

Marin County Employees' Retirement Association

Actuarial Valuation Report as of June 30, 2022

Produced by Cheiron

February 2023

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February 3, 2023

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, 2022. 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, 2023.

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.

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, 2022**

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 2023-2024, 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, 2023. 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.

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.

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SECTION I – EXECUTIVE SUMMARY

Table I-1 Marin County Employees' Retirement Association Summary of Key Valuation Results (in millions)			
Valuation Date	June 30, 2021		June 30, 2022
Actuarial Liability	\$	3,216.9	\$ 3,325.8
Valuation Assets		<u>3,361.6</u>	<u>3,009.9</u>
Unfunded Actuarial Liability	\$	(144.6)	\$ 315.9
Funded Ratio		104.5%	90.5%
Net Employer Contribution Rate			
County of Marin		22.35%	21.83%
Novato Fire Protection District		43.01%	44.27%
City of San Rafael		58.91%	56.76%
Total MCERA		27.61%	26.91%

Table I-2 Membership Total			
Item	June 30, 2021	June 30, 2022	% Change
Actives	2,682	2,727	1.7%
Current Inactives	763	809	6.0%
Retired Members	<u>3,592</u>	<u>3,697</u>	<u>2.9%</u>
Total Members	7,037	7,233	2.8%
Ratio of Retired Members to Active Members	133.9%	135.6%	
Active Member Payroll (FYE 2022/2023)	\$ 281,568,629	\$ 297,932,570	5.8%
Average Pay per Active	\$ 104,985	\$ 109,253	4.1%

The key results of the June 30, 2022 actuarial valuation are as follows:

- The actuarially determined employer contribution rate decreased for the County from 22.35% to 21.83% of payroll, and for San Rafael from 58.91% to 56.76%. For Novato, the actuarially determined employer contribution rate increased from 43.01% to 44.27%.

The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Valuation Assets. The UAL increased by just over \$460 million, from a surplus

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SECTION I – EXECUTIVE SUMMARY

of \$144.6 million to an unfunded liability of \$315.9 million, primarily due to investment losses.

- The Plan's funded ratio, the ratio of Valuation Assets over Actuarial Liability, decreased from 104.5% last year to 90.5% as of June 30, 2022.
- During the year ending June 30, 2022, the return on Plan assets was -9.6% 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 353 new hires, rehires, and incoming transfers during 2021-2022, and 308 retirements, disabilities, deaths, and other terminations during that same period, resulting in an increase in the total active population of 45 from 2,682 to 2,727. The number of members in pay status and deferred status increased from 4,355 to 4,506. Total projected pensionable payroll increased 5.8% from \$281.6 million to \$297.9 million.

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SECTION I – EXECUTIVE SUMMARY

Assets and Liabilities

Table I-3 below presents the assets, liabilities, Unfunded Actuarial Liability, and funding ratios as of June 30, 2022 for each of the three main groups.

Table I-3						
Assets & Liabilities						
(in millions)						
Item	County		Novato	San Rafael		
Actuarial Liability						
Actives	\$	756.0	\$	70.7	\$	128.7
Current Inactives		108.2		3.6		31.5
Retired Members		1,575.1		157.6		494.3
Total Actuarial Liability	\$	2,439.2	\$	232.0	\$	654.6
Valuation Assets	\$	2,253.6	\$	209.8	\$	546.5
Unfunded Actuarial Liability	\$	185.6	\$	22.2	\$	108.1
Funded Ratio		92.4%		90.4%		83.5%
Inactive-Only Funded Ratio		69.0%		69.5%		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 69.0% 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.

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Changes in Employer Contributions

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

Table I-4 Employer Contribution Reconciliation				
Item	Total	County	Novato	San Rafael
FYE 2023 Net Employer Contribution Rate	27.61%	22.35%	43.01%	58.91%
Expected change in amortization from prior changes	(2.74%)	(2.45%)	(4.09%)	(4.31%)
Change due to asset (gains)/losses	2.87%	2.56%	5.32%	4.26%
Change due to contingency reserve drawdown	(0.18%)	(0.16%)	(0.33%)	(0.28%)
Change due to demographic (gains)/losses	(0.02%)	(0.01%)	(0.06%)	0.05%
Change due to PEPRA new hires	(0.25%)	(0.17%)	(0.44%)	(0.61%)
Change due to salaries	0.04%	0.03%	0.09%	0.05%
Change due to effect of payroll on amortization	(0.42%)	(0.32%)	0.77%	(1.31%)
Total change from current year's changes	2.04%	1.93%	5.35%	2.16%
FYE 2024 Net Employer Contribution Rate	26.91%	21.83%	44.27%	56.76%

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 4.31% for San Rafael, 4.09% for Novato, and 2.45% for the County.

Plan experience during the year – including demographic and salary changes, as well as asset experience – resulted in a net increase in the overall employer contribution rate of 2.04% of pay (the total of the third through eighth rows in the table above):

- Asset experience produced an investment loss.

The -9.6% return, compared to last year's 6.75% assumption, resulted in a loss that increased the contribution rate by 2.87% 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 increases in the UAL rates in each of the next four years.

- Drawdown of the contingency reserves reduced contribution rates.

The contingency reserves are used to reduce volatility in employer contributions and can be used to supplement the valuation assets in years when the return on the Market Value of Assets is less than expected. The County, Novato and San Rafael had contingency reserves of approximately \$25.2 million, \$2.4 million, and \$6.3 million, respectively, at the beginning of the year. When drawn down, these reserves offset their respective

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contribution rates by 0.16% of payroll, 0.33% of payroll, and 0.28% of payroll. The amortization payments for these offsets to the unfunded liability will continue to be phased-in over the next four years.

- 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 slightly decreased due to demographic changes for the County and Novato, and slightly increased for San Rafael.

- 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 0.25%. As these changes only affect the normal cost, they are not subject to further phase-in.

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

Liability-weighted salary increases for continuing active members were higher than anticipated for the County, Novato, and San Rafael, increasing the contribution rates by 0.03% for the County, 0.09% for Novato, and by 0.05% for San Rafael. The amortization of these losses 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 higher-than-expected payroll growth for the County and San Rafael meant that the UAL is being amortized over a larger than expected payroll base, which decreased the contribution rate by 0.32% for the County and 1.31% for San Rafael. The lower than anticipated payroll growth for Novato meant that its UAL is being amortized over a smaller than expected payroll base, which further increased the contribution rate by 0.77%. The changes in payroll do not affect the dollar amount of the unfunded liability payments, and therefore are not subject to further phase-in.

The net impact of salaries and payroll was a decrease in the current year contribution rate of 0.29% for the County and 1.26% for San Rafael, and an increase in the current year contribution rate of 0.86% for Novato.

Changes in UAL

The Unfunded Actuarial Liability (UAL) for MCERA increased by \$460.5 million, from a surplus of \$144.6 million to an unfunded liability of \$315.9 million. Table I-5 on the next page presents the specific components of the change in the UAL.

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Table I-5 Change in Unfunded Actuarial Liability (in millions)				
Experience	Total	County	Novato	San Rafael
1. Unfunded actuarial liability, 6/30/2021	\$ (144.6)	\$ (160.0)	\$ (11.6)	\$ 27.0
2. Expected change in unfunded actuarial liability	(47.3)	(32.2)	(2.8)	(12.3)
3. Change due to unexpected contributions	(15.5)	(12.3)	(0.1)	(3.1)
4. Change due to investment loss	547.5	410.2	38.2	99.2
5. Change due to contingency reserve drawdown	(34.0)	(25.2)	(2.4)	(6.3)
6. Change due to demographic (gains) / losses	2.2	(0.6)	0.3	2.4
7. Change due to salary (gains) / losses	7.6	5.7	0.6	1.2
8. Total change in unfunded actuarial liability	\$ 460.5	\$ 345.6	\$ 33.8	\$ 81.1
9. Unfunded actuarial liability, 6/30/2022	\$ 315.9	\$ 185.6	\$ 22.2	\$ 108.1

The dollar amount of contributions was slightly higher than the actuarial cost for the prior year, which reduced the UAL by \$15.5 million (row 3).

The return on the assets was -9.6% during the 2021-22 plan year compared to last year's assumed rate of 6.75%, resulting in an increase in the UAL of \$547.5 million (row 4). The drawdown of contingency reserves reduced the overall UAL by \$34.0 million as of the end of the year (row 5).

Net salary losses in addition to other liability gains and losses (rows 6 and 7 above) – including losses due to greater than expected salary increases from wage agreements for several County bargaining units – increased the UAL by \$9.8 million.

All the above combined with the expected UAL reduction (\$47.3 million) from contributions produced an overall increase of \$460.5 million in the UAL last year.

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SECTION I – EXECUTIVE SUMMARY

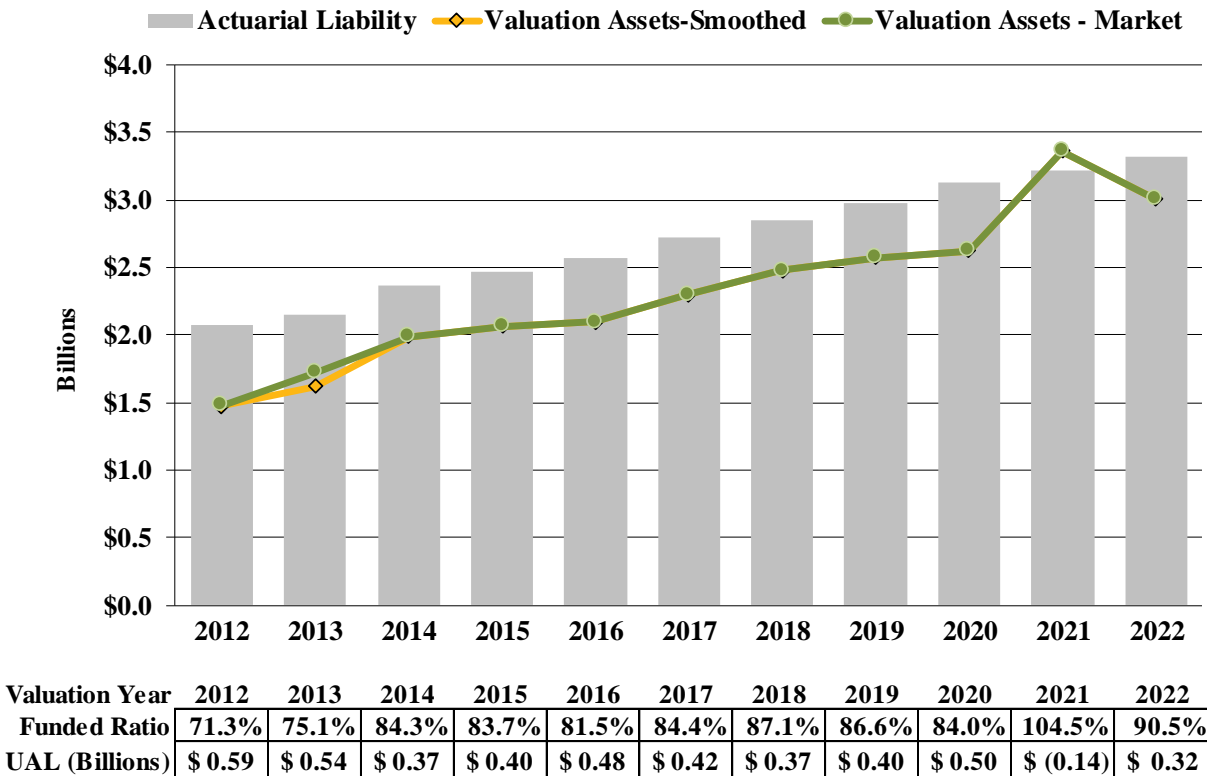
C. Historical Trends

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 90.5% as of June 30, 2022, more than 19% higher than the 71.3% funded ratio in 2012 and calculated under significantly more conservative assumptions.

Chart I-1: Assets and Actuarial Liabilities



* Prior to 2014, Valuation Assets were smoothed

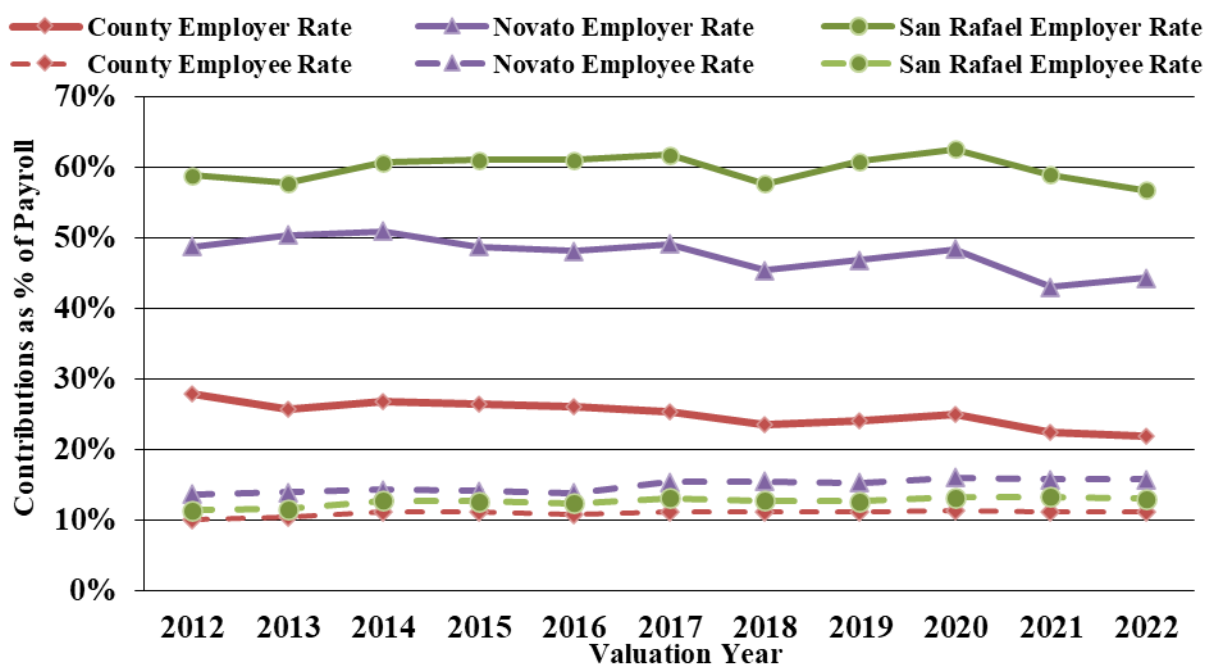
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SECTION I – EXECUTIVE SUMMARY

Contribution Trends

Chart I-2 presents the historical trends for the MCERA contribution rates. Employer contribution rates have remained relatively stable over the past decade with gradual decreases for the County and Novato, whereas the San Rafael rates have stayed more level, partially because San Rafael's payroll increased more slowly than expected. The average employee contribution rates have also stayed relatively stable, increasing slightly as the Plan's economic and mortality assumptions have changed.

Chart I-2: Marin County Employees' Retirement Association



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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, 2022 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 pensionable 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 for the County, Novato, and San Rafael that follow project relatively level employer contribution rates for the next seven years, as this year's investment losses are recognized over the next four years and the significant investment gains from the prior actuarial valuation are recognized over the next three years. Employer contribution rates for the County, Novato, and San Rafael are then expected to drop to the level of the employer's share of the normal cost with the 2030 valuation, as the bulk of the current unfunded liability is amortized over this period as a level percentage of payroll. A moderate longer-term decline is then projected in the employer normal cost rates, primarily due to the PEPRA members becoming a larger proportion of the active member population over time.

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SECTION I – EXECUTIVE SUMMARY

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

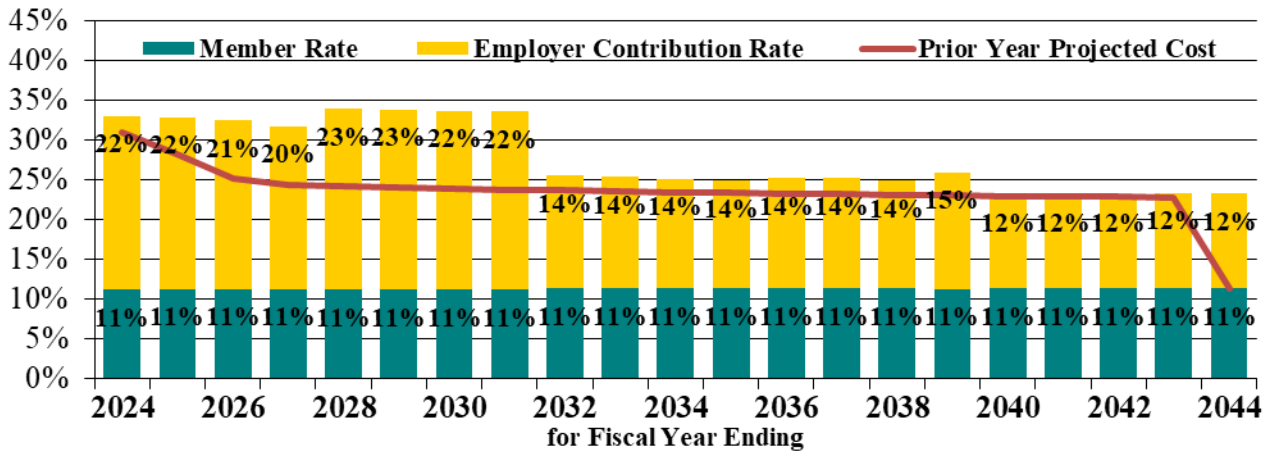


Chart I-4: Projection of Contributions, 6.75% Return Each Year – Novato FPD

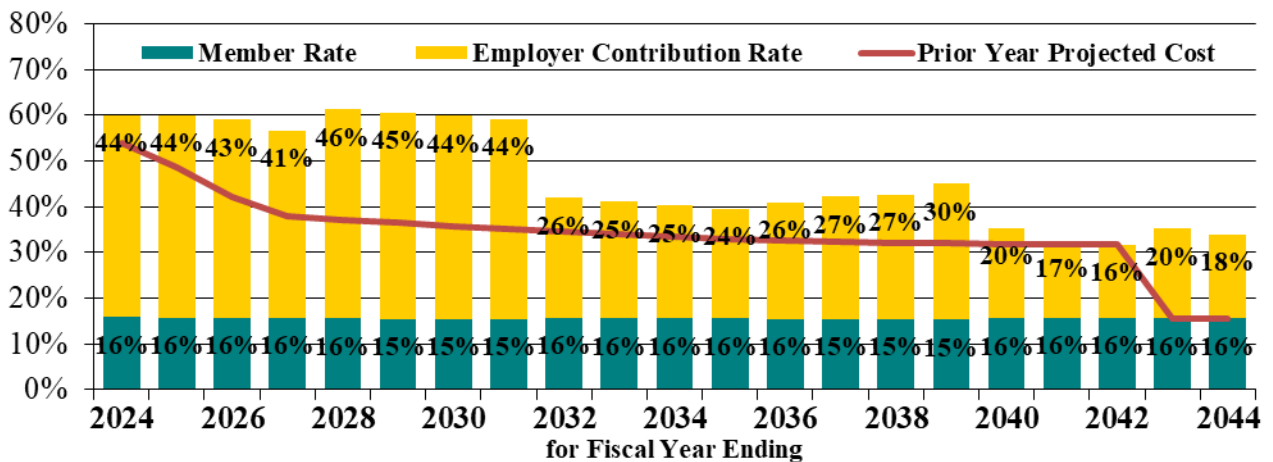
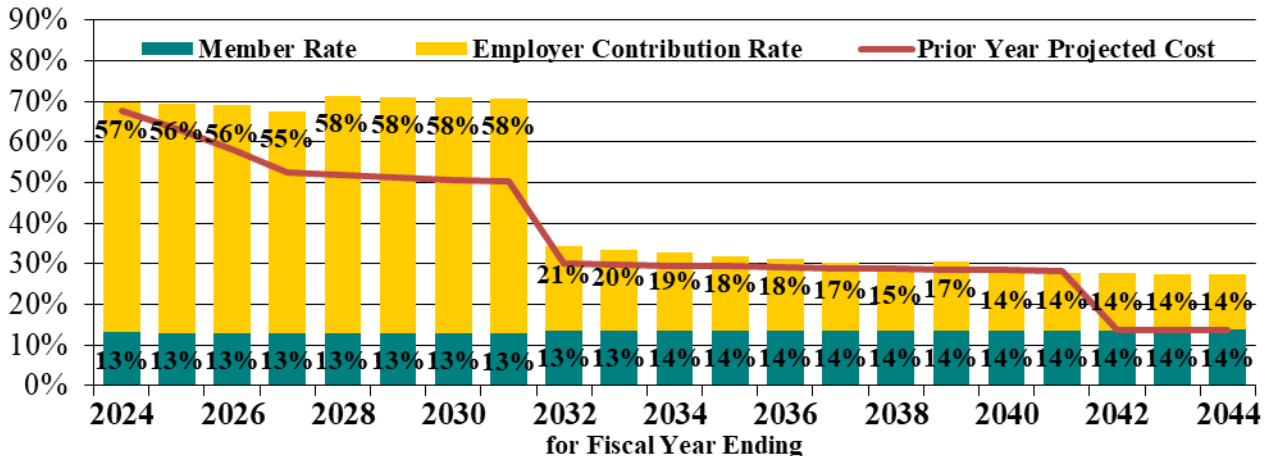


Chart I-5: Projection of Contributions, 6.75% Return Each Year – City of San Rafael



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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 increases to around 100% over the next 10 to 15 years depending on the employer, assuming the actuarial assumptions are achieved. However, it is the **actual** return on Plan assets that will determine the future funding status and contribution rate to the Plan.

