Age	Basic	COL	Total
20	6.95%	2.10%	9.05%
21	6.98%	2.15%	9.13%
22	7.00%	2.21%	9.21%
23	7.00%	2.27%	9.27%
24	7.00%	2.33%	9.33%
25	7.01%	2.39%	9.40%
26	7.01%	2.44%	9.45%
27	6.99%	2.51%	9.50%
28	6.97%	2.56%	9.53%
29	6.95%	2.62%	9.57%
30	6.93%	2.67%	9.60%
31	7.03%	2.73%	9.76%
32	7.16%	2.77%	9.93%
33	7.28%	2.83%	10.11%
34	7.40%	2.89%	10.29%
35	7.53%	2.95%	10.48%
36	7.65%	3.02%	10.67%
37	7.79%	3.08%	10.87%
38	7.93%	3.14%	11.07%
39	8.06%	3.21%	11.27%
40	8.19%	3.27%	11.46%
41	8.34%	3.33%	11.67%
42	8.49%	3.38%	11.87%
43	8.65%	3.40%	12.05%
44	8.79%	3.44%	12.23%
45	8.95%	3.47%	12.42%
46	9.12%	3.51%	12.63%
47	9.30%	3.53%	12.83%
48	9.48%	3.55%	13.03%
49	9.67%	3.58%	13.25%
50	9.86%	3.60%	13.46%
51	10.05%	3.60%	13.65%
52	10.22%	3.59%	13.81%
53	10.39%	3.55%	13.94%
54	10.53%	3.50%	14.03%
55	10.63%	3.42%	14.05%
56	10.66%	3.33%	13.99%
57	10.60%	3.23%	13.83%
58	10.49%	3.10%	13.59%
59+	10.37%	2.99%	13.36%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

LAFCO Tier 3 (31676.16)			
Entry Age	Basic	COL	Total
20	6.70%	1.41%	8.11%
21	6.73%	1.45%	8.18%
22	6.74%	1.48%	8.22%
23	6.76%	1.52%	8.28%
24	6.75%	1.56%	8.31%
25	6.75%	1.59%	8.34%
26	6.75%	1.62%	8.37%
27	6.74%	1.65%	8.39%
28	6.73%	1.68%	8.41%
29	6.71%	1.72%	8.43%
30	6.68%	1.75%	8.43%
31	6.78%	1.79%	8.57%
32	6.90%	1.82%	8.72%
33	7.01%	1.86%	8.87%
34	7.14%	1.90%	9.04%
35	7.26%	1.94%	9.20%
36	7.39%	1.97%	9.36%
37	7.50%	2.02%	9.52%
38	7.64%	2.06%	9.70%
39	7.77%	2.10%	9.87%
40	7.90%	2.13%	10.03%
41	8.04%	2.17%	10.21%
42	8.19%	2.20%	10.39%
43	8.34%	2.22%	10.56%
44	8.48%	2.23%	10.71%
45	8.64%	2.24%	10.88%
46	8.80%	2.27%	11.07%
47	8.96%	2.28%	11.24%
48	9.13%	2.29%	11.42%
49	9.29%	2.31%	11.60%
50	9.46%	2.32%	11.78%
51	9.60%	2.32%	11.92%
52	9.74%	2.31%	12.05%
53	9.84%	2.29%	12.13%
54	9.90%	2.26%	12.16%
55	9.91%	2.21%	12.12%
56	9.85%	2.15%	12.00%
57	9.74%	2.08%	11.82%
58	10.06%	2.00%	12.06%
59+	10.38%	1.93%	12.31%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

Novato Miscellaneous Tier 1 (31676.16)			
Entry			
Age	Basic	COL	Total
20	6.95%	2.09%	9.04%
21	6.97%	2.14%	9.11%
22	7.00%	2.19%	9.19%
23	7.00%	2.26%	9.26%
24	7.00%	2.31%	9.31%
25	7.01%	2.35%	9.36%
26	7.01%	2.39%	9.40%
27	7.00%	2.44%	9.44%
28	6.97%	2.50%	9.47%
29	6.95%	2.55%	9.50%
30	6.92%	2.60%	9.52%
31	7.04%	2.65%	9.69%
32	7.17%	2.69%	9.86%
33	7.27%	2.76%	10.03%
34	7.40%	2.82%	10.22%
35	7.53%	2.88%	10.41%
36	7.66%	2.93%	10.59%
37	7.79%	2.99%	10.78%
38	7.92%	3.05%	10.97%
39	8.06%	3.10%	11.16%
40	8.20%	3.16%	11.36%
41	8.34%	3.22%	11.56%
42	8.49%	3.27%	11.76%
43	8.64%	3.29%	11.93%
44	8.79%	3.30%	12.09%
45	8.96%	3.33%	12.29%
46	9.13%	3.35%	12.48%
47	9.31%	3.37%	12.68%
48	9.48%	3.38%	12.86%
49	9.67%	3.40%	13.07%
50	9.85%	3.44%	13.29%
51	10.05%	3.42%	13.47%
52	10.23%	3.41%	13.64%
53	10.39%	3.38%	13.77%
54	10.54%	3.33%	13.87%
55	10.63%	3.26%	13.89%
56	10.66%	3.17%	13.83%
57	10.61%	3.06%	13.67%
58	10.50%	2.95%	13.45%
59+	10.38%	2.84%	13.22%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