The liabilities have been divided into those associated with the active employees and the inactive members (members in pay status or eligible to receive a deferred benefit). If the Plan's asset level drops below the liabilities for the inactive members, it indicates that no Plan assets have been set aside to fund future benefits for current active participants. All three groups currently have asset levels greater than their inactive liabilities.

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SECTION I – EXECUTIVE SUMMARY

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

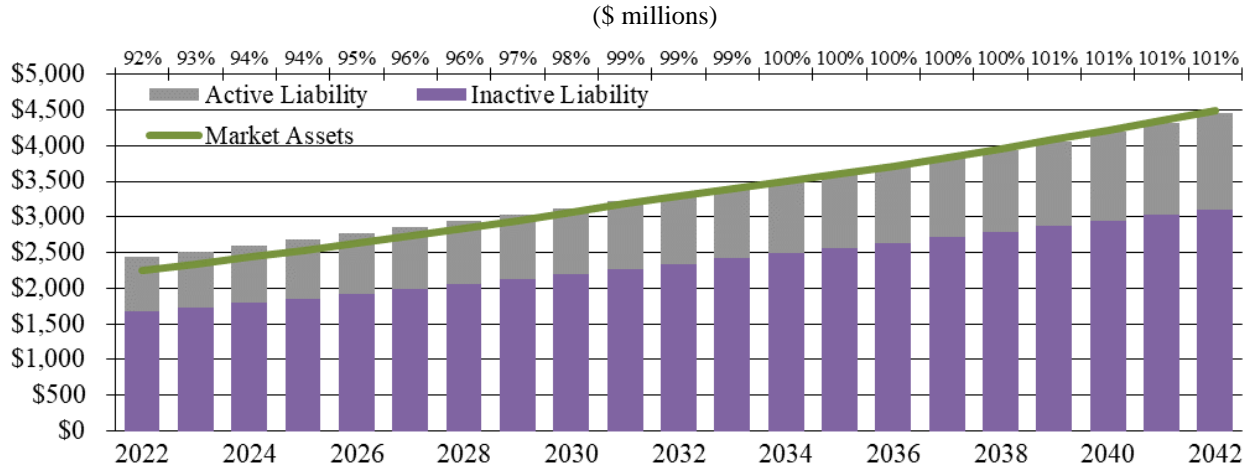


Chart I-7: Projection of Assets and Liabilities, 6.75% Return – Novato FPD

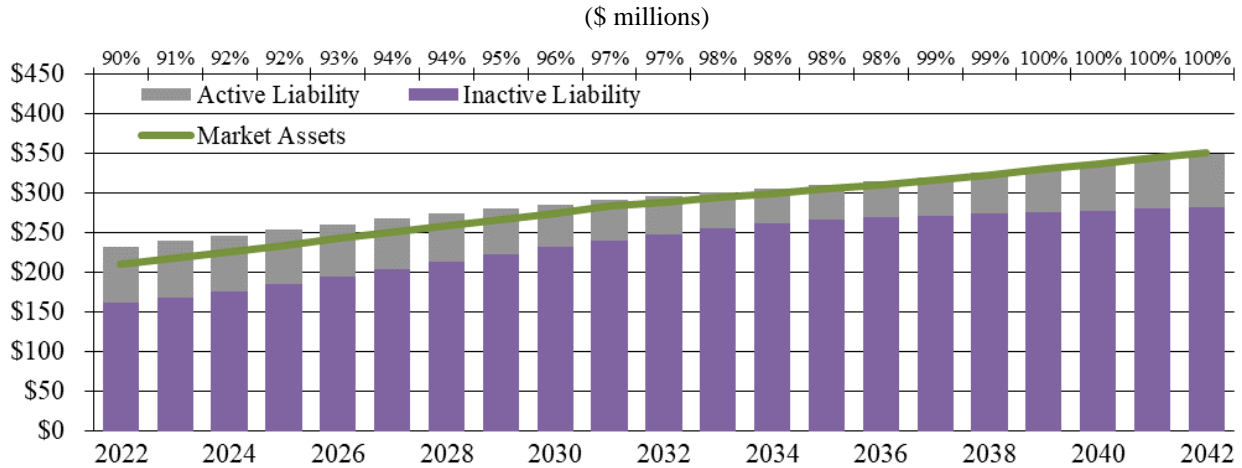
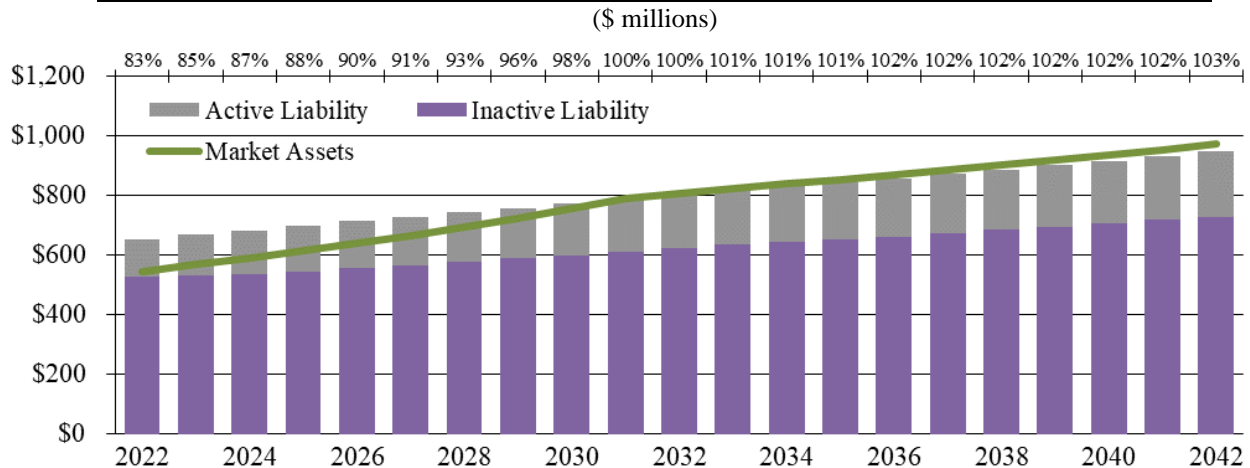


Chart I-8: Projection of Assets and Liabilities, 6.75% Return – City of San Rafael



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 (which have recently reversed) resulted in higher returns for fixed income, but lower expected future returns requiring 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.

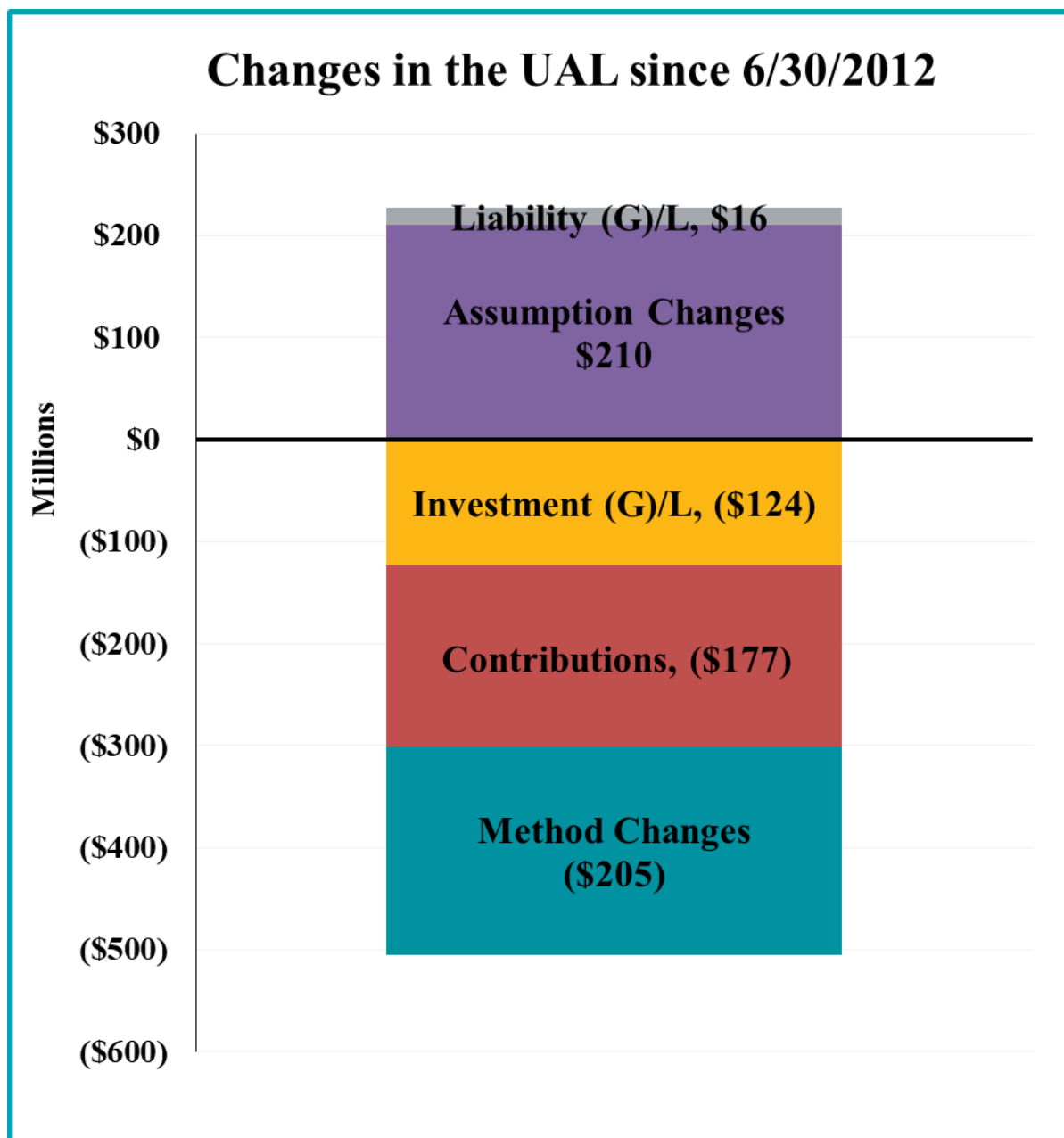
Other risks may also turn out to be important. In particular, unexpected changes in mortality rates and/or inflation may have an impact on the liabilities of the Plan. However, the scale of changes in liabilities from these factors is likely to be substantially less than changes which may result from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

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SECTION II – RISK ANALYSIS

The chart below shows the components contributing to the Unfunded Actuarial Liability (UAL) from June 30, 2012 through June 30, 2022. Over the last 10 years, the UAL has decreased by approximately \$279 million. The decrease is primarily due to method changes (teal bar) of \$205 million (which were a result of prior investment gains). Investment gains occurring during the past 10 years (gold bar) also decreased the UAL by about \$124 million, and contributions more than the “tread water” level (red bar) reduced the UAL by \$177 million. The assumption changes (purple bar) of \$210 million and net liability losses (gray bar) of \$16 million have increased the UAL since June 30, 2012.

Chart II-1

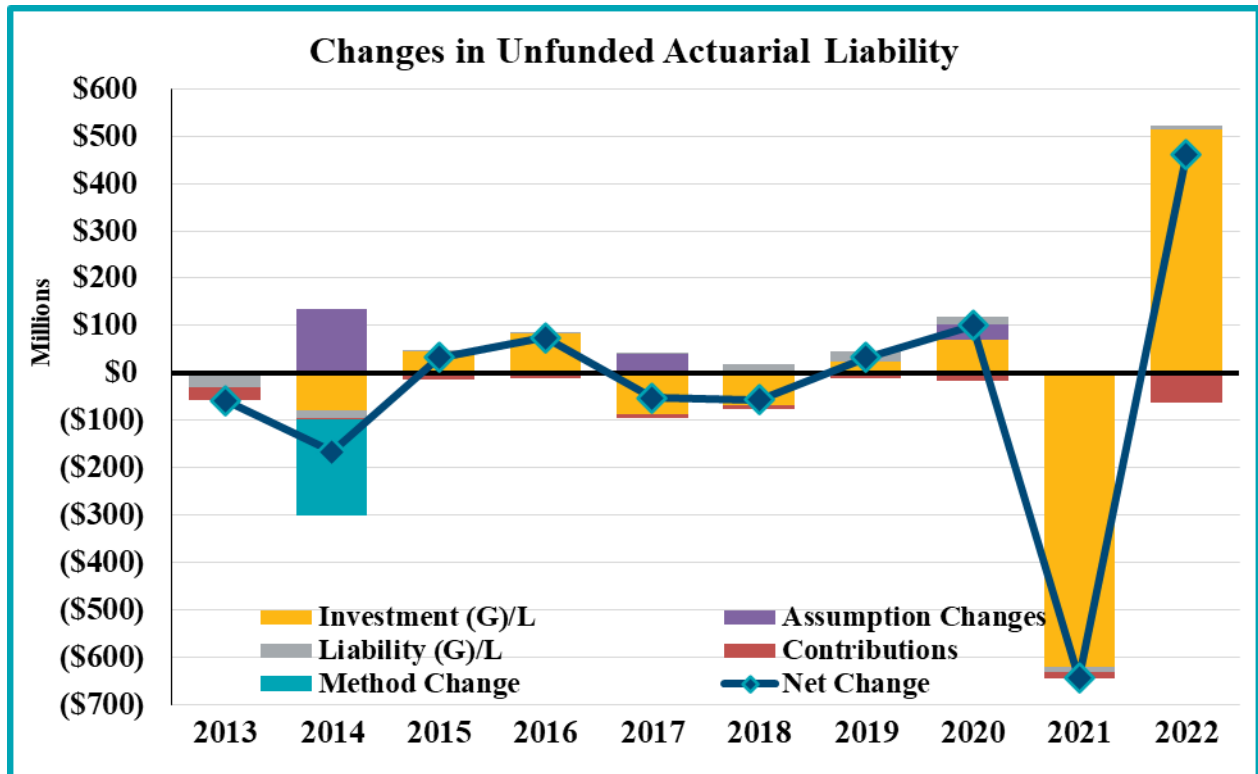


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SECTION II – RISK ANALYSIS

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 2015, 2016, 2019, 2020, and 2022 offset by gains in 2013, 2014, 2017, 2018, and 2021, resulting in overall UAL gains. 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.

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.

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SECTION II – RISK ANALYSIS

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 contributions have exceeded the tread water cost every year, resulting in payments toward principal as well as covering the interest on the current UAL.

Table II-1

Unfunded Actuarial Liability (UAL) Change by Source						
(in thousands)						
June 30,	Investment	Liability	Assumption	Method		Total UAL
Experience	Experience	Experience	Changes	Changes	Contributions	Change
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)
2022	513,584	9,796	0	0	(62,835)	460,545
Total	(\$123,710)	\$16,311	\$210,433	(\$204,619)	(\$177,433)	(\$279,018)

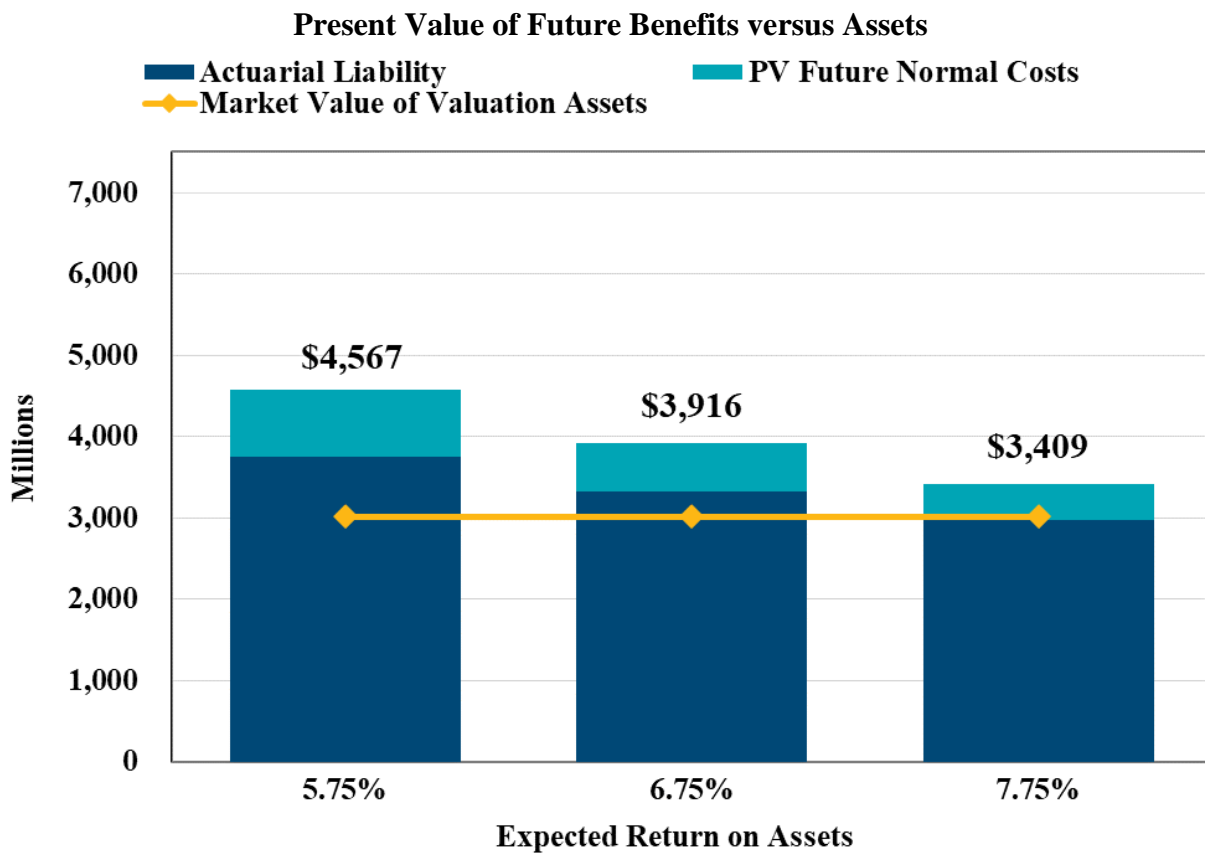
MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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SECTION II – RISK ANALYSIS

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 \$3.9 billion in assets today to pay all projected benefits (including those on behalf of active members for service they are expected earn in the future) compared to current assets of \$3.0 billion. If investment returns are only 5.75%, the Plan would need approximately \$4.6 billion in assets today, and if investment returns are 7.75%, the Plan would need approximately \$3.4 billion in assets today.

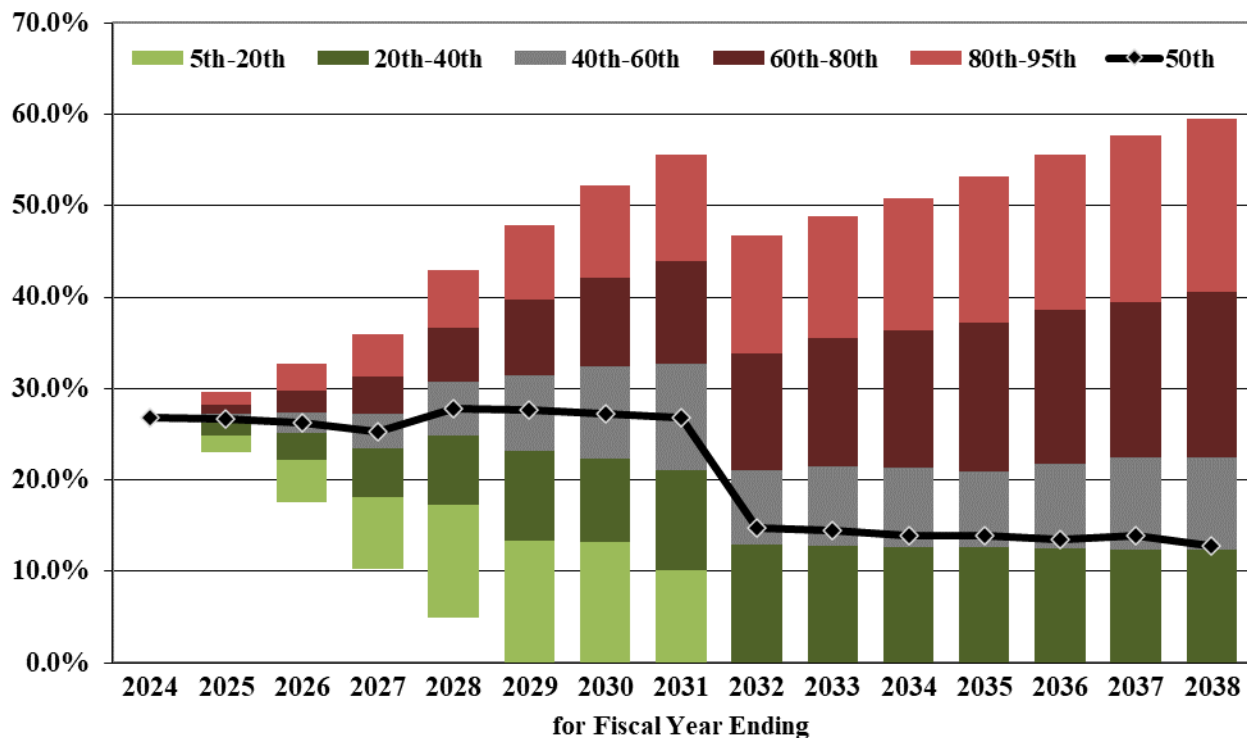
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SECTION II – RISK ANALYSIS

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 13.1% assumed standard deviation of annual returns (based on the target allocation in the investment consultant's Asset-Liability Study from March 16, 2022). 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



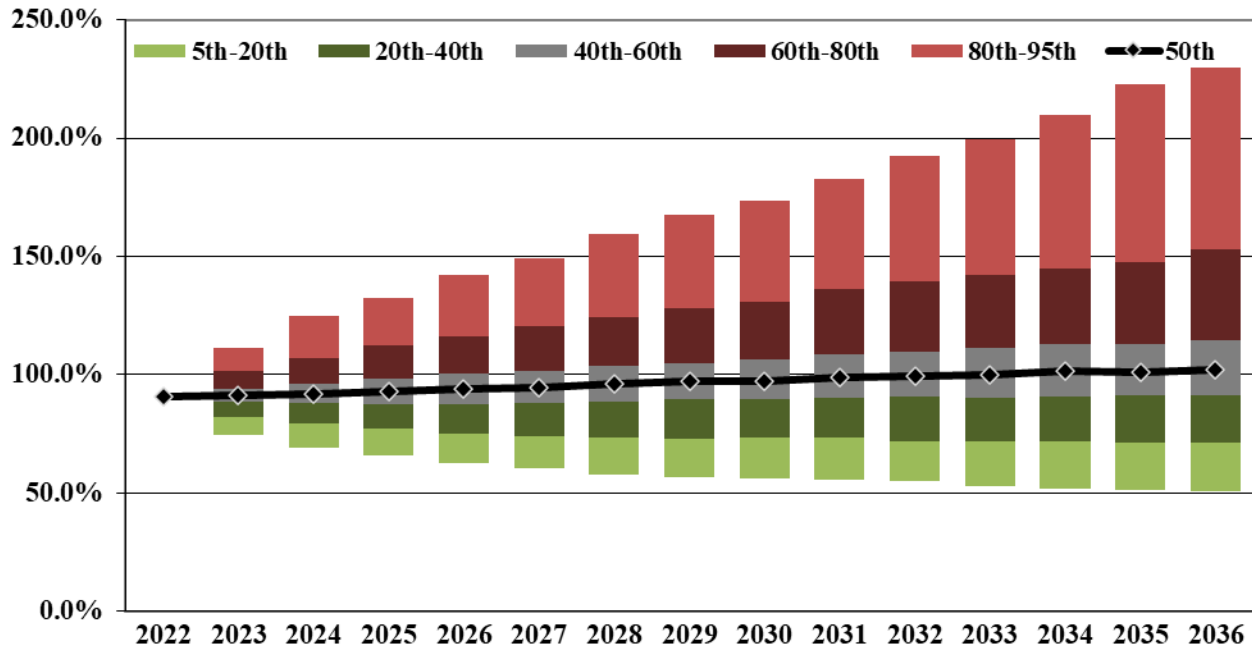
The stochastic projection of employer contributions as a percentage of pay shows the probable range of future contribution rates. The baseline contribution rate (black line), which is based on the median of the simulations using an average return of 6.75%, aligns closely with the projections discussed in subsection D. of the Executive Summary of this report. In the most pessimistic scenario shown, the 95th percentile, the projected employer contribution rate exceeds 55% of pay in FYE 2031. Conversely, the most optimistic scenario shown, the 5th percentile, the projected employer contribution rate declines to 0% beginning in FYE 2029. 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 PEPRA.

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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 50% 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.

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SECTION II – RISK ANALYSIS

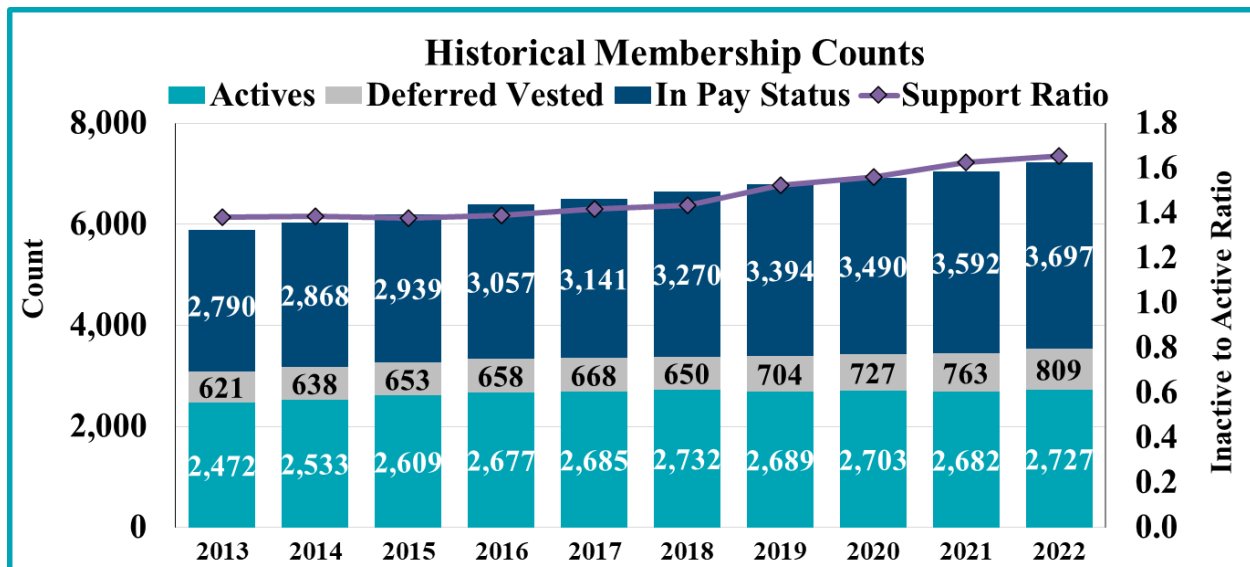
There is also a risk of the contribution rate increasing even higher when payroll decreases since the Plan's funding policy amortizes the UAL as a level percentage of pay. This means that the UAL payments increase at the assumed payroll growth rate of 2.75%, so that the payment is expected to remain 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 Novato).

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 2013 to 2022. The Support Ratio was approximately 1.4 in 2013. Over the past 10 years, the growth in retired membership has exceeded the growth in active membership, increasing the Support Ratio to nearly 1.7. That means for 2022, there are approximately 1.7 inactive members per active member.

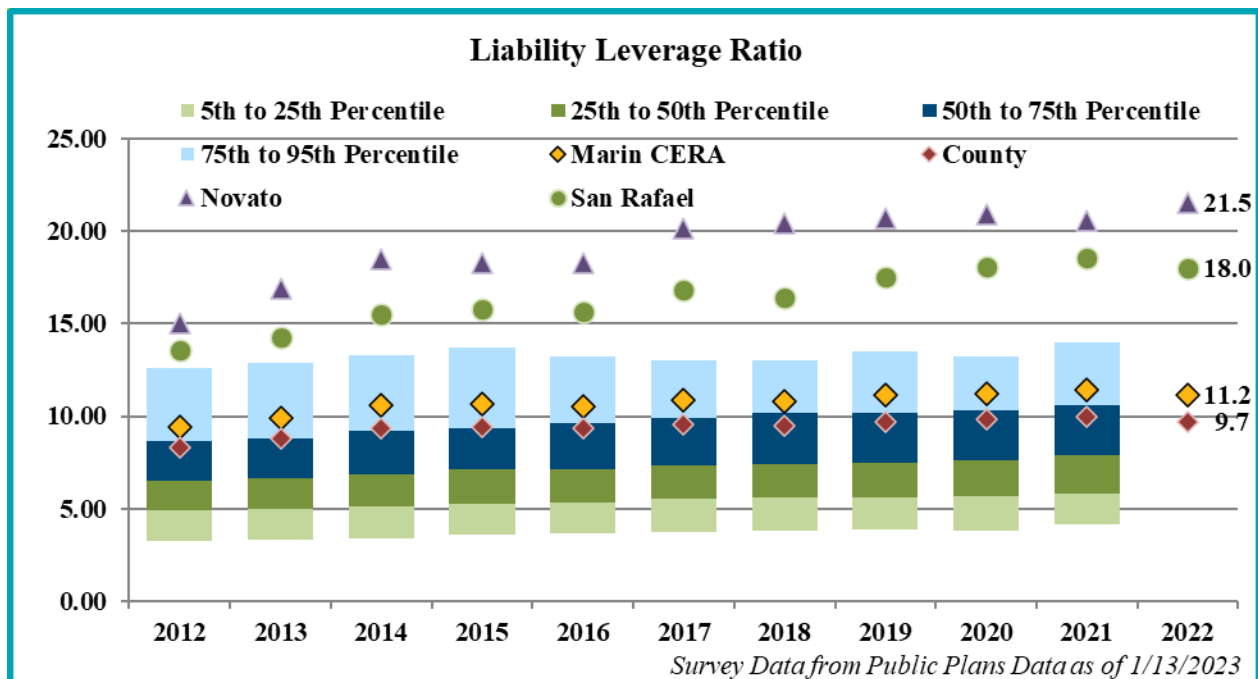
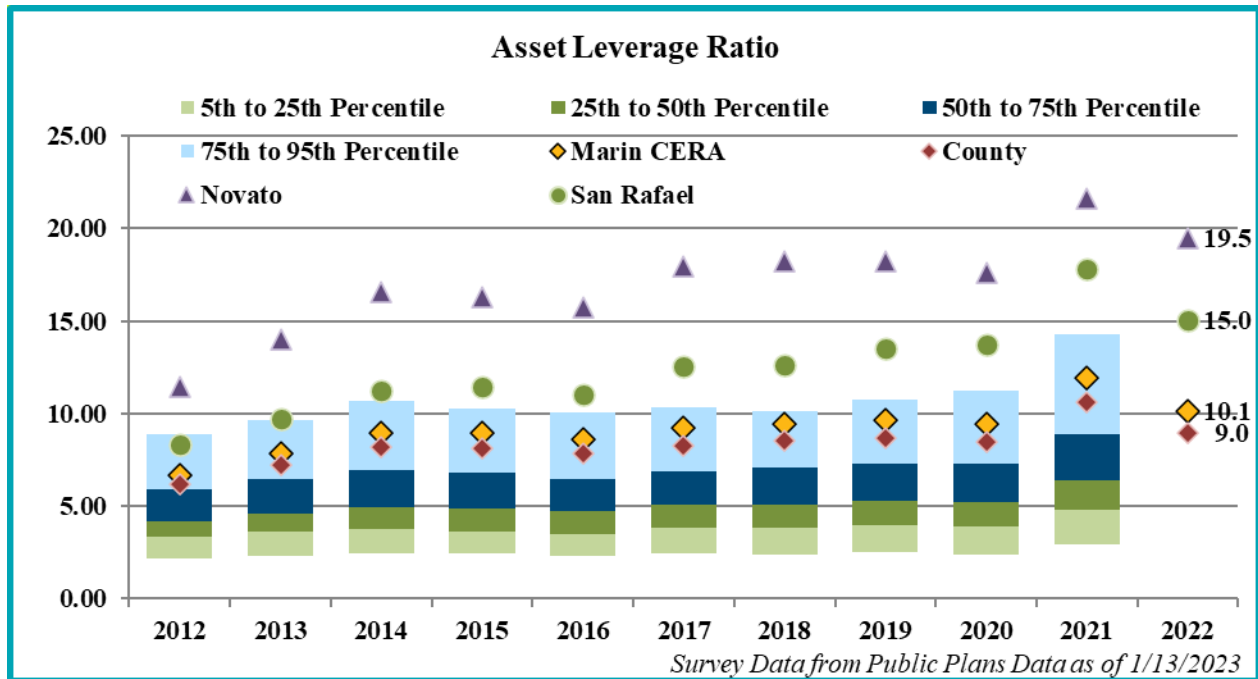


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SECTION II – RISK ANALYSIS

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
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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 is currently around 10 times payroll. We note that while assets are currently around 9 times payroll for the County, the ratio is around 15 for San Rafael, and over 19 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 (9.0) for the County, that means the loss in assets is about 90% of active County payroll (9.0 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 7.0% 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 150% of pay, which would require an eventual 11.8% of pay amortization payment. The same loss for Novato would translate to a loss of 195% of pay, requiring a 15.2% 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
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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, 2021 and June 30, 2022,
- 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. The Statutory Contingency Reserves are valued at \$0 as of the June 30, 2022 measurement date.

Table III-1 on the next page discloses asset value as of June 30, 2021 and June 30, 2022.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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SECTION III – ASSETS

**Table III-1
Statement of Assets at Market Value**

Assets	June 30, 2021	June 30, 2022
Cash and Cash Equivalents	\$ 106,826,520	\$ 105,664,961
Collateral held for Securities Loaned	35,601,032	91,684,215
Total Cash and Short Term Investments	142,427,552	197,349,176
Receivables		
Contributions	5,281,118	6,290,667
Interest and Dividends	3,091,284	4,506,274
Due from Brokers for Securities Sold	7,818,052	9,621,715
Other Receivables	2,243,007	1,527,450
Total Receivables	18,433,461	21,946,106
Investments, at Fair Value		
Domestic Fixed Income	494,083,206	533,045,310
International Fixed Income	70,297,645	69,142,524
Domestic Equities	1,067,027,753	820,416,009
International Equities	727,552,625	554,453,464
Private Equity	444,009,053	381,189,873
Opportunistic	29,941,119	52,423,309
Real Estate	294,538,314	325,912,457
Real Assets	161,494,512	166,523,845
Total Investments	3,288,944,227	2,903,106,791
Other Assets		
Capital Assets	7,083,908	7,777,799
Prepaid Insurance	177,276	263,349
Total Assets	3,457,066,424	3,130,443,221
Liabilities		
Accounts Payable and Accrued Expenses	649,350	1,554,586
Due to Brokers for Securities Purchased	25,295,756	27,325,272
Retiree Payroll Payable	0	0
Obligations Under Securities Lending Program	35,601,032	91,684,215
Total Liabilities	61,546,138	120,564,073
Net Assets Held in Trust for Pension Benefits	\$ 3,395,520,286	\$ 3,009,879,148
Statutory Contingency Reserve (County)	25,245,694	0
Statutory Contingency Reserve (Novato)	2,393,842	0
Statutory Contingency Reserve (San Rafael)	6,315,668	0
Total Non-Valuation Reserves	33,955,203	0
Market Value of Valuation Assets	\$ 3,361,565,083	\$ 3,009,879,148

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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, 2021 and June 30, 2022.

Table III-2 Changes in Market Values		
<u>Additions</u>	<u>Fiscal Year Ending June 30, 2021</u>	<u>Fiscal Year Ending June 30, 2022</u>
Contributions		
Employers' Contributions	\$ 80,359,731	\$ 85,165,422
Members' Contributions	32,019,007	33,878,121
Total Contributions	112,378,738	119,043,543
Investment Income		
Net Appreciation/(Depreciation) in Fair Value of Investments	804,922,444	(358,258,105)
Interest and Dividends	28,817,679	44,325,603
Real Estate Operating Income, net	7,966,024	162,101
Other Investment Income	2,005,283	1,148,999
Total Investment Income/(Loss)	843,711,430	(312,621,402)
Investment Expenses	(13,967,090)	(10,296,718)
Net Investment Income/(Loss)	829,744,340	(322,918,120)
Securities Lending Activities		
Net Securities Lending Income/(Loss)	145,984	195,686
Total Investment Income/(Loss)	829,890,324	(322,722,434)
Total Additions/(Declines)	\$ 942,269,062	\$ (203,678,891)

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

SECTION III – ASSETS

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

<u>Deductions</u>	<u>Fiscal Year ending June 30, 2021</u>	<u>Fiscal Year ending June 30, 2022</u>
Benefit payments	166,139,520	174,758,842
Refunds of Members' Contributions	1,540,282	2,242,861
Administrative Costs	3,572,267	4,254,848
Legal Costs & Litigation Settlement	341,721	240,829
Computer Expenses	279,871	285,250
Actuarial Expenses	189,980	179,617
Total Deductions	172,063,641	181,962,247
Net increase (Decrease)	770,205,421	(385,641,138)
Net Assets Held in Trust for Pension Benefits		
Beginning of Year	2,625,314,865	3,395,520,286
End of Year	\$ 3,395,520,286	\$ 3,009,879,148
Approximate Return (Net of Investment Expenses)*	31.97%	-9.59%

**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, 2022**

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%
2022	-9.6%	6.8%
10-Year Compound Average	8.7%	3.3%
5-Year Compound Average	7.4%	3.7%

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

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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.

Separate reserves are maintained by MCERA for each of the three main valuation groups (County / Novato / San Rafael). Within each of the three main groups, the assets for each employer subgroup are allocated such that all employers within that group have the same funding ratio.