Novato Safety: Tier 1 (31664.1)			
Entry			
Age	Basic	COL	Total
20	9.95%	5.37%	15.32%
21	10.09%	5.34%	15.43%
22	10.23%	5.44%	15.67%
23	10.37%	5.57%	15.94%
24	10.52%	5.68%	16.20%
25	10.67%	5.81%	16.48%
26	10.82%	5.89%	16.71%
27	10.98%	5.98%	16.96%
28	11.13%	6.09%	17.22%
29	11.29%	6.19%	17.48%
30	11.46%	6.20%	17.66%
31	11.62%	6.24%	17.86%
32	11.80%	6.34%	18.14%
33	11.98%	6.43%	18.41%
34	12.15%	6.56%	18.71%
35	12.35%	6.68%	19.03%
36	12.55%	6.76%	19.31%
37	12.75%	6.82%	19.57%
38	12.96%	6.88%	19.84%
39	13.16%	6.94%	20.10%
40	13.34%	7.01%	20.35%
41	13.53%	7.09%	20.62%
42	13.69%	7.17%	20.86%
43	13.83%	7.27%	21.10%
44	13.93%	7.31%	21.24%
45	13.98%	7.36%	21.34%
46	13.99%	7.43%	21.42%
47	13.95%	7.52%	21.47%
48	13.86%	7.62%	21.48%
49+	13.76%	7.75%	21.51%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

Novato Safety: Tier 2 (31664.2)			
Entry			
Age	Basic	COL	Total
20	9.95%	4.53%	14.48%
21	10.09%	4.65%	14.74%
22	10.23%	4.77%	15.00%
23	10.37%	4.89%	15.26%
24	10.53%	5.03%	15.56%
25	10.67%	5.13%	15.80%
26	10.82%	5.26%	16.08%
27	10.97%	5.35%	16.32%
28	11.13%	5.44%	16.57%
29	11.29%	5.53%	16.82%
30	11.45%	5.62%	17.07%
31	11.62%	5.69%	17.31%
32	11.80%	5.75%	17.55%
33	11.97%	5.83%	17.80%
34	12.15%	5.89%	18.04%
35	12.35%	5.96%	18.31%
36	12.55%	6.02%	18.57%
37	12.75%	6.08%	18.83%
38	12.96%	6.13%	19.09%
39	13.16%	6.20%	19.36%
40	13.34%	6.30%	19.64%
41	13.53%	6.39%	19.92%
42	13.69%	6.48%	20.17%
43	13.83%	6.59%	20.42%
44	13.93%	6.69%	20.62%
45	13.98%	6.79%	20.77%
46	13.99%	6.85%	20.84%
47	13.95%	6.93%	20.88%
48	13.85%	7.04%	20.89%
49+	13.76%	7.13%	20.89%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Miscellaneous Tier 1 (31676.19)			
Entry			
Age	Basic	COL	Total
20	8.88%	2.35%	11.23%
21	8.89%	2.42%	11.31%
22	8.86%	2.50%	11.36%
23	8.84%	2.57%	11.41%
24	8.81%	2.63%	11.44%
25	8.78%	2.66%	11.44%
26	8.93%	2.71%	11.64%
27	9.07%	2.77%	11.84%
28	9.23%	2.82%	12.05%
29	9.39%	2.88%	12.27%
30	9.56%	2.94%	12.50%
31	9.71%	2.99%	12.70%
32	9.88%	3.03%	12.91%
33	10.04%	3.09%	13.13%
34	10.23%	3.16%	13.39%
35	10.40%	3.24%	13.64%
36	10.58%	3.28%	13.86%
37	10.77%	3.33%	14.10%
38	10.96%	3.38%	14.34%
39	11.15%	3.44%	14.59%
40	11.36%	3.49%	14.85%
41	11.57%	3.53%	15.10%
42	11.80%	3.57%	15.37%
43	12.03%	3.58%	15.61%
44	12.27%	3.58%	15.85%
45	12.50%	3.59%	16.09%
46	12.74%	3.60%	16.34%
47	12.96%	3.60%	16.56%
48	13.18%	3.61%	16.79%
49	13.36%	3.63%	16.99%
50	13.48%	3.65%	17.13%
51	13.51%	3.63%	17.14%
52	13.46%	3.61%	17.07%
53	13.31%	3.57%	16.88%
54+	13.16%	3.51%	16.67%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Miscellaneous Tier 2 (31676.16)			
Entry			
Age	Basic	COL	Total
20	6.70%	1.41%	8.11%
21	6.72%	1.44%	8.16%
22	6.74%	1.48%	8.22%
23	6.76%	1.51%	8.27%
24	6.75%	1.55%	8.30%
25	6.75%	1.56%	8.31%
26	6.75%	1.59%	8.34%
27	6.74%	1.63%	8.37%
28	6.72%	1.66%	8.38%
29	6.70%	1.69%	8.39%
30	6.68%	1.73%	8.41%
31	6.79%	1.75%	8.54%
32	6.91%	1.77%	8.68%
33	7.01%	1.81%	8.82%
34	7.14%	1.85%	8.99%
35	7.26%	1.88%	9.14%
36	7.38%	1.91%	9.29%
37	7.51%	1.95%	9.46%
38	7.65%	1.98%	9.63%
39	7.76%	2.03%	9.79%
40	7.90%	2.06%	9.96%
41	8.04%	2.11%	10.15%
42	8.19%	2.15%	10.34%
43	8.33%	2.18%	10.51%
44	8.48%	2.21%	10.69%
45	8.64%	2.24%	10.88%
46	8.80%	2.27%	11.07%
47	8.96%	2.28%	11.24%
48	9.13%	2.29%	11.42%
49	9.29%	2.31%	11.60%
50	9.46%	2.32%	11.78%
51	9.60%	2.32%	11.92%
52	9.74%	2.31%	12.05%
53	9.84%	2.29%	12.13%
54	9.90%	2.26%	12.16%
55	9.91%	2.20%	12.11%
56	9.85%	2.15%	12.00%
57	9.74%	2.08%	11.82%
58	10.06%	2.00%	12.06%
59+	10.38%	1.93%	12.31%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Safety Tier 1 (31664.2)			
Entry			
Age	Basic	COL	Total
20	9.95%	4.24%	14.19%
21	10.10%	4.33%	14.43%
22	10.23%	4.46%	14.69%
23	10.38%	4.56%	14.94%
24	10.52%	4.69%	15.21%
25	10.67%	4.77%	15.44%
26	10.81%	4.89%	15.70%
27	10.97%	4.97%	15.94%
28	11.13%	5.04%	16.17%
29	11.28%	5.14%	16.42%
30	11.45%	5.21%	16.66%
31	11.62%	5.27%	16.89%
32	11.79%	5.34%	17.13%
33	11.97%	5.40%	17.37%
34	12.15%	5.46%	17.61%
35	12.35%	5.52%	17.87%
36	12.55%	5.59%	18.14%
37	12.75%	5.64%	18.39%
38	12.96%	5.69%	18.65%
39	13.16%	5.75%	18.91%
40	13.34%	5.84%	19.18%
41	13.53%	5.92%	19.45%
42	13.69%	6.01%	19.70%
43	13.83%	6.11%	19.94%
44	13.93%	6.21%	20.14%
45	13.98%	6.30%	20.28%
46	13.99%	6.36%	20.35%
47	13.95%	6.43%	20.38%
48	13.85%	6.53%	20.38%
49+	13.76%	6.61%	20.37%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