Under this methodology employers with higher leverage ratios will be more impacted by changes in assets and liabilities with respect to their contribution rates. It also helps to stabilize the contribution rates for some of the smaller employers when they experience one or more retirements among their senior workforces.

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.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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SECTION III – ASSETS

Table III-4					
Valuation Assets and Funding Ratios					
Plan	Group	Assets 2021	Ratios 2021	Assets 2022	Ratios 2022
County					
	County Misc	\$ 1,523,808,169	106.8%	\$ 1,355,124,216	92.4%
	County Safety	743,544,442	106.8%	675,080,073	92.4%
	Courts	92,800,437	106.8%	83,018,391	92.4%
	South Marin Fire Misc	2,522,163	106.8%	2,304,345	92.4%
	South Marin Fire Safety	104,577,057	106.8%	93,752,520	92.4%
	Mosquito District	35,294,586	106.8%	32,398,597	92.4%
	LAFCO	1,286,868	106.8%	1,146,230	92.4%
	Tamalpais CSD	11,209,080	106.8%	9,998,374	92.4%
	Marin City CSD	1,016,447	106.8%	788,792	92.4%
Novato					
	Novato Misc	7,675,556	105.2%	7,121,965	90.4%
	Novato Safety	227,588,832	105.2%	202,649,711	90.4%
San Rafael					
	San Rafael Misc	231,537,822	95.8%	209,043,614	83.5%
	San Rafael Safety	378,703,627	95.8%	337,452,318	83.5%

Market Value of Valuation Assets and Funding Ratios - Total					
County		\$ 2,516,059,248	106.8%	\$ 2,253,611,537	92.4%
Novato		235,264,389	105.2%	209,771,676	90.4%
San Rafael		610,241,449	95.8%	546,495,931	83.5%

MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2022**

SECTION IV – LIABILITIES

Table IV-1			
Present Value of Benefits - Active Members Only			
Plan	Group	2021	2022
County	County Misc Tier 1	\$ 1,834,273	\$ 855,885
	County Misc Tier 2	15,592,095	13,633,619
	County Misc Tier 3	395,134,067	387,272,725
	County Misc Tier 3A	36,926,727	37,907,272
	County Misc Tier 4	47,315,400	46,413,925
	County Misc Tier 5 (PEPRA)	211,650,086	255,328,823
	County Safety Tier 1A	3,008,386	2,987,755
	County Safety Tier 2A	40,447,178	40,727,095
	County Safety Tier 2B	219,532,878	218,422,411
	County Safety Tier 3 (PEPRA)	80,639,498	95,695,191
	Courts Tier 1	0	0
	Courts Tier 2	384,342	410,541
	Courts Tier 3	28,699,691	25,946,997
	Courts Tier 4	1,128,283	1,353,112
	Courts Tier 5 (PEPRA)	8,169,917	11,483,025
	South Marin Fire Misc Tier 1	0	0
	South Marin Fire Misc Tier 2 (PEPRA)	1,574,421	2,014,775
	South Marin Fire Safety Tier 1	19,008,068	18,126,004
	South Marin Fire Safety Tier 2	22,295,057	22,340,476
	South Marin Fire Safety Tier 2A	5,829,324	6,992,847
	South Marin Fire Safety Tier 3A (PEPRA)	9,076,872	9,786,092
	Mosquito District Tier 1	19,616,209	18,817,547
	Mosquito District Tier 2 (PEPRA)	2,182,331	3,543,139
	LAFCO Tier 3	0	0
	LAFCO Tier 4 (PEPRA)	603,555	779,337
	Tamalpais CSD Tier 1	2,338,467	1,721,104
	Tamalpais CSD Tier 2 (PEPRA)	1,568,140	2,361,798
	Marin City CSD Tier 1	187,045	0
	Marin City CSD Tier 2 (PEPRA)	981,846	231,476
Novato	Novato Misc Tier 1	4,904,197	5,173,322
	Novato Misc Tier 2A (PEPRA)	1,016,871	1,190,171
	Novato Safety Tier 1	74,302,833	69,282,082
	Novato Safety Tier 2	8,785,485	9,416,239
	Novato Safety Tier 3 (PEPRA)	4,404,544	4,871,941
	Novato Safety Tier 3A (PEPRA)	7,655,718	9,516,914
San Rafael	San Rafael Misc Tier 1	52,560,285	50,309,169
	San Rafael Misc Tier 2	5,377,921	6,310,805
	San Rafael Misc Tier 3 (PEPRA)	19,936,955	25,237,367
	San Rafael Fire Tier 1	45,103,954	38,606,045
	San Rafael Police Tier 1	43,158,635	45,672,371
	San Rafael Fire Tier 2	12,286,196	13,146,484
	San Rafael Police Tier 2	4,314,183	4,627,050
	San Rafael Safety Tier 3 (PEPRA)	33,843,453	37,322,071
Total Present Value of Benefits - Active and Inactive Members			
County		\$ 2,798,759,331	\$ 2,908,403,006
Novato		252,962,323	260,696,159
San Rafael		728,376,447	747,098,880

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

SECTION IV – LIABILITIES

Table IV-2			
Actuarial Liabilities - Active Members Only			
Plan	Group	2021	2022
County	County Misc Tier 1	\$ 1,722,157	\$ 812,423
	County Misc Tier 2	14,125,107	12,394,723
	County Misc Tier 3	323,322,807	321,688,655
	County Misc Tier 3A	23,354,109	25,091,600
	County Misc Tier 4	21,535,908	22,601,907
	County Misc Tier 5 (PEPRA)	65,573,544	81,420,812
	County Safety Tier 1A	3,008,386	2,987,755
	County Safety Tier 2A	26,500,333	27,545,814
	County Safety Tier 2B	159,416,624	160,770,442
	County Safety Tier 3 (PEPRA)	18,147,796	23,924,540
	Courts Tier 1	0	0
	Courts Tier 2	318,898	349,003
	Courts Tier 3	23,512,171	21,579,539
	Courts Tier 4	476,845	604,404
	Courts Tier 5 (PEPRA)	1,970,909	2,551,338
	South Marin Fire Misc Tier 1	0	0
	South Marin Fire Misc Tier 2 (PEPRA)	395,336	588,287
	South Marin Fire Safety Tier 1	16,061,557	15,537,935
	South Marin Fire Safety Tier 2	12,582,761	13,108,016
	South Marin Fire Safety Tier 2A	1,292,103	1,826,985
	South Marin Fire Safety Tier 3A (PEPRA)	2,049,309	2,661,419
	Mosquito District Tier 1	15,204,934	15,161,391
	Mosquito District Tier 2 (PEPRA)	467,336	742,646
	LAFCO Tier 3	0	0
	LAFCO Tier 4 (PEPRA)	96,999	200,754
	Tamalpais CSD Tier 1	1,276,676	1,181,356
	Tamalpais CSD Tier 2 (PEPRA)	463,516	632,595
	Marin City CSD Tier 1	0	0
	Marin City CSD Tier 2 (PEPRA)	157,987	24,241
Novato	Novato Misc Tier 1	3,667,765	4,123,361
	Novato Misc Tier 2A (PEPRA)	311,248	390,602
	Novato Safety Tier 1	61,425,151	58,406,921
	Novato Safety Tier 2	3,846,916	4,562,588
	Novato Safety Tier 3 (PEPRA)	1,637,547	2,023,569
	Novato Safety Tier 3A (PEPRA)	848,869	1,234,860
San Rafael	San Rafael Misc Tier 1	41,794,061	40,907,396
	San Rafael Misc Tier 2	2,188,680	2,809,374
	San Rafael Misc Tier 3 (PEPRA)	5,566,712	7,009,785
	San Rafael Fire Tier 1	30,963,197	27,088,928
	San Rafael Police Tier 1	32,736,953	35,873,479
	San Rafael Fire Tier 2	4,908,604	5,759,631
	San Rafael Police Tier 2	1,158,152	1,442,281
	San Rafael Safety Tier 3 (PEPRA)	6,136,657	7,821,900

Total Actuarial Liabilities - Active and Inactive Members		
County	\$ 2,356,069,283	\$ 2,439,238,615
Novato	223,630,171	231,987,391
San Rafael	637,247,881	654,580,292

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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 with 16 years remaining as of the current valuation,
- The remaining UAL as of June 30, 2013 as a level percent of member payroll over a fixed period with 8 years remaining as of the current valuation, 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 \$5.3 million per year as of June 30, 2022, increasing at 2.75% per annum. The administrative expenses are split between employees and employers based on their share of the overall contributions.

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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, 2022 for FYE 2024						
		June 30, 2021			June 30, 2022	
	County	Novato	San Rafael	County	Novato	San Rafael
1. Total Normal Cost Rate	23.26%	37.99%	28.88%	23.06%	37.46%	27.95%
2. Member Contribution Rate	<u>10.75%</u>	<u>15.06%</u>	<u>12.72%</u>	<u>10.73%</u>	<u>15.07%</u>	<u>12.46%</u>
3. Employer Normal Cost Rate (1-2)	12.51%	22.93%	16.16%	12.33%	22.39%	15.49%
4. UAL Amortization	8.76%	18.01%	39.91%	8.46%	19.78%	38.57%
5. Administrative Expense Rate	<u>1.08%</u>	<u>2.07%</u>	<u>2.84%</u>	<u>1.04%</u>	<u>2.10%</u>	<u>2.70%</u>
6. Final Employer Contribution Rate (3+4+5)	22.35%	43.01%	58.91%	21.83%	44.27%	56.76%

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
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SECTION V – CONTRIBUTIONS

**Table V-2
Development of Amortization Payment - MCERA
For the June 30, 2022 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2022 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	\$ 201,051,256	16	N/A	100%	\$ 17,023,811
2. Initial UAL	6/30/2013	329,672,983	17	237,371,331	8	N/A	100%	34,906,953
3. (Gain)/Loss Base	6/30/2014	(300,327,139)	24	(317,238,332)	16	5	100%	(29,717,612)
4. Assumption Changes	6/30/2014	135,956,758	22	130,789,755	14	3	100%	12,948,942
5. (Gain)/Loss Base	6/30/2015	47,331,467	24	51,052,645	17	5	100%	4,540,855
6. (Gain)/Loss Base	6/30/2016	87,717,930	24	96,167,269	18	5	100%	8,156,996
7. (Gain)/Loss Base	6/30/2017	(83,984,113)	24	(93,201,878)	19	5	100%	(7,567,759)
8. Assumption Changes	6/30/2017	40,801,680	22	41,811,976	17	3	100%	3,542,432
9. (Gain)/Loss Base	6/30/2018	(47,270,380)	24	(53,027,738)	20	5	80%	(4,135,670)
10. Audit Changes	6/30/2018	2,264,341	24	2,540,129	20	5	80%	198,106
11. (Gain)/Loss Base	6/30/2019	46,353,517	24	51,644,987	21	5	60%	3,150,073
12. (Gain)/Loss Base	6/30/2020	80,741,784	24	87,939,799	22	5	40%	3,995,707
13. Assumption Changes	6/30/2020	33,674,497	22	35,648,255	20	3	67%	2,675,970
14. (Gain)/Loss Base	6/30/2021	(632,025,512)	24	(664,484,211)	23	5	20%	(20,293,491)
15. (Gain)/Loss Base	6/30/2022	507,861,909	24	507,861,909	24	5	20%	7,935,165
Total (MCERA)				315,927,153				37,360,476

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SECTION V – CONTRIBUTIONS

**Table V-3
Development of Amortization Payment - County
For the June 30, 2022 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2022 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	\$ 150,006,959	16	N/A	100%	\$ 12,701,687
2. Initial UAL	6/30/2013	188,358,828	17	135,622,230	8	N/A	100%	19,944,105
3. (Gain)/Loss Base	6/30/2014	(223,502,748)	24	(236,088,018)	16	5	100%	(22,115,777)
4. Assumption Changes	6/30/2014	99,117,401	22	95,350,469	14	3	100%	9,440,248
5. (Gain)/Loss Base	6/30/2015	36,267,023	24	39,118,320	17	5	100%	3,479,362
6. (Gain)/Loss Base	6/30/2016	62,321,452	24	68,324,501	18	5	100%	5,795,347
7. (Gain)/Loss Base	6/30/2017	(56,402,352)	24	(62,592,851)	19	5	100%	(5,082,383)
8. Assumption Changes	6/30/2017	27,391,858	22	28,070,112	17	3	100%	2,378,181
9. (Gain)/Loss Base	6/30/2018	(45,161,446)	24	(50,661,944)	20	5	80%	(3,951,160)
10. Audit Changes	6/30/2018	1,870,282	24	2,098,075	20	5	80%	163,630
11. (Gain)/Loss Base	6/30/2019	34,582,319	24	38,530,052	21	5	60%	2,350,131
12. (Gain)/Loss Base	6/30/2020	54,612,033	24	59,480,617	22	5	40%	2,702,611
13. Assumption Changes	6/30/2020	32,811,182	22	34,734,338	20	3	67%	2,607,366
14. (Gain)/Loss Base	6/30/2021	(470,028,373)	24	(494,167,445)	23	5	20%	(15,091,980)
15. (Gain)/Loss Base	6/30/2022	377,801,662	24	377,801,662	24	5	20%	5,903,019
Total (County)				185,627,078				21,224,386

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SECTION V – CONTRIBUTIONS

**Table V-4
Development of Amortization Payment - Novato
For the June 30, 2022 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2022 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	\$ 15,146,180	16	N/A	100%	\$ 1,282,487
2. Initial UAL	6/30/2013	17,008,202	17	12,246,255	8	N/A	100%	1,800,889
3. (Gain)/Loss Base	6/30/2014	(22,114,107)	24	(23,359,335)	16	5	100%	(2,188,209)
4. Assumption Changes	6/30/2014	6,230,650	22	5,993,856	14	3	100%	593,426
5. (Gain)/Loss Base	6/30/2015	2,876,813	24	3,102,987	17	5	100%	275,994
6. (Gain)/Loss Base	6/30/2016	6,441,310	24	7,061,762	18	5	100%	598,985
7. (Gain)/Loss Base	6/30/2017	(7,837,057)	24	(8,697,221)	19	5	100%	(706,193)
8. Assumption Changes	6/30/2017	4,583,960	22	4,697,464	17	3	100%	397,983
9. (Gain)/Loss Base	6/30/2018	1,668,937	24	1,872,207	20	5	80%	146,015
10. Audit Changes	6/30/2018	14,052	24	15,763	20	5	80%	1,229
11. (Gain)/Loss Base	6/30/2019	4,098,708	24	4,566,594	21	5	60%	278,538
12. (Gain)/Loss Base	6/30/2020	9,698,977	24	10,563,627	22	5	40%	479,978
13. Assumption Changes	6/30/2020	1,097,329	22	1,161,647	20	3	67%	87,200
14. (Gain)/Loss Base	6/30/2021	(46,432,603)	24	(48,817,224)	23	5	20%	(1,490,889)
15. (Gain)/Loss Base	6/30/2022	36,661,154	24	36,661,154	24	5	20%	572,818
Total (Novato)				22,215,715				2,130,252

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

**Table V-5
Development of Amortization Payment - San Rafael
For the June 30, 2022 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2022 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	\$ 35,898,117	16	N/A	100%	\$ 3,039,637
2. Initial UAL	6/30/2013	124,305,953	17	89,502,846	8	N/A	100%	13,161,959
3. (Gain)/Loss Base	6/30/2014	(54,710,285)	24	(57,790,979)	16	5	100%	(5,413,627)
4. Assumption Changes	6/30/2014	30,608,707	22	29,445,431	14	3	100%	2,915,268
5. (Gain)/Loss Base	6/30/2015	8,187,631	24	8,831,339	17	5	100%	785,499
6. (Gain)/Loss Base	6/30/2016	18,955,168	24	20,781,005	18	5	100%	1,762,664
7. (Gain)/Loss Base	6/30/2017	(19,744,705)	24	(21,911,805)	19	5	100%	(1,779,184)
8. Assumption Changes	6/30/2017	8,825,862	22	9,044,400	17	3	100%	766,268
9. (Gain)/Loss Base	6/30/2018	(3,777,871)	24	(4,238,001)	20	5	80%	(330,525)
10. Audit Changes	6/30/2018	380,007	24	426,290	20	5	80%	33,247
11. (Gain)/Loss Base	6/30/2019	7,672,490	24	8,548,341	21	5	60%	521,404
12. (Gain)/Loss Base	6/30/2020	16,430,775	24	17,895,555	22	5	40%	813,117
13. Assumption Changes	6/30/2020	(234,014)	22	(247,730)	20	3	67%	(18,596)
14. (Gain)/Loss Base	6/30/2021	(115,564,537)	24	(121,499,542)	23	5	20%	(3,710,622)
15. (Gain)/Loss Base	6/30/2022	93,399,094	24	93,399,094	24	5	20%	1,459,328
Total (San Rafael)				108,084,361				14,005,838

The single equivalent amortization periods for the County, Novato, and San Rafael – i.e., the lengths of time required to amortize the overall UAL as a level percentage of payroll based on the total current amortization payment rate – are eleven years, fourteen years, and nine years, respectively.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2022 for FYE 2024							
	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	21.35%	21.67%	19.97%	22.15%	21.79%	18.90%	19.63%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>0.00%</u>	<u>9.78%</u>	<u>9.00%</u>	<u>10.13%</u>	<u>9.14%</u>	<u>9.41%</u>	9.30%
C. Employer Normal Cost Rate (A-B)	21.35%	11.89%	10.97%	12.02%	12.65%	9.49%	10.33%
D. UAL Amortization Rate	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%
E. Administrative Expense Rate	<u>1.41%</u>	<u>0.94%</u>	<u>0.89%</u>	<u>0.94%</u>	<u>0.98%</u>	<u>0.82%</u>	0.86%
F. Net June 30, 2022 Contribution Rate (C+D+E)	29.66%	19.73%	18.76%	19.86%	20.53%	17.21%	18.09%
	County Safety Tier 2A		County Safety Tier 2B	County Safety Tier 3	County Safety Tier 3	County Safety	County Misc / Safety
A. Total Normal Cost Rate	38.63%		37.70%	29.38%	34.32%		22.68%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>16.70%</u>		<u>16.68%</u>	<u>14.76%</u>	<u>15.88%</u>		10.62%
C. Employer Normal Cost Rate (A-B)	21.93%		21.02%	14.62%	18.44%		12.06%
D. UAL Amortization Rate	13.79%		13.79%	13.79%	13.79%		8.32%
E. Administrative Expense Rate	<u>1.78%</u>		<u>1.74%</u>	<u>1.42%</u>	<u>1.61%</u>		1.02%
F. Net June 30, 2022 Contribution Rate (C+D+E)	37.50%		36.55%	29.83%	33.84%		21.40%

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SECTION V – CONTRIBUTIONS

Table V-7
Development of the County Special Districts Contribution Rates as of June 30, 2022 for FYE 2024

	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		18.26%	24.72%	19.89%	0.00%	24.52%	24.54%	20.11%
B. Member Contribution Rate (Excluding Admin Expense Load)		<u>9.87%</u>	<u>11.34%</u>	<u>9.87%</u>	<u>0.00%</u>	<u>9.87%</u>	<u>9.75%</u>	<u>9.87%</u>
C. Employer Normal Cost Rate (A-B)		8.39%	13.38%	10.02%	0.00%	14.65%	14.79%	10.24%
D. UAL Amortization Rate		1.15%	7.85%	7.85%	8.16%	8.16%	12.46%	12.46%
E. Administrative Expense Rate		<u>0.48%</u>	<u>1.06%</u>	<u>0.89%</u>	<u>0.41%</u>	<u>1.14%</u>	<u>1.36%</u>	<u>1.13%</u>
F. Net June 30, 2022 Contribution Rate (C+D+E)		10.02%	22.29%	18.76%	8.57%	23.95%	28.61%	23.83%

	LAFCO Tier 3*	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		17.99%	42.61%	43.49%	45.50%	32.80%	31.78%
B. Member Contribution Rate (Excluding Admin Expense Load)		<u>9.41%</u>	<u>14.89%</u>	<u>15.90%</u>	<u>15.00%</u>	<u>16.40%</u>	<u>12.83%</u>
C. Employer Normal Cost Rate (A-B)		8.58%	27.72%	27.59%	30.50%	16.40%	18.95%
D. UAL Amortization Rate		2.66%	11.30%	11.30%	11.30%	11.30%	10.50%
E. Administrative Expense Rate		<u>0.56%</u>	<u>1.95%</u>	<u>1.94%</u>	<u>2.09%</u>	<u>1.38%</u>	<u>1.47%</u>
F. Net June 30, 2022 Contribution Rate (C+D+E)		11.80%	40.97%	40.83%	43.89%	29.08%	30.92%

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

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

Table V-8
Development of the Courts and Novato Contribution Rates as of June 30, 2022 for FYE 2024

	Courts Tier 1	Courts Tier 2	Courts Tier 3	Courts Tier 4	Courts Tier 5	Courts Total
A. Total Normal Cost Rate	0.00%	17.24%	19.98%	26.87%	18.88%	19.69%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>0.00%</u>	<u>8.42%</u>	<u>8.91%</u>	<u>10.23%</u>	<u>9.41%</u>	<u>9.24%</u>
C. Employer Normal Cost Rate (A-B)	0.00%	8.82%	11.07%	16.64%	9.47%	10.45%
D. UAL Amortization Rate	8.88%	8.88%	8.88%	8.88%	8.88%	8.88%
E. Administrative Expense Rate	<u>0.44%</u>	<u>0.88%</u>	<u>1.00%</u>	<u>1.27%</u>	<u>0.92%</u>	<u>0.96%</u>
F. Net June 30, 2022 Contribution Rate (C+D+E)	9.32%	18.58%	20.95%	26.79%	19.27%	20.29%

	Novato Misc Tier 1	Novato Misc Tier 2A	Novato Misc	Novato Safety Tier 1	Novato Safety Tier 2	Novato Safety Tier 3	Novato Safety Tier 3A	Novato Safety	Novato Total
A. Total Normal Cost Rate	22.56%	21.94%	22.32%	42.01%	47.17%	35.54%	29.12%	39.22%	37.46%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>9.88%</u>	<u>9.41%</u>	<u>9.70%</u>	<u>15.63%</u>	<u>16.30%</u>	<u>17.77%</u>	<u>14.76%</u>	<u>15.70%</u>	<u>15.07%</u>
C. Employer Normal Cost Rate (A-B)	12.68%	12.53%	12.62%	26.38%	30.87%	17.77%	14.36%	23.52%	22.39%
D. UAL Amortization Rate	6.28%	6.28%	6.28%	21.35%	21.35%	21.35%	21.35%	21.35%	19.78%
E. Administrative Expense Rate	<u>0.95%</u>	<u>0.94%</u>	<u>0.94%</u>	<u>2.38%</u>	<u>2.61%</u>	<u>1.95%</u>	<u>1.78%</u>	<u>2.24%</u>	<u>2.10%</u>
F. Net June 30, 2022 Contribution Rate (C+D+E)	19.91%	19.75%	19.84%	50.11%	54.83%	41.07%	37.49%	47.11%	44.27%

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

**Table V-9
Development of the San Rafael Contribution Rates as of June 30, 2022 for FYE 2024**

	San Rafael Misc Tier 1	San Rafael Misc Tier 2	San Rafael Misc Tier 3	<i>San Rafael Misc</i>
A. Total Normal Cost Rate	26.43%	24.64%	17.98%	<i>21.27%</i>
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>11.70%</u>	<u>9.40%</u>	<u>9.41%</u>	<i>10.12%</i>
C. Employer Normal Cost Rate (A-B)	14.73%	15.24%	8.57%	<i>11.15%</i>
D. UAL Amortization Rate	31.11%	31.11%	31.11%	<i>31.11%</i>
E. Administrative Expense Rate	<u>2.29%</u>	<u>2.31%</u>	<u>1.98%</u>	<i>2.11%</i>
F. Net June 30, 2022 Contribution Rate (C+D+E)	48.13%	48.66%	41.66%	<i>44.37%</i>

	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	<i>San Rafael Safety</i>	<i>San Rafael Total</i>
A. Total Normal Cost Rate	39.59%	37.94%	36.20%	37.94%	29.96%	<i>34.71%</i>	<i>27.95%</i>
B. Member Contribution Rate (Excluding Admin Expense)	<u>15.70%</u>	<u>14.93%</u>	<u>13.54%</u>	<u>13.44%</u>	<u>14.76%</u>	<i>14.82%</i>	<i>12.46%</i>
C. Employer Normal Cost Rate (A-B)	23.89%	23.01%	22.66%	24.50%	15.20%	<i>19.89%</i>	<i>15.49%</i>
D. UAL Amortization Rate	46.25%	46.25%	46.25%	46.25%	46.25%	<i>46.25%</i>	<i>38.57%</i>
E. Administrative Expense Rate	<u>3.50%</u>	<u>3.46%</u>	<u>3.44%</u>	<u>3.53%</u>	<u>3.07%</u>	<i>3.30%</i>	<i>2.70%</i>
F. Net June 30, 2022 Contribution Rate (C+D+E)	73.64%	72.72%	72.35%	74.28%	64.52%	<i>69.44%</i>	<i>56.76%</i>

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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, 2022. 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, 2022 for FYE 2024		
	South Marin Fire Safety Tier 3	Novato Misc Tier 2
A. Total Normal Cost Rate	35.54%	19.75%
B. Member Contribution Rate (Excluding Admin Expense Load)	<u>17.77%</u>	<u>9.87%</u>
C. Employer Normal Cost Rate (A-B)	17.77%	9.88%
D. UAL Amortization Rate	11.30%	6.28%
E. Administrative Expense Rate	<u>1.45%</u>	<u>0.81%</u>
F. Net June 30, 2022 Contribution Rate (C+D+E)	30.52%	16.97%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2022.

Table V-11				
Plan	Group	# of Active Members	2021	2022
County	County Misc Tier 1	1	33.55%	29.66%
	County Misc Tier 2	22	20.23%	19.73%
	County Misc Tier 3	488	19.33%	18.76%
	County Misc Tier 3A	66	20.28%	19.86%
	County Misc Tier 4	124	20.91%	20.53%
	County Misc Tier 5 (PEPRA)	1,044	17.48%	17.21%
	County Misc	1,745	18.62%	18.09%
	County Safety Tier 1A	1	14.25%	14.48%
	County Safety Tier 2A	39	37.43%	37.50%
	County Safety Tier 2B	147	36.52%	36.55%
	County Safety Tier 3 (PEPRA)	166	29.48%	29.83%
	County Safety	353	33.94%	33.84%
	County Misc/Safety	2,098	22.14%	21.40%
	Courts Tier 1	0	N/A	N/A
	Courts Tier 2	1	19.28%	18.58%
	Courts Tier 3	44	21.87%	20.95%
	Courts Tier 4	4	26.13%	26.79%
	Courts Tier 5 (PEPRA)	64	20.42%	19.27%
	Courts	113	21.42%	20.29%
	South Marin Fire Misc Tier 1	0	N/A	N/A
	South Marin Fire Misc Tier 2 (PEPRA)	8	11.05%	10.02%
	South Marin Fire Safety Tier 1	9	40.16%	40.97%
	South Marin Fire Safety Tier 2	18	40.52%	40.83%
	South Marin Fire Safety Tier 2A	8	39.83%	43.89%
	South Marin Fire Safety Tier 3A (PEPRA)	15	28.01%	29.08%
	Mosquito District Tier 1	20	30.52%	28.61%
	Mosquito District Tier 2 (PEPRA)	15	23.66%	23.83%
	LAFCO Tier 3	0	N/A	N/A
	LAFCO Tier 4 (PEPRA)	3	11.63%	11.80%
	Tamalpais CSD Tier 1	3	26.24%	22.29%
	Tamalpais CSD Tier 2 (PEPRA)	10	21.12%	18.76%
	Marin City CSD Tier 1	0	N/A	N/A
	Marin City CSD Tier 2 (PEPRA)	2	16.52%	23.95%
	Special Districts	111	30.97%	30.92%
	Total County	2,322	22.35%	21.83%
Novato	Novato Misc Tier 1	5	20.16%	19.91%
	Novato Misc Tier 2A (PEPRA)	4	16.48%	19.75%
	Novato Safety Tier 1	34	48.24%	50.11%
	Novato Safety Tier 2	9	53.00%	54.83%
	Novato Safety Tier 3 (PEPRA)	6	38.73%	41.07%
	Novato Safety Tier 3A (PEPRA)	17	35.90%	37.49%
	Total Novato	75	43.01%	44.27%
San Rafael	San Rafael Misc Tier 1	61	52.37%	48.13%
	San Rafael Misc Tier 2	16	53.15%	48.66%
	San Rafael Misc Tier 3 (PEPRA)	122	46.09%	41.66%
	San Rafael Misc	199	49.23%	44.37%
	San Rafael Fire Tier 1	23	71.55%	73.64%
	San Rafael Police Tier 1	26	71.14%	72.72%
	San Rafael Fire Tier 2	12	70.51%	72.35%
	San Rafael Police Tier 2	5	72.39%	74.28%
	San Rafael Safety Tier 3 (PEPRA)	65	62.31%	64.52%
	San Rafael Safety	131	67.68%	69.44%
	Total San Rafael	330	58.91%	56.76%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided by MCERA as of June 30, 2022. 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, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: County of Marin														
	Marin County				Total				Marin Special Districts				Total County and Special Districts	
	Miscellaneous		Safety		Miscellaneous		Miscellaneous		Safety		Total			
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants														
Number	1,706	1,745	356	353	2,062	2,098	163	174	52	50	215	224	2,277	2,322
Average Age	47.39	47.32	40.28	40.39	46.16	46.16	47.79	46.16	41.31	42.41	46.23	45.32	46.17	46.08
Average Service	9.55	9.28	10.75	10.80	9.75	9.53	10.44	9.32	9.46	10.08	10.20	9.49	9.80	9.53
Average Pay*	\$97,358	\$99,401	\$123,044	\$127,379	\$101,792	\$104,108	\$87,666	\$88,330	\$132,414	\$139,002	\$98,489	\$99,641	\$101,481	\$103,677
Service Retired														
Number	1,710	1,757	290	302	2,000	2,059	151	159	34	36	185	195	2,185	2,254
Average Age	72.80	73.05	64.61	64.74	71.61	71.83	69.99	70.53	63.87	63.50	68.87	69.23	71.38	71.60
Average Total Benefit*	\$40,184	\$40,681	\$72,947	\$74,049	\$44,935	\$45,575	\$39,403	\$40,455	\$72,909	\$72,090	\$45,561	\$46,295	\$44,988	\$45,638
Beneficiaries														
Number	283	288	78	81	361	369	17	18	8	10	25	28	386	397
Average Age	74.96	75.33	70.16	70.32	73.92	74.23	68.36	69.47	66.33	69.95	67.71	69.64	73.52	73.91
Average Total Benefit*	\$27,432	\$28,376	\$45,530	\$48,325	\$31,342	\$32,755	\$26,895	\$26,486	\$52,394	\$58,091	\$35,055	\$37,774	\$31,583	\$33,109
Duty Disabled														
Number	83	82	125	129	208	211	6	7	19	17	25	24	233	235
Average Age	69.85	70.50	64.39	64.51	66.57	66.84	66.88	66.07	66.72	66.78	66.76	66.57	66.59	66.81
Average Total Benefit*	\$40,146	\$41,551	\$63,643	\$65,553	\$54,267	\$56,225	\$34,947	\$35,271	\$64,005	\$66,058	\$57,031	\$57,079	\$54,563	\$56,312
Ordinary Disabled														
Number	28	29	8	8	36	37	2	2	0	0	2	2	38	39
Average Age	72.37	72.94	57.14	58.14	68.98	69.74	66.85	67.85	0.00	0.00	66.85	67.85	68.87	69.65
Average Total Benefit*	\$22,712	\$23,039	\$45,027	\$45,963	\$27,671	\$27,996	\$26,917	\$27,455	\$0	\$0	\$26,917	\$27,455	\$27,631	\$27,968
Total In Pay														
Number	2,104	2,156	501	520	2,605	2,676	176	186	61	63	237	249	2,842	2,925
Average Age	72.97	73.25	65.30	65.45	71.49	71.74	69.69	70.23	65.08	65.41	68.50	69.01	71.24	71.51
Average Total Benefit*	\$38,235	\$38,833	\$65,911	\$67,502	\$43,558	\$44,404	\$37,901	\$38,768	\$67,445	\$68,241	\$45,505	\$46,225	\$43,720	\$44,559
Terminated Vested														
Number	261	303	34	36	295	339	20	23	3	4	23	27	318	366
Average Age	48.41	47.62	42.43	42.05	47.72	47.02	48.27	50.69	52.40	47.61	48.81	50.23	47.80	47.26
Average Service	8.20	7.86	7.18	6.28	8.08	7.69	9.15	8.43	7.00	6.00	8.87	8.07	8.14	7.72
Transfers														
Number	170	161	54	50	224	211	28	25	10	9	38	34	262	245
Average Age	50.18	50.19	44.66	45.10	48.85	48.98	48.20	50.03	46.84	47.22	47.84	49.29	48.70	49.02
Average Service	4.96	5.04	4.98	5.04	4.97	5.04	5.18	6.00	5.20	5.00	5.18	5.74	5.00	5.13
Total Inactive														
Number	431	464	88	86	519	550	48	48	13	13	61	61	580	611
Average Age	49.11	48.51	43.80	43.82	48.21	47.77	48.23	50.35	48.12	47.34	48.20	49.70	48.21	47.97
Average Service	6.92	6.88	5.83	5.56	6.74	6.67	6.83	7.17	5.62	5.31	6.57	6.77	6.72	6.68

*All payroll and benefit figures shown are annual.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: County of Marin												
	Tier 1		Tier 2		Tier 3		Tier 3A		Tier 4		Tier 5	
	Miscellaneous		Miscellaneous		Miscellaneous		Miscellaneous		Miscellaneous		Miscellaneous	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants												
Number	2	1	26	22	537	488	70	66	136	124	935	1,044
Average Age	74.44	74.69	66.44	68.06	54.93	55.46	50.61	51.59	49.83	50.45	41.88	42.42
Average Service	37.50	43.00	23.23	23.18	19.37	20.24	11.29	12.21	6.54	7.20	3.77	3.89
Average Pay*	\$101,669	\$91,026	\$90,615	\$94,201	\$107,756	\$110,812	\$112,214	\$114,063	\$107,674	\$107,879	\$88,951	\$92,250
Service Retired												
Number	441	422	224	223	988	1,033	25	29	5	12	27	38
Average Age	79.77	80.38	79.63	80.22	68.51	69.01	66.65	67.24	67.61	65.37	65.81	66.18
Average Total Benefit*	\$59,184	\$61,165	\$25,686	\$26,210	\$36,403	\$37,306	\$18,909	\$19,320	\$19,483	\$21,800	\$12,010	\$12,133
Beneficiaries												
Number	149	149	52	48	79	88	2	2	1	1	0	0
Average Age	80.66	80.73	74.80	75.61	64.85	66.50	64.90	65.90	52.52	53.52	0.00	0.00
Average Total Benefit*	\$34,861	\$35,611	\$17,067	\$18,011	\$20,907	\$22,400	\$10,310	\$10,516	\$9,218	\$9,402	\$0	\$0
Duty Disabled												
Number	17	16	26	26	40	40	0	0	0	0	0	0
Average Age	77.06	77.91	70.71	70.96	66.24	67.24	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$48,342	\$52,652	\$31,352	\$32,136	\$42,378	\$43,230	\$0	\$0	\$0	\$0	\$0	\$0
Ordinary Disabled												
Number	8	8	11	11	7	8	2	2	0	0	0	0
Average Age	77.29	78.29	75.68	76.68	66.96	67.11	53.39	54.38	0.00	0.00	0.00	0.00
Average Total Benefit*	\$29,338	\$30,218	\$19,521	\$19,911	\$19,893	\$19,895	\$23,632	\$24,105	\$0	\$0	\$0	\$0
Total In Pay												
Number	615	595	313	308	1,114	1,169	29	33	6	13	27	38
Average Age	79.87	80.37	77.95	78.60	68.16	68.74	65.61	66.38	65.10	64.45	65.81	66.18
Average Total Benefit*	\$52,603	\$54,121	\$24,508	\$25,208	\$35,415	\$36,268	\$18,642	\$19,076	\$17,772	\$20,847	\$12,010	\$12,133
Terminated Vested												
Number	1	1	0	0	159	156	32	32	40	49	29	65
Average Age	81.34	82.34	0.00	0.00	51.21	51.68	42.90	43.49	45.04	46.22	42.64	40.41
Average Service	5.00	5.00	0.00	0.00	9.89	10.03	7.47	7.81	4.38	4.45	5.07	5.29
Transfers												
Number	1	0	6	5	114	105	12	12	7	8	30	31
Average Age	52.48	0.00	57.32	57.54	51.94	51.99	46.25	45.07	44.90	45.98	44.80	45.94
Average Service	3.00	0.00	2.67	2.60	6.04	5.98	3.58	4.08	1.86	3.00	2.67	3.13
Total Inactive												
Number	2	1	6	5	273	261	44	44	47	57	59	96
Average Age	66.91	82.34	57.32	57.54	51.52	51.80	43.81	43.92	45.02	46.19	43.74	42.20
Average Service	4.00	5.00	2.67	2.60	8.29	8.40	6.41	6.80	4.00	4.25	3.85	4.59

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: County of Marin										
	Tier 1A Safety		Tier 2A Safety		Tier 1B Safety		Tier 2B Safety		Tier 3 Safety	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants										
Number	1	1	41	39	0	0	159	147	155	166
Average Age	73.91	74.91	47.72	48.22	0.00	0.00	45.35	45.77	32.89	33.58
Average Service	36.00	37.00	14.44	15.23	0.00	0.00	16.26	16.57	3.96	4.49
Average Pay*	\$256,298	\$264,558	\$120,337	\$122,272	\$0	\$0	\$140,908	\$147,468	\$104,577	\$109,962
Service Retired										
Number	54	52	45	48	26	26	164	175	1	1
Average Age	76.37	77.02	65.34	65.24	67.93	68.93	60.07	60.37	55.83	56.83
Average Total Benefit*	\$94,306	\$95,163	\$57,378	\$58,550	\$111,616	\$114,964	\$64,352	\$66,229	\$24,348	\$24,835
Beneficiaries										
Number	48	45	7	8	4	4	19	24	0	0
Average Age	76.15	76.84	66.06	67.98	58.78	59.78	58.92	60.63	0.00	0.00
Average Total Benefit*	\$49,340	\$53,259	\$32,941	\$35,007	\$29,341	\$30,221	\$43,950	\$46,531	\$0	\$0
Duty Disabled										
Number	34	33	25	25	8	8	57	62	1	1
Average Age	76.93	77.50	61.26	62.26	66.08	67.08	58.46	58.55	40.57	41.57
Average Total Benefit*	\$57,275	\$59,641	\$42,206	\$43,051	\$132,237	\$136,204	\$67,486	\$68,919	\$48,302	\$49,268
Ordinary Disabled										
Number	1	1	2	2	0	0	5	5	0	0
Average Age	74.72	75.72	59.37	60.37	0.00	0.00	52.73	53.73	0.00	0.00
Average Total Benefit*	\$28,359	\$29,210	\$33,223	\$33,887	\$0	\$0	\$53,083	\$54,144	\$0	\$0
Total In Pay										
Number	137	131	79	83	38	38	245	266	2	2
Average Age	76.42	77.07	63.96	64.49	66.58	67.58	59.46	59.85	48.20	49.20
Average Total Benefit*	\$68,880	\$71,317	\$49,800	\$51,018	\$107,297	\$110,515	\$63,269	\$64,851	\$36,325	\$37,051
Terminated Vested										
Number	0	0	10	9	0	0	18	18	6	9
Average Age	0.00	0.00	45.42	45.28	0.00	0.00	43.83	44.75	33.23	33.43
Average Service	0.00	0.00	10.00	8.00	0.00	0.00	6.22	6.17	5.33	4.78
Transfers										
Number	0	0	6	8	0	0	40	35	8	7
Average Age	0.00	0.00	45.49	47.53	0.00	0.00	47.33	47.10	30.71	32.32
Average Service	0.00	0.00	6.00	5.25	0.00	0.00	5.43	5.54	2.00	2.29
Total Inactive										
Number	0	0	16	17	0	0	58	53	14	16
Average Age	0.00	0.00	45.45	46.34	0.00	0.00	46.24	46.30	31.79	32.94
Average Service	0.00	0.00	8.50	6.71	0.00	0.00	5.67	5.75	3.43	3.69