San Rafael Safety Tier 2 (31664.2)			
Entry			
Age	Basic	COL	Total
20	9.55%	3.04%	12.59%
21	9.69%	3.11%	12.80%
22	9.83%	3.19%	13.02%
23	9.96%	3.28%	13.24%
24	10.10%	3.37%	13.47%
25	10.25%	3.42%	13.67%
26	10.38%	3.51%	13.89%
27	10.54%	3.57%	14.11%
28	10.68%	3.62%	14.30%
29	10.83%	3.69%	14.52%
30	10.99%	3.75%	14.74%
31	11.15%	3.80%	14.95%
32	11.32%	3.84%	15.16%
33	11.49%	3.88%	15.37%
34	11.66%	3.94%	15.60%
35	11.85%	3.98%	15.83%
36	12.03%	4.02%	16.05%
37	12.22%	4.06%	16.28%
38	12.40%	4.09%	16.49%
39	12.56%	4.15%	16.71%
40	12.71%	4.21%	16.92%
41	12.85%	4.27%	17.12%
42	12.96%	4.33%	17.29%
43	13.03%	4.41%	17.44%
44	13.06%	4.48%	17.54%
45	13.05%	4.54%	17.59%
46	13.00%	4.58%	17.58%
47	12.92%	4.65%	17.57%
48	13.33%	4.71%	18.04%
49+	13.76%	4.77%	18.53%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2021**

APPENDIX E – MEMBER CONTRIBUTION RATES

PEPRA Rates				
All Ages	Basic	COLA	Total	Prior Total
PEPRA Misc 2% COLA	8.11%	1.63%	9.74%	9.71%
PEPRA Misc 4% COLA	8.04%	2.27%	10.31%	10.75%
PEPRA Safety 2% COLA	12.21%	3.05%	15.26%	14.99%
PEPRA Safety 3% COLA	12.39%	4.14%	16.53%	16.41%
PEPRA Safety 4% COLA	13.62%	4.61%	18.23%	17.78%



Classic Values, Innovative Advice