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

Participant Data as of June 30, 2022: Marin Special Districts												
	Court Tier 1 Miscellaneous		Court Tier 2 Miscellaneous		Court Tier 3 Miscellaneous		Court Tier 4 Miscellaneous		Court Tier 5 Miscellaneous		Total	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants												
Number	0	0	1	1	51	44	4	4	46	64	102	113
Average Age	0.00	0.00	53.60	54.60	54.34	54.62	56.91	56.16	41.20	40.05	48.51	46.42
Average Service	0.00	0.00	20.00	21.00	20.02	20.59	5.25	6.00	2.67	2.47	11.62	9.81
Average Pay*	\$0	\$0	\$61,016	\$62,556	\$81,288	\$82,739	\$93,108	\$106,795	\$76,207	\$77,065	\$79,261	\$80,198
Service Retired												
Number	17	17	11	11	84	88	1	2	1	1	114	119
Average Age	73.53	74.53	79.30	80.30	68.33	69.03	65.83	65.75	66.52	67.52	70.13	70.79
Average Total Benefit*	\$76,363	\$78,654	\$37,998	\$38,758	\$30,258	\$32,433	\$60,721	\$33,121	\$3,436	\$3,505	\$37,912	\$39,389
Beneficiaries												
Number	1	1	0	0	6	6	0	0	0	0	7	7
Average Age	76.11	77.11	0.00	0.00	73.04	74.04	0.00	0.00	0.00	0.00	73.48	74.48
Average Total Benefit*	\$65,754	\$67,727	\$0	\$0	\$21,898	\$22,336	\$0	\$0	\$0	\$0	\$28,163	\$28,820
Duty Disabled												
Number	0	0	0	0	1	2	0	0	0	0	1	2
Average Age	0.00	0.00	0.00	0.00	76.93	66.58	0.00	0.00	0.00	0.00	76.93	66.58
Average Total Benefit*	\$0	\$0	\$0	\$0	\$32,105	\$31,997	\$0	\$0	\$0	\$0	\$32,105	\$31,997
Ordinary Disabled												
Number	0	0	1	1	1	1	0	0	0	0	2	2
Average Age	0.00	0.00	74.71	75.71	58.98	59.98	0.00	0.00	0.00	0.00	66.85	67.85
Average Total Benefit*	\$0	\$0	\$14,985	\$15,284	\$38,849	\$39,626	\$0	\$0	\$0	\$0	\$26,917	\$27,455
Total In Pay												
Number	18	18	12	12	92	97	1	2	1	1	124	130
Average Age	73.68	74.68	78.92	79.92	68.63	69.20	65.83	65.75	66.52	67.52	70.32	70.88
Average Total Benefit*	\$75,774	\$78,047	\$36,080	\$36,802	\$29,827	\$31,874	\$60,721	\$33,121	\$3,436	\$3,505	\$37,138	\$38,523
Terminated Vested												
Number	0	0	0	0	13	13	0	0	0	1	13	14
Average Age	0.00	0.00	0.00	0.00	46.84	49.70	0.00	0.00	0.00	57.36	46.84	50.25
Average Service	0.00	0.00	0.00	0.00	9.46	9.15	0.00	0.00	0.00	9.00	9.46	9.14
Transfers												
Number	0	0	1	1	16	16	2	2	6	4	25	23
Average Age	0.00	0.00	63.04	64.04	51.07	52.07	39.66	40.66	38.26	43.42	47.56	50.09
Average Service	0.00	0.00	5.00	5.00	6.88	6.69	2.50	2.50	2.17	2.00	5.32	5.43
Total Inactive												
Number	0	0	1	1	29	29	2	2	6	5	38	37
Average Age	0.00	0.00	63.04	64.04	49.17	51.01	39.66	40.66	38.26	46.20	47.31	50.15
Average Service	0.00	0.00	5.00	5.00	8.03	7.79	2.50	2.50	2.17	3.40	6.74	6.84

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: 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	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants																
Number	0	0	7	8	7	8	10	9	19	18	7	8	16	15	52	50
Average Age	0.00	0.00	37.23	36.98	37.23	36.98	50.37	50.78	44.95	45.60	37.75	41.37	32.87	34.11	41.31	42.41
Average Service	0.00	0.00	2.43	3.13	2.43	3.13	20.40	21.33	10.74	11.50	4.00	4.50	3.50	4.60	9.46	10.08
Average Pay*	\$0	\$0	\$88,930	\$95,386	\$88,930	\$95,386	\$156,681	\$160,111	\$140,136	\$144,882	\$119,513	\$138,834	\$113,721	\$119,370	\$132,414	\$139,002
Service Retired																
Number	4	4	0	0	4	4	30	31	4	5	0	0	0	0	34	36
Average Age	71.23	72.23	0.00	0.00	71.23	72.23	64.71	64.50	57.54	57.27	0.00	0.00	0.00	0.00	63.87	63.50
Average Total Benefit*	\$29,851	\$30,746	\$0	\$0	\$29,851	\$30,746	\$80,211	\$78,696	\$18,141	\$31,133	\$0	\$0	\$0	\$0	\$72,909	\$72,090
Beneficiaries																
Number	0	0	0	0	0	0	8	10	0	0	0	0	0	0	8	10
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	66.33	69.95	0.00	0.00	0.00	0.00	0.00	0.00	66.33	69.95
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$52,394	\$58,091	\$0	\$0	\$0	\$0	\$0	\$0	\$52,394	\$58,091
Duty Disabled																
Number	1	1	0	0	1	1	17	15	2	2	0	0	0	0	19	17
Average Age	77.28	78.28	0.00	0.00	77.28	78.28	68.66	68.86	50.15	51.15	0.00	0.00	0.00	0.00	66.72	66.78
Average Total Benefit*	\$4,777	\$4,920	\$0	\$0	\$4,777	\$4,920	\$64,153	\$66,248	\$62,750	\$64,633	\$0	\$0	\$0	\$0	\$64,005	\$66,058
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	55	56	6	7	0	0	0	0	61	63
Average Age	72.44	73.44	0.00	0.00	72.44	73.44	66.17	66.64	55.07	55.52	0.00	0.00	0.00	0.00	65.08	65.41
Average Total Benefit*	\$24,836	\$25,581	\$0	\$0	\$24,836	\$25,581	\$71,202	\$71,683	\$33,010	\$40,704	\$0	\$0	\$0	\$0	\$67,445	\$68,241
Terminated Vested																
Number	1	2	1	1	2	3	0	0	3	3	0	0	0	1	3	4
Average Age	77.85	63.40	59.23	60.23	68.54	62.34	0.00	0.00	52.40	53.40	0.00	0.00	0.00	30.24	52.40	47.61
Average Service	9.00	5.00	7.00	7.00	8.00	5.67	0.00	0.00	7.00	7.00	0.00	0.00	0.00	3.00	7.00	6.00
Transfers																
Number	1	0	0	0	1	0	5	4	5	5	0	0	0	0	10	9
Average Age	46.95	0.00	0.00	0.00	46.95	0.00	52.06	52.96	41.62	42.62	0.00	0.00	0.00	0.00	46.84	47.22
Average Service	1.00	0.00	0.00	0.00	1.00	0.00	6.60	6.50	3.80	3.80	0.00	0.00	0.00	0.00	5.20	5.00
Total Inactive																
Number	2	2	1	1	3	3	5	4	8	8	0	0	0	1	13	13
Average Age	62.40	63.40	59.23	60.23	61.34	62.34	52.06	52.96	45.66	46.66	0.00	0.00	0.00	30.24	48.12	47.34
Average Service	5.00	5.00	7.00	7.00	5.67	5.67	6.60	6.50	5.00	5.00	0.00	0.00	0.00	3.00	5.62	5.31

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30,2022: Marin Special Districts														
	Southern Marin Fire		Marin City CSD		Marin City CSD		Total		Mosquito District		Mosquito District		Total	
	Total		Tier 1 Miscellaneous		Tier 2 Miscellaneous		Total		Tier 1 Miscellaneous		Tier 2 Miscellaneous		Total	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants														
Number	59	58	1	0	6	2	7	2	24	20	9	15	33	35
Average Age	40.82	41.66	41.20	#DIV/0!	56.10	48.81	53.97	48.81	53.64	54.51	36.28	41.86	48.90	49.09
Average Service	8.63	9.12	0.00	#DIV/0!	1.33	1.00	1.14	1.00	16.63	18.50	2.44	2.27	12.76	11.54
Average Pay*	\$127,255	\$132,986	\$71,802	#DIV/0!	\$87,349	\$50,156	\$85,128	\$50,156	\$114,640	\$123,814	\$98,570	\$95,370	\$110,257	\$111,624
Service Retired														
Number	38	40	1	1	0	1	1	2	15	18	0	0	15	18
Average Age	64.64	64.37	72.52	73.52	0.00	77.25	72.52	75.39	67.72	67.18	0.00	0.00	67.72	67.18
Average Total Benefit*	\$68,376	\$67,956	\$35,753	\$36,826	\$0	\$2,910	\$35,753	\$19,868	\$61,044	\$56,796	\$0	\$0	\$61,044	\$56,796
Beneficiaries														
Number	8	10	1	1	0	0	1	1	5	5	0	0	5	5
Average Age	66.33	69.95	60.74	61.74	0.00	0.00	60.74	61.74	73.66	74.65	0.00	0.00	73.66	74.65
Average Total Benefit*	\$52,394	\$58,091	\$3,924	\$4,042	\$0	\$0	\$3,924	\$4,042	\$26,067	\$26,849	\$0	\$0	\$26,067	\$26,849
Duty Disabled														
Number	20	18	0	0	0	0	0	0	3	3	0	0	3	3
Average Age	67.24	67.42	0.00	0.00	0.00	0.00	0.00	0.00	65.92	66.92	0.00	0.00	65.92	66.92
Average Total Benefit*	\$61,044	\$62,662	\$0	\$0	\$0	\$0	\$0	\$0	\$52,201	\$53,767	\$0	\$0	\$52,201	\$53,767
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	66	68	2	2	0	1	2	3	23	26	0	0	23	26
Average Age	65.63	66.00	66.63	67.63	0.00	77.25	66.63	70.84	68.78	68.59	0.00	0.00	68.78	68.59
Average Total Benefit*	\$64,217	\$65,104	\$19,839	\$20,434	\$0	\$2,910	\$19,839	\$14,593	\$52,287	\$50,687	\$0	\$0	\$52,287	\$50,687
Terminated Vested														
Number	5	7	3	3	0	0	3	3	1	1	0	0	1	1
Average Age	58.85	53.92	43.11	44.11	0.00	0.00	43.11	44.11	38.97	39.97	0.00	0.00	38.97	39.97
Average Service	7.40	5.86	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	11	9	0	0	0	0	0	0	1	2	0	0	1	2
Average Age	46.85	47.22	0.00	0.00	0.00	0.00	0.00	0.00	55.03	49.36	0.00	0.00	55.03	49.36
Average Service	4.82	5.00	0.00	0.00	0.00	0.00	0.00	0.00	11.00	12.50	0.00	0.00	11.00	12.50
Total Inactive														
Number	16	16	3	3	0	0	3	3	2	3	0	0	2	3
Average Age	50.60	50.15	43.11	44.11	0.00	0.00	43.11	44.11	47.00	46.23	0.00	0.00	47.00	46.23
Average Service	5.63	5.38	8.00	8.00	0.00	0.00	8.00	8.00	10.50	11.67	0.00	0.00	10.50	11.67

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: 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	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants														
Number	0	0	0	0	3	3	3	3	4	3	7	10	11	13
Average Age	0.00	0.00	0.00	0.00	35.91	36.91	35.91	36.91	50.66	51.90	40.02	40.78	43.89	43.34
Average Service	0.00	0.00	0.00	0.00	1.67	3.00	1.67	3.00	9.50	12.33	4.00	3.50	6.00	5.54
Average Pay*	\$0	\$0	\$0	\$0	\$97,219	\$105,255	\$97,219	\$105,255	\$122,354	\$96,923	\$80,997	\$93,030	\$96,036	\$93,928
Service Retired														
Number	2	1	2	2	0	0	4	3	13	13	0	0	13	13
Average Age	73.38	72.68	62.76	63.76	0.00	0.00	68.07	66.73	71.43	72.43	0.00	0.00	71.43	72.43
Average Total Benefit*	\$30,412	\$50,754	\$6,313	\$6,439	\$0	\$0	\$18,362	\$21,211	\$37,198	\$38,178	\$0	\$0	\$37,198	\$38,178
Beneficiaries														
Number	0	1	0	0	0	0	0	1	4	4	0	0	4	4
Average Age	0.00	71.32	0.00	0.00	0.00	0.00	0.00	71.32	54.68	55.68	0.00	0.00	54.68	55.68
Average Total Benefit*	\$0	\$7,136	\$0	\$0	\$0	\$0	\$0	\$7,136	\$31,453	\$32,397	\$0	\$0	\$31,453	\$32,397
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	49.31	50.31	0.00	0.00	49.31	50.31
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,196	\$16,682	\$0	\$0	\$16,196	\$16,682
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	18	18	0	0	18	18
Average Age	73.38	72.00	62.76	63.76	0.00	0.00	68.07	67.88	66.48	67.48	0.00	0.00	66.48	67.48
Average Total Benefit*	\$30,412	\$28,945	\$6,313	\$6,439	\$0	\$0	\$18,362	\$17,692	\$34,754	\$35,699	\$0	\$0	\$34,754	\$35,699
Terminated Vested														
Number	0	0	1	1	0	0	1	1	0	1	0	0	0	1
Average Age	0.00	0.00	51.04	52.04	0.00	0.00	51.04	52.04	0.00	50.92	0.00	0.00	0.00	50.92
Average Service	0.00	0.00	10.00	10.00	0.00	0.00	10.00	10.00	0.00	5.00	0.00	0.00	0.00	5.00
Transfers														
Number	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.57	0.00	58.57	0.00
Average Service	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00
Total Inactive														
Number	0	0	1	1	0	0	1	1	0	1	1	0	1	1
Average Age	0.00	0.00	51.04	52.04	0.00	0.00	51.04	52.04	0.00	50.92	58.57	0.00	58.57	50.92
Average Service	0.00	0.00	10.00	10.00	0.00	0.00	10.00	10.00	0.00	5.00	1.00	0.00	1.00	5.00

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: Novato Fire Protection District												
	Tier 1 Miscellaneous		Tier 2A Miscellaneous		Tier 1 Safety		Tier 2 Safety		Tier 3 Safety		Tier 3A Safety	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants												
Number	6	5	4	4	39	34	9	9	6	6	15	17
Average Age	50.65	52.39	43.45	49.68	48.42	48.89	44.24	45.24	39.92	40.92	33.92	33.43
Average Service	15.00	18.80	4.25	4.50	20.00	20.79	7.78	8.78	7.17	8.17	1.80	2.18
Average Pay*	\$115,257	\$133,564	\$99,038	\$111,677	\$151,471	\$158,050	\$125,148	\$130,514	\$125,810	\$131,257	\$116,591	\$121,650
Service Retired												
Number	5	5	0	0	58	63	0	0	0	0	0	0
Average Age	67.06	68.06	0.00	0.00	68.78	68.29	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$48,044	\$49,485	\$0	\$0	\$115,401	\$114,310	\$0	\$0	\$0	\$0	\$0	\$0
Beneficiaries												
Number	1	1	0	0	20	20	0	0	0	0	0	0
Average Age	58.67	59.67	0.00	0.00	68.35	68.70	0.00	0.00	0.00	0.00	0.00	0.00
Average Total Benefit*	\$12,990	\$13,380	\$0	\$0	\$44,783	\$45,470	\$0	\$0	\$0	\$0	\$0	\$0
Duty Disabled												
Number	0	0	0	0	32	34	1	1	0	0	0	0
Average Age	0.00	0.00	0.00	0.00	70.65	70.71	42.95	43.95	0.00	0.00	0.00	0.00
Average Total Benefit*	\$0	\$0	\$0	\$0	\$87,081	\$89,500	\$64,380	\$66,311	\$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	6	6	0	0	110	117	1	1	0	0	0	0
Average Age	65.66	66.66	0.00	0.00	69.24	69.06	42.95	43.95	0.00	0.00	0.00	0.00
Average Total Benefit*	\$42,201	\$43,468	\$0	\$0	\$94,323	\$95,333	\$64,380	\$66,311	\$0	\$0	\$0	\$0
Terminated Vested												
Number	1	2	0	0	1	0	0	0	0	0	0	0
Average Age	46.12	47.53	0.00	0.00	49.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Service	12.00	6.50	0.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transfers												
Number	0	1	0	0	10	10	0	0	1	1	0	0
Average Age	0.00	59.73	0.00	0.00	47.71	49.62	0.00	0.00	29.65	30.64	0.00	0.00
Average Service	0.00	1.00	0.00	0.00	4.40	5.70	0.00	0.00	3.00	3.00	0.00	0.00
Total Inactive												
Number	1	3	0	0	11	10	0	0	1	1	0	0
Average Age	46.12	51.60	0.00	0.00	47.88	49.62	0.00	0.00	29.65	30.64	0.00	0.00
Average Service	12.00	4.67	0.00	0.00	4.82	5.70	0.00	0.00	3.00	3.00	0.00	0.00

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: Novato Fire Protection District						
	Miscellaneous		Safety		Total	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants						
Number	10	9	69	66	79	75
Average Age	47.77	51.18	43.99	43.68	44.46	44.58
Average Service	10.70	12.44	13.33	13.21	13.00	13.12
Average Pay*	\$108,769	\$123,837	\$138,224	\$142,483	\$134,495	\$140,246
Service Retired						
Number	5	5	58	63	63	68
Average Age	67.06	68.06	68.78	68.29	68.64	68.27
Average Total Benefit*	\$48,044	\$49,485	\$115,401	\$114,310	\$110,055	\$109,543
Beneficiaries						
Number	1	1	20	20	21	21
Average Age	58.67	59.67	68.35	68.70	67.89	68.27
Average Total Benefit*	\$12,990	\$13,380	\$44,783	\$45,470	\$43,269	\$43,942
Duty Disabled						
Number	0	0	33	35	33	35
Average Age	0.00	0.00	69.81	69.94	69.81	69.94
Average Total Benefit*	\$0	\$0	\$86,393	\$88,838	\$86,393	\$88,838
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	6	6	111	118	117	124
Average Age	65.66	66.66	69.01	68.85	68.84	68.74
Average Total Benefit*	\$42,201	\$43,468	\$94,053	\$95,087	\$91,394	\$92,589
Terminated Vested						
Number	1	2	1	0	2	2
Average Age	46.12	47.53	49.63	0.00	47.88	47.53
Average Service	12.00	6.50	9.00	0.00	10.50	6.50
Transfers						
Number	0	1	11	11	11	12
Average Age	0.00	59.73	46.07	47.89	46.07	48.88
Average Service	0.00	1.00	4.27	5.45	4.27	5.08
Total Inactive						
Number	1	3	12	11	13	14
Average Age	46.12	51.60	46.37	47.89	46.35	48.68
Average Service	12.00	4.67	4.67	5.45	5.23	5.29

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: City of San Rafael										
	Miscellaneous		Police		Fire		Total Safety		Total	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants										
Number	188	199	68	68	70	63	138	103	326	302
Average Age	46.14	45.13	38.38	39.08	39.08	39.76	38.74	40.86	43.01	43.67
Average Service	9.22	8.64	9.26	9.65	9.37	9.78	9.32	11.20	9.26	9.52
Average Pay*	\$85,235	\$90,737	\$125,863	\$132,279	\$128,265	\$135,095	\$127,082	\$139,502	\$102,949	\$107,369
Service Retired										
Number	289	299	82	85	86	85	168	170	457	469
Average Age	70.41	70.70	66.93	67.39	68.95	68.95	67.96	68.17	69.51	69.78
Average Total Benefit*	\$41,223	\$42,507	\$77,125	\$77,033	\$101,395	\$105,420	\$89,549	\$91,227	\$58,988	\$60,167
Beneficiaries										
Number	43	43	26	26	22	29	48	55	91	98
Average Age	74.00	74.08	69.92	70.40	75.18	75.18	72.33	72.92	73.12	73.43
Average Total Benefit*	\$23,880	\$24,448	\$39,991	\$42,833	\$42,833	\$43,768	\$41,293	\$43,326	\$33,065	\$35,043
Duty Disabled										
Number	18	18	41	39	24	23	65	62	83	80
Average Age	68.93	69.93	62.40	62.68	69.81	70.39	65.14	65.54	65.96	66.53
Average Total Benefit*	\$31,312	\$32,264	\$65,564	\$68,114	\$99,999	\$102,277	\$78,278	\$80,787	\$68,093	\$69,870
Ordinary Disabled										
Number	2	1	0	0	0	0	0	0	2	1
Average Age	88.45	80.04	0.00	0.00	0.00	0.00	0.00	0.00	88.45	80.04
Average Total Benefit*	\$13,586	\$18,482	\$0	\$0	\$0	\$0	\$0	\$0	\$13,586	\$18,482
Total In Pay										
Number	352	361	149	150	132	137	281	287	633	648
Average Age	70.88	71.09	66.21	66.69	70.14	70.51	68.06	68.51	69.63	69.95
Average Total Benefit*	\$38,440	\$39,779	\$67,464	\$68,786	\$91,381	\$91,842	\$78,699	\$79,792	\$56,312	\$57,501
Terminated Vested										
Number	48	52	18	18	6	10	24	25	72	77
Average Age	47.93	48.11	45.17	43.84	37.42	39.78	43.23	43.45	46.36	46.60
Average Service	6.50	6.37	10.50	10.06	6.50	8.90	9.50	10.00	7.50	7.55
Transfers										
Number	78	82	14	15	6	7	20	20	98	102
Average Age	43.31	43.36	48.18	48.50	42.23	41.18	46.40	47.60	43.94	44.19
Average Service	2.72	2.50	4.43	4.47	3.67	3.43	4.20	4.35	3.02	2.86
Total Inactive										
Number	126	134	32	33	12	17	44	45	170	179
Average Age	45.07	45.20	46.49	45.96	39.83	40.36	44.67	45.30	44.96	45.23
Average Service	4.16	4.00	7.84	7.52	5.08	6.65	7.09	7.49	4.92	4.88

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Participant Data as of June 30, 2022: City of San Rafael																		
	Tier 1 Miscellaneous		Tier 2 Miscellaneous		Tier 3 Miscellaneous		Tier 1 Police		Tier 2 Police		Tier 3 Police		Tier 1 Fire		Tier 2 Fire		Tier 3 Fire	
	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022	6/30/2021	6/30/2022
Active Participants																		
Number	70	61	15	16	103	122	27	26	5	5	36	37	28	23	12	12	30	28
Average Age	53.19	53.31	52.01	51.42	40.50	40.21	47.82	48.67	38.04	39.04	31.35	32.34	45.90	46.81	38.59	39.59	32.92	34.05
Average Service	18.69	19.90	5.20	6.13	3.37	3.34	18.41	19.35	5.00	6.00	3.00	3.32	16.29	16.70	8.50	9.50	3.27	4.21
Average Pay*	\$87,599	\$90,965	\$109,572	\$114,006	\$80,084	\$87,572	\$145,093	\$154,968	\$128,649	\$132,852	\$111,054	\$116,258	\$154,457	\$159,776	\$136,364	\$141,571	\$100,580	\$112,045
Service Retired																		
Number	287	296	1	2	1	1	82	84	0	1	0	0	86	85	0	0	0	0
Average Age	70.39	70.72	77.55	69.01	69.11	70.11	66.93	67.46	0.00	60.99	0.00	0.00	68.95	68.95	0.00	0.00	0.00	0.00
Average Total Benefit*	\$41,483	\$42,866	\$3,960	\$8,803	\$3,779	\$3,893	\$77,125	\$77,317	\$0	\$53,198	\$0	\$0	\$101,395	\$105,420	\$0	\$0	\$0	\$0
Beneficiaries																		
Number	43	43	0	0	0	0	26	26	0	0	0	0	22	29	0	0	0	0
Average Age	74.00	74.08	0.00	0.00	0.00	0.00	69.92	70.40	0.00	0.00	0.00	0.00	75.18	75.18	0.00	0.00	0.00	0.00
Average Total Benefit*	\$23,880	\$24,448	\$0	\$0	\$0	\$0	\$39,991	\$42,833	\$0	\$0	\$0	\$0	\$42,833	\$43,768	\$0	\$0	\$0	\$0
Duty Disabled																		
Number	18	18	0	0	0	0	41	39	0	0	0	0	24	23	0	0	0	0
Average Age	68.93	69.93	0.00	0.00	0.00	0.00	62.40	62.68	0.00	0.00	0.00	0.00	69.81	70.39	0.00	0.00	0.00	0.00
Average Total Benefit*	\$31,312	\$32,264	\$0	\$0	\$0	\$0	\$65,564	\$68,114	\$0	\$0	\$0	\$0	\$99,999	\$102,277	\$0	\$0	\$0	\$0
Ordinary Disabled																		
Number	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Age	88.45	80.04	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*	\$13,586	\$18,482	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total In Pay																		
Number	350	358	1	2	1	1	149	149	0	1	0	0	132	137	0	0	0	0
Average Age	70.87	71.11	77.55	69.01	69.11	70.11	66.21	66.72	0.00	60.99	0.00	0.00	70.14	70.51	0.00	0.00	0.00	0.00
Average Total Benefit*	\$38,638	\$40,052	\$3,960	\$8,803	\$3,779	\$3,893	\$67,464	\$68,891	\$0	\$53,198	\$0	\$0	\$91,381	\$91,842	\$0	\$0	\$0	\$0
Terminated Vested																		
Number	35	35	9	9	4	8	14	13	3	2	1	3	2	5	2	2	2	3
Average Age	49.41	49.68	44.22	46.85	43.29	42.65	46.26	47.02	42.97	35.45	36.41	35.67	43.47	44.87	35.42	36.42	33.37	33.54
Average Service	7.17	7.23	3.89	3.22	6.50	6.13	11.71	11.85	6.00	4.50	7.00	6.00	8.50	12.40	3.50	3.50	7.50	6.67
Transfers																		
Number	42	40	7	7	29	35	13	13	0	0	1	2	4	4	1	1	1	2
Average Age	49.23	49.86	41.36	42.36	35.20	36.13	49.21	50.21	0.00	0.00	34.81	37.42	46.44	47.44	33.66	34.66	33.98	31.94
Average Service	4.24	4.20	2.14	2.14	0.66	0.63	4.38	4.38	0.00	0.00	5.00	5.00	4.00	4.00	4.00	4.00	2.00	2.00
Total Inactive																		
Number	77	75	16	16	33	43	27	26	3	2	2	5	6	9	3	3	3	5
Average Age	49.31	49.78	42.97	44.89	36.18	37.34	47.68	48.61	42.97	35.45	35.61	36.37	45.45	46.01	34.83	35.83	33.57	32.90
Average Service	5.57	5.61	3.13	2.75	1.36	1.65	8.19	8.12	6.00	4.50	6.00	5.60	5.50	8.67	3.67	3.67	5.67	4.80

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN COUNTY
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

COUNTS BY AGE/SERVICE													
Age	Service												
	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	Total
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	9	3	3	0	1	1	0	0	0	0	0	0	17
25 to 29	35	15	23	13	8	7	0	0	0	0	0	0	101
30 to 34	39	25	27	38	18	52	4	0	0	0	0	0	203
35 to 39	41	15	27	14	23	81	14	6	0	0	0	0	221
40 to 44	41	21	23	14	15	59	29	30	5	0	0	0	237
45 to 49	18	8	15	15	11	54	25	40	20	3	0	0	209
50 to 54	18	10	15	8	9	53	26	45	31	16	1	0	232
55 to 59	10	11	12	16	9	47	26	40	36	20	13	2	242
60 to 64	9	8	4	8	9	32	17	22	32	12	7	3	163
65 to 69	3	1	1	1	6	19	6	24	14	6	5	1	87
70 & up	0	0	0	1	0	2	5	9	10	4	1	1	33
Total	223	117	150	128	109	407	152	216	148	61	27	7	1,745

**MARIN COUNTY
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

AVERAGE PAY BY AGE/SERVICE													
Age	Service												
	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	Total
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	68,021	72,543	78,085	0	61,328	74,783	0	0	0	0	0	0	70,599
25 to 29	75,590	74,067	82,623	76,127	87,133	83,426	0	0	0	0	0	0	78,492
30 to 34	75,837	75,179	89,446	87,962	101,258	90,492	114,654	0	0	0	0	0	86,608
35 to 39	86,780	88,982	88,814	103,074	100,301	95,458	108,688	113,018	0	0	0	0	94,898
40 to 44	98,879	83,874	98,528	103,870	102,221	102,519	102,865	123,035	124,845	0	0	0	103,021
45 to 49	96,278	77,252	99,755	91,710	102,196	102,090	106,482	109,710	114,446	103,192	0	0	102,914
50 to 54	93,198	93,406	92,953	115,909	122,088	99,200	105,572	115,832	114,189	125,738	75,134	0	107,214
55 to 59	91,134	106,530	107,879	93,649	106,817	107,954	102,271	103,066	115,278	116,990	117,218	185,420	107,758
60 to 64	83,021	112,517	99,101	92,376	99,590	101,938	116,747	105,190	98,985	86,770	136,447	82,980	102,164
65 to 69	113,497	53,820	134,992	61,094	109,601	94,897	97,105	106,049	97,515	93,580	160,978	210,163	104,835
70 & up	0	0	0	98,322	0	84,536	97,098	98,926	97,140	85,899	73,691	91,026	94,634
Total	86,265	85,317	92,869	93,196	102,381	98,829	105,804	110,381	108,832	108,320	127,136	131,567	99,401

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN COUNTY
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

COUNTS BY AGE/SERVICE													
Age	Service												
	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	Total
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	4	4	0	1	0	0	0	0	0	0	0	0	9
25 to 29	7	6	7	10	3	11	0	0	0	0	0	0	44
30 to 34	6	9	8	2	4	29	5	0	0	0	0	0	63
35 to 39	5	2	0	4	3	26	21	3	0	0	0	0	64
40 to 44	0	1	1	0	1	15	10	24	7	0	0	0	59
45 to 49	0	1	1	2	1	1	5	20	18	1	0	0	50
50 to 54	1	3	0	1	2	2	1	15	9	6	2	0	42
55 to 59	0	1	0	0	0	2	2	2	6	1	0	0	14
60 to 64	0	0	0	0	0	0	1	1	1	0	0	0	3
65 to 69	0	0	0	0	1	0	1	1	0	0	0	0	3
70 & up	0	0	0	0	0	0	1	0	0	0	0	1	2
Total	23	27	17	20	15	86	47	66	41	8	2	1	353

**MARIN COUNTY
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

AVERAGE PAY BY AGE/SERVICE													
Age	Service												
	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	Total
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	96,268	101,171	0	110,136	0	0	0	0	0	0	0	0	99,988
25 to 29	101,817	102,075	102,395	106,518	125,620	117,909	0	0	0	0	0	0	108,659
30 to 34	95,470	113,423	114,578	117,426	109,637	116,341	134,300	0	0	0	0	0	114,747
35 to 39	98,172	112,316	0	102,151	108,954	115,351	138,253	127,564	0	0	0	0	120,876
40 to 44	0	195,736	104,790	0	85,238	117,118	127,868	148,025	143,913	0	0	0	135,275
45 to 49	0	199,576	77,334	129,948	227,383	121,264	140,780	135,998	153,577	178,590	0	0	145,046
50 to 54	133,827	126,117	0	195,744	119,527	128,666	157,212	139,729	150,476	160,300	175,843	0	145,839
55 to 59	0	133,827	0	0	0	109,970	102,542	124,549	128,586	118,280	0	0	121,267
60 to 64	0	0	0	0	0	0	202,696	139,909	136,503	0	0	0	159,703
65 to 69	0	0	0	0	146,737	0	128,547	92,290	0	0	0	0	122,525
70 & up	0	0	0	0	0	0	150,966	0	0	0	0	264,558	207,762
Total	99,796	117,410	106,795	113,721	122,712	116,574	136,210	139,886	147,172	157,334	175,843	264,558	127,379

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

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	3	0	0	0	0	0	0	0	0	0	0	5	
25 to 29	9	3	2	1	0	2	0	0	0	0	0	0	17	
30 to 34	6	2	1	5	1	1	0	0	0	0	0	0	16	
35 to 39	5	6	2	3	1	2	0	1	0	0	0	0	20	
40 to 44	4	2	0	1	1	5	0	6	0	0	0	0	19	
45 to 49	2	1	0	5	3	4	2	3	7	1	0	0	28	
50 to 54	5	2	1	0	0	1	2	4	5	0	0	0	20	
55 to 59	0	3	2	0	1	0	0	5	5	3	2	0	21	
60 to 64	2	0	0	0	0	3	3	9	4	1	1	0	23	
65 to 69	1	0	0	0	0	1	0	1	0	0	0	0	3	
70 & up	0	0	0	0	0	1	0	0	0	0	1	0	2	
Total	36	22	8	15	7	20	7	29	21	5	4	0	174	

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

	AVERAGE PAY BY AGE/SERVICE													
	Service													
Age	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	Total	
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	
20 to 24	50,525	59,293	0	0	0	0	0	0	0	0	0	0	55,786	
25 to 29	70,516	88,028	61,640	124,363	0	66,417	0	0	0	0	0	0	75,247	
30 to 34	69,558	51,578	109,408	77,293	63,395	101,279	0	0	0	0	0	0	73,816	
35 to 39	84,238	75,965	71,689	112,314	136,183	68,284	0	70,278	0	0	0	0	85,016	
40 to 44	68,267	59,378	0	92,922	101,279	101,147	0	79,764	0	0	0	0	82,650	
45 to 49	59,232	133,058	0	117,176	114,969	121,282	73,712	130,198	88,646	124,618	0	0	105,378	
50 to 54	108,096	94,909	87,630	0	0	153,275	108,451	90,472	84,287	0	0	0	98,571	
55 to 59	0	86,029	88,377	0	70,278	0	0	98,165	99,160	96,343	116,014	0	95,848	
60 to 64	72,562	0	0	0	0	84,052	138,203	88,053	79,800	109,376	62,556	0	91,109	
65 to 69	50,338	0	0	0	0	62,556	0	70,278	0	0	0	0	61,057	
70 & up	0	0	0	0	0	62,556	0	0	0	0	83,533	0	73,044	
Total	75,047	77,301	80,056	101,771	102,291	94,604	111,277	91,549	88,427	104,604	94,529	0	88,330	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

Age	COUNTS BY AGE/SERVICE												Total
	Service												
	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	1	0	0	0	0	0	0	0	0	0	0	1
25 to 29	0	2	0	1	0	0	0	0	0	0	0	0	3
30 to 34	0	2	0	1	0	5	0	0	0	0	0	0	8
35 to 39	0	1	0	2	0	5	2	0	0	0	0	0	10
40 to 44	0	0	0	0	0	2	6	2	0	0	0	0	10
45 to 49	0	0	0	0	0	1	1	3	1	0	0	0	6
50 to 54	0	0	0	0	0	1	4	0	2	1	0	0	8
55 to 59	1	0	0	0	0	0	0	1	1	0	0	0	3
60 to 64	0	0	0	0	0	1	0	0	0	0	0	0	1
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	6	0	4	0	15	13	6	4	1	0	0	50

**MARIN SPECIAL DISTRICTS
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

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	96,678	0	0	0	0	0	0	0	0	0	0	96,678
25 to 29	0	104,162	0	106,579	0	0	0	0	0	0	0	0	104,968
30 to 34	0	108,996	0	106,579	0	116,382	0	0	0	0	0	0	113,310
35 to 39	0	122,540	0	122,290	0	131,679	152,034	0	0	0	0	0	132,959
40 to 44	0	0	0	0	0	130,632	137,155	138,137	0	0	0	0	136,047
45 to 49	0	0	0	0	0	144,471	139,595	176,086	129,225	0	0	0	156,925
50 to 54	0	0	0	0	0	128,752	157,474	0	161,786	153,598	0	0	154,477
55 to 59	213,096	0	0	0	0	0	0	167,005	158,208	0	0	0	179,436
60 to 64	0	0	0	0	0	226,304	0	0	0	0	0	0	226,304
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	213,096	107,589	0	114,435	0	133,407	145,884	161,923	152,751	153,598	0	0	139,002

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

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	0	0	0	1	0	0	0	0	0	0	1
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	0	0	0	0	0	1	1	0	0	0	0	2
50 to 54	1	0	0	1	0	0	0	2	0	0	0	0	4
55 to 59	0	0	0	0	0	1	0	0	0	0	0	0	1
60 to 64	0	0	0	0	0	0	0	0	1	0	0	0	1
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	1	0	0	1	0	2	1	3	1	0	0	0	9

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

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	0	0	0	58,117	0	0	0	0	0	0	58,117
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	0	0	0	0	0	167,634	97,369	0	0	0	0	132,501
50 to 54	111,692	0	0	184,066	0	0	0	115,286	0	0	0	0	131,583
55 to 59	0	0	0	0	0	92,834	0	0	0	0	0	0	92,834
60 to 64	0	0	0	0	0	0	0	0	172,245	0	0	0	172,245
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	111,692	0	0	184,066	0	75,476	167,634	109,314	172,245	0	0	0	123,837

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

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	1	0	1	0	0	0	0	0	0	0	0	0	2	
30 to 34	2	2	1	2	1	2	0	0	0	0	0	0	10	
35 to 39	2	1	1	2	2	1	0	0	0	0	0	0	9	
40 to 44	0	0	1	1	0	1	1	2	3	0	0	0	9	
45 to 49	0	0	0	0	0	1	4	11	7	0	0	0	23	
50 to 54	0	1	0	0	0	0	0	2	7	0	1	0	11	
55 to 59	0	0	0	0	0	1	0	0	0	1	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	5	4	4	5	3	6	5	15	17	1	1	0	66	

**NOVATO FIRE PROTECTION DISTRICT
DISTRIBUTION OF SAFETY ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

	AVERAGE PAY BY AGE/SERVICE													
	Service													
Age	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	Total	
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	116,631	0	127,513	0	0	0	0	0	0	0	0	0	122,072	
30 to 34	115,007	112,575	128,707	127,819	128,124	127,819	0	0	0	0	0	0	122,327	
35 to 39	116,225	112,575	127,513	128,110	127,513	128,707	0	0	0	0	0	0	123,610	
40 to 44	0	0	128,707	127,513	0	128,707	128,930	147,323	172,424	0	0	0	147,308	
45 to 49	0	0	0	0	0	127,513	129,049	144,101	167,472	0	0	0	147,875	
50 to 54	0	145,771	0	0	0	0	0	145,886	147,956	0	227,396	0	154,602	
55 to 59	0	0	0	0	0	146,978	0	0	0	249,497	0	0	198,238	
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	115,819	120,874	128,110	127,874	127,717	131,257	129,025	144,768	160,310	249,497	227,396	0	142,483	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

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	4	1	0	1	0	0	0	0	0	0	0	0	6	
25 to 29	4	2	3	2	1	3	0	0	0	0	0	0	15	
30 to 34	7	3	4	1	3	10	0	0	0	0	0	0	28	
35 to 39	9	2	0	5	2	4	0	2	0	0	0	0	24	
40 to 44	3	0	3	3	1	8	2	0	2	0	0	0	22	
45 to 49	3	1	4	2	1	6	5	3	4	0	0	0	29	
50 to 54	3	3	1	0	1	3	1	7	9	1	1	0	30	
55 to 59	2	1	1	1	4	4	2	1	8	3	0	0	27	
60 to 64	0	0	0	1	0	4	2	0	3	0	0	0	10	
65 to 69	0	0	0	1	0	1	1	3	0	1	0	1	8	
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	35	13	16	17	13	43	13	16	26	5	1	1	199	

**CITY OF SAN RAFAEL
DISTRIBUTION OF MISCELLANEOUS ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

	AVERAGE PAY BY AGE/SERVICE													
	Service													
Age	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	Total	
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	
20 to 24	63,419	37,962	0	85,469	0	0	0	0	0	0	0	0	62,851	
25 to 29	82,027	85,147	71,084	63,073	69,459	67,985	0	0	0	0	0	0	74,081	
30 to 34	107,835	113,321	81,509	124,196	96,941	87,000	0	0	0	0	0	0	96,638	
35 to 39	92,931	64,235	0	100,304	139,150	75,309	0	92,375	0	0	0	0	92,944	
40 to 44	90,656	0	115,676	87,667	84,416	80,266	119,670	0	53,854	0	0	0	88,890	
45 to 49	93,328	41,850	66,473	75,046	74,744	125,936	85,819	78,180	93,369	0	0	0	89,837	
50 to 54	143,368	28,048	69,752	0	133,770	89,129	79,083	102,741	82,201	123,864	97,556	0	91,488	
55 to 59	49,090	96,549	76,616	80,438	132,190	113,651	114,971	73,248	96,477	84,054	0	0	98,604	
60 to 64	0	0	0	159,413	0	105,461	108,927	0	78,701	0	0	0	103,521	
65 to 69	0	0	0	34,457	0	85,761	95,238	82,072	0	88,320	0	78,864	78,607	
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	92,950	69,171	81,161	89,690	112,328	93,082	99,273	91,121	85,727	92,869	97,556	78,864	90,737	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF POLICE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

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	1	0	0	0	0	0	0	0	0	0	1	
25 to 29	1	1	4	2	4	5	0	0	0	0	0	0	17	
30 to 34	0	0	4	3	0	4	0	0	0	0	0	0	11	
35 to 39	1	1	1	1	1	2	1	3	0	0	0	0	11	
40 to 44	1	1	0	0	0	0	1	1	1	0	0	0	5	
45 to 49	0	0	0	0	0	0	0	7	2	1	0	0	10	
50 to 54	0	1	1	0	0	0	0	5	3	2	0	0	12	
55 to 59	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	
65 to 69	0	0	0	0	0	0	0	1	0	0	0	0	1	
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	3	4	11	6	5	11	2	17	6	3	0	0	68	

**CITY OF SAN RAFAEL
DISTRIBUTION OF POLICE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

Age	AVERAGE PAY BY AGE/SERVICE													Total
	Service													
	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	93,125	0	0	0	0	0	0	0	0	0	93,125	
25 to 29	88,695	97,556	97,145	103,890	116,599	127,459	0	0	0	0	0	0	110,959	
30 to 34	0	0	98,076	114,009	0	131,679	0	0	0	0	0	0	114,641	
35 to 39	88,695	88,695	123,877	126,046	108,871	144,347	141,183	148,048	0	0	0	0	128,201	
40 to 44	88,695	118,856	0	0	0	0	136,490	160,586	191,424	0	0	0	139,210	
45 to 49	0	0	0	0	0	0	0	152,682	152,554	145,241	0	0	151,912	
50 to 54	0	207,617	207,617	0	0	0	0	146,397	172,026	166,584	0	0	166,372	
55 to 59	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	
65 to 69	0	0	0	0	0	0	0	132,666	0	0	0	0	132,666	
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	88,695	128,181	109,591	112,642	115,053	132,064	138,837	149,303	168,769	159,469	0	0	132,279	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

**CITY OF SAN RAFAEL
DISTRIBUTION OF FIRE ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JULY 1, 2022**

COUNTS BY AGE/SERVICE														
Age	Service													Total
	0	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up		
0 to 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 to 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	3	0	0	1	1	0	0	0	0	0	0	0	5
30 to 34	0	2	2	1	1	5	0	0	0	0	0	0	0	11
35 to 39	0	2	1	0	2	5	9	2	0	0	0	0	0	21
40 to 44	0	0	1	0	1	2	5	0	1	0	0	0	0	10
45 to 49	0	0	0	0	0	0	3	2	1	1	0	0	0	7
50 to 54	0	0	0	0	0	0	1	0	6	0	0	0	0	7
55 to 59	0	0	0	0	0	0	1	1	0	0	0	0	0	2
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	7	4	1	5	13	19	5	8	1	0	0	0	63

**CITY OF SAN RAFAEL
DISTRIBUTION OF FIRE ACTIVE MEMBERS
PAYROLL BY AGE AND SERVICE AS OF JULY 1, 2022**

Age	AVERAGE PAY BY AGE/SERVICE													Total
	Service													
	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	102,624	0	0	110,787	121,184	0	0	0	0	0	0	107,969	
30 to 34	0	104,657	97,781	104,550	114,376	118,464	0	0	0	0	0	0	110,557	
35 to 39	0	104,502	97,833	0	111,794	129,916	147,939	147,185	0	0	0	0	133,611	
40 to 44	0	0	99,881	0	107,407	142,802	148,609	0	204,066	0	0	0	144,000	
45 to 49	0	0	0	0	0	0	156,953	161,325	146,926	159,359	0	0	157,114	
50 to 54	0	0	0	0	0	0	153,551	0	157,602	0	0	0	157,023	
55 to 59	0	0	0	0	0	0	165,231	144,970	0	0	0	0	155,101	
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	103,741	98,319	104,550	111,232	126,822	150,744	152,398	162,076	159,359	0	0	135,095	

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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, 2021	1,706	170	412	261	28	83	1,710	283	4,653
New Entrants	253	0	0	0	0	0	0	0	253
Rehires	12	0	(6)	(6)	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(66)	(12)	(2)	(11)	0	0	91	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(57)	(4)	0	61	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(1)	(18)	19	0
Non-Vested Terminations and Death without beneficiary	(75)	(3)	76	(1)	0	(1)	(26)	0	(30)
Transfers	(8)	11	(1)	(2)	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(16)	(16)
Domestic Relations Orders	0	0	0	1	0	0	0	1	2
Withdrawals Paid	(19)	(1)	(15)	(2)	0	0	0	0	(37)
Data Corrections	0	0	(2)	2	0	1	0	1	2
June 30, 2022	1,745	161	462	303	29	82	1,757	288	4,827

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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, 2021	356	54	41	34	8	125	290	78	986
New Entrants	24	0	0	0	0	0	0	0	24
Rehires	1	0	0	(1)	0	0	0	0	0
Duty Disabilities	(1)	0	0	(1)	0	2	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(13)	(6)	0	(3)	0	0	21	1	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(5)	(1)	0	6	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	(7)	(1)	8	0	0	(1)	(2)	0	(3)
Transfers	0	1	(1)	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(3)	(3)
Domestic Relations Orders	0	0	0	2	0	0	0	1	3
Withdrawals Paid	(1)	0	(2)	0	0	0	0	0	(3)
Data Corrections	(1)	3	0	(1)	0	4	(4)	0	1
June 30, 2022	353	50	46	36	8	129	302	81	1005

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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, 2021	163	28	49	20	2	6	151	17	436
New Entrants	32	0	0	0	0	0	0	0	32
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	(11)	0	0	0	0	0	11	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(2)	(1)	0	3	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	(5)	(3)	8	0	0	0	0	0	0
Transfers	(1)	1	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	1	0	0	0	0	1
Withdrawals Paid	(2)	0	(2)	(1)	0	0	0	0	(5)
Data Corrections	0	0	0	0	0	1	(2)	0	(1)
June 30, 2022	174	25	55	23	2	7	159	18	463

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2021	52	10	1	3	0	19	34	8	127
New Entrants	1	0	0	0	0	0	0	0	1
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(2)	(1)	0	0	0	0	3	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)	(1)	2	0
Non-Vested Terminations and Death without beneficiary	0	0	0	0	0	(1)	0	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	(1)	0	0	0	0	0	(1)
Data Corrections	0	0	0	0	0	0	0	0	0
June 30, 2022	50	9	0	4	0	17	36	10	126

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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, 2021	2,277	262	503	318	38	233	2,185	386	6,202
New Entrants	310	0	0	0	0	0	0	0	310
Rehires	13	0	(6)	(7)	0	0	0	0	0
Duty Disabilities	(1)	0	0	(1)	0	2	0	0	0
Ordinary Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(92)	(19)	(2)	(14)	0	0	126	1	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(65)	(6)	0	71	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(3)	(23)	26	0
Non-Vested Terminations and Death without beneficiary	(87)	(7)	92	(1)	0	(3)	(28)	0	(34)
Transfers	(9)	13	(2)	(2)	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(19)	(19)
Domestic Relations Orders	0	0	0	4	0	0	0	2	6
Withdrawals Paid	(22)	(1)	(20)	(3)	0	0	0	0	(46)
Data Corrections	(1)	3	(2)	1	0	6	(6)	1	2
June 30, 2022	2,322	245	563	366	39	235	2,254	397	6,421

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2021	10	0	1	1	0	0	5	1	18
New Entrants	1	0	0	0	0	0	0	0	1
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	0	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	(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	(1)	0	1	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	0	0	0	0	0	0	0	0
Data Corrections	0	1	0	0	0	0	0	0	1
June 30, 2022	9	1	2	2	0	0	5	1	20

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2021	69	11	4	1	0	33	58	20	196
New Entrants	5	0	0	0	0	0	0	0	5
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	(4)	(1)	0	(1)	0	0	6	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	(2)	0	2	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(1)	(1)
Domestic Relations Orders	0	0	0	0	0	0	0	1	1
Withdrawals Paid	(1)	0	0	0	0	0	0	0	(1)
Data Corrections	0	1	0	0	0	1	(1)	0	1
June 30, 2022	66	11	6	0	0	35	63	20	201

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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, 2021	79	11	5	2	0	33	63	21	214
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	(4)	(1)	0	(1)	0	0	6	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	(3)	0	3	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(1)	(1)
Domestic Relations Orders	0	0	0	0	0	0	0	1	1
Withdrawals Paid	(1)	0	0	0	0	0	0	0	(1)
Data Corrections	0	2	0	0	0	1	(1)	0	2
June 30, 2022	75	12	8	2	0	35	68	21	221

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

Changes in Plan Membership: City of San Rafael Miscellaneous

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2021	188	78	89	48	2	18	289	43	755
New Entrants	43	0	0	0	0	0	0	0	43
Rehires	1	0	0	(1)	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(8)	(3)	(2)	(2)	0	0	15	0	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	(1)	2	0
Non-Vested Terminations and Death without beneficiary	(9)	0	9	0	0	0	(4)	0	(4)
Transfers	(5)	7	(2)	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(3)	(3)
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	(4)	0	(2)	0	0	0	0	0	(6)
Data Corrections	0	0	0	0	0	0	0	1	1
June 30, 2022	199	82	92	52	1	18	299	43	786

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

Changes in Plan Membership: City of San Rafael Police

	Actives	Transfer to Participating Agency	Non-vested Terminations Due Refunds	Vested Terminations	Ordinary Disability	Duty Disability	Retired	Beneficiaries	Total Participants
June 30, 2021	68	14	11	18	0	41	82	26	260
New Entrants	1	0	0	0	0	0	0	0	1
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(1)	0	0	(2)	0	0	3	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	(1)	(1)	2	0
Non-Vested Terminations and Death without beneficiary	(1)	0	1	0	0	(1)	0	0	(1)
Transfers	3	1	0	0	0	0	0	0	4
Beneficiary Deaths	0	0	0	0	0	0	0	(1)	(1)
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	0	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	1	(1)	0
June 30, 2022	68	15	12	18	0	39	85	26	263

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2021	70	6	10	6	0	24	86	22	224
New Entrants	7	0	0	0	0	0	0	0	7
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	(4)	0	0	4	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(1)	(2)	3	0
Non-Vested Terminations and Death without beneficiary	(7)	0	7	0	0	0	(1)	0	(1)
Transfers	(1)	1	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	1	0	0	0	3	4
Withdrawals Paid	0	0	0	(1)	0	0	0	0	(1)
Data Corrections	0	0	0	0	0	0	0	1	1
June 30, 2022	63	7	17	10	0	23	85	29	234

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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, 2021	326	98	110	72	2	83	457	91	1,239
New Entrants	51	0	0	0	0	0	0	0	51
Rehires	1	0	0	(1)	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(11)	(3)	(2)	(4)	0	0	20	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0	0	0
Vested Terminations	(13)	0	0	13	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	(1)	(2)	(4)	7	0
Non-Vested Terminations and Death without beneficiary	(17)	0	17	0	0	(1)	(5)	0	(6)
Transfers	(3)	9	(2)	0	0	0	0	0	4
Beneficiary Deaths	0	0	0	0	0	0	0	(4)	(4)
Domestic Relations Orders	0	0	0	1	0	0	0	3	4
Withdrawals Paid	(4)	0	(2)	(1)	0	0	0	0	(7)
Data Corrections	0	0	0	0	0	0	1	1	2
June 30, 2022	330	104	121	80	1	80	469	98	1,283

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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%	90	27	11	7	135
Option 3 - J&S 50%	10	2	0	1	13
Option 4	1	0	0	0	1
Unmodified Benefit Option	1,595	270	143	27	2,035
Unmodified Option - Service Connected Disability	0	0	0	1	1
(missing)	0	0	0	0	0
Total Service Retired	1,757	302	159	36	2,254
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	23	7	2	0	32
Unmodified Option - Service Connected Disability	0	0	0	0	0
(missing)	0	0	0	0	0
Total Ordinary Disability	29	8	2	0	39
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	2	4	0	0	6
Unmodified Option - Service Connected Disability	78	121	6	16	221
(missing)	0	0	0	0	0
Total Duty Disability	82	129	7	17	235
Total	1,868	439	168	53	2,528

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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Benefit Form Elections: Novato Fire Protection District				
	Status	Miscellaneous	Safety	Total
Service Retired				
Option 1 - Cash Refund Annuity		0	1	1
Option 2 - J&S 100%		0	4	4
Option 3 - J&S 50%		1	0	1
Option 4		0	0	0
Unmodified Benefit Option		4	58	62
Unmodified Option - Service Connected Disability		0	0	0
(missing)		0	0	0
Total Service Retired		5	63	68
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	35	35
(missing)		0	0	0
Total Duty Disability		0	35	35
Total		5	98	103

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

Benefit Form Elections: City of San Rafael				
	Miscellaneous	Police	Fire	Total
Service Retired				
Option 1 - Cash Refund Annuity	5	1	0	6
Option 2 - J&S 100%	29	12	6	47
Option 3 - J&S 50%	3	0	1	4
Option 4	0	0	0	0
Unmodified Benefit Option	262	71	78	411
Unmodified Option - Service Connected Disability	0	0	0	0
(missing)	0	1	0	1
Total Service Retired	299	85	85	469
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	1	0	0	1
Unmodified Option - Service Connected Disability	0	0	0	0
(missing)	0	0	0	0
Total Ordinary Disability	1	0	0	1
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	16	38	23	77
(missing)	0	0	0	0
Total Duty Disability	18	39	23	80
Total	318	124	108	550

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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Marin County and Special Districts: Service Retired

Age	Marin County				Marin Special Districts				Total	
	<u>Miscellaneous</u>		<u>Safety</u>		<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	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	1	\$65,603	0	\$0	0	\$0	1	\$65,603
45 to 49	0	\$0	1	\$74,197	0	\$0	0	\$0	1	\$74,197
50 to 54	22	\$19,881	41	\$62,900	1	\$37,669	5	\$50,331	69	\$47,907
55 to 59	105	\$29,527	55	\$62,282	8	\$21,414	7	\$59,997	175	\$40,670
60 to 64	192	\$36,088	68	\$71,935	30	\$41,098	7	\$49,266	297	\$45,112
65 to 69	324	\$41,755	61	\$84,334	43	\$43,504	13	\$96,131	441	\$49,418
70 to 74	420	\$40,868	32	\$79,525	32	\$37,383	2	\$102,206	486	\$43,436
75 to 79	320	\$46,351	22	\$68,868	29	\$40,205	2	\$62,320	373	\$47,287
80 to 84	201	\$44,094	18	\$110,325	13	\$51,892	0	\$0	232	\$49,669
85 to 89	115	\$39,235	3	\$45,631	1	\$20,918	0	\$0	119	\$39,243
90 to 94	43	\$38,081	0	\$0	2	\$30,999	0	\$0	45	\$37,766
95+	15	\$31,475	0	\$0	0	\$0	0	\$0	15	\$31,475
<Total>	1,757	\$40,681	302	\$74,049	159	\$40,455	36	\$72,090	2,254	\$45,638

Marin County and Special Districts: Duty Disabled

Age	Marin County				Marin Special Districts				Total	
	<u>Miscellaneous</u>		<u>Safety</u>		<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	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	\$54,322	0	\$0	0	\$0	1	\$54,322
40 to 44	0	\$0	5	\$53,631	0	\$0	0	\$0	5	\$53,631
45 to 49	2	\$33,805	4	\$54,567	0	\$0	1	\$77,124	7	\$51,858
50 to 54	3	\$26,799	13	\$57,066	1	\$16,682	1	\$52,141	18	\$49,504
55 to 59	5	\$31,005	27	\$64,347	1	\$31,248	2	\$69,146	35	\$58,913
60 to 64	12	\$39,931	21	\$67,571	2	\$60,018	3	\$67,071	38	\$58,405
65 to 69	19	\$37,412	20	\$89,339	0	\$0	2	\$78,540	41	\$64,749
70 to 74	15	\$41,483	11	\$47,638	0	\$0	4	\$53,967	30	\$45,404
75 to 79	13	\$45,931	14	\$69,288	3	\$26,311	4	\$70,318	34	\$56,686
80 to 84	9	\$40,440	9	\$61,745	0	\$0	0	\$0	18	\$51,093
85 to 89	4	\$82,702	3	\$47,846	0	\$0	0	\$0	7	\$67,764
90 to 94	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
95+	0	\$0	1	\$37,243	0	\$0	0	\$0	1	\$37,243
<Total>	82	\$41,551	129	\$65,553	7	\$35,271	17	\$66,058	235	\$56,312

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX A – MEMBERSHIP INFORMATION

Marin County and Special Districts: Ordinary Disabled

Age	Marin County				Marin Special Districts				Total	
	<u>Miscellaneous</u>		<u>Safety</u>		<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	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	\$2,531	0	\$0	0	\$0	1	\$2,531
40 to 44	1	\$25,783	1	\$39,520	0	\$0	0	\$0	2	\$32,652
45 to 49	1	\$2,478	0	\$0	0	\$0	0	\$0	1	\$2,478
50 to 54	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
55 to 59	0	\$0	2	\$46,773	1	\$39,626	0	\$0	3	\$44,390
60 to 64	2	\$20,919	2	\$50,403	0	\$0	0	\$0	4	\$35,661
65 to 69	7	\$27,135	1	\$102,093	0	\$0	0	\$0	8	\$36,504
70 to 74	3	\$21,378	0	\$0	0	\$0	0	\$0	3	\$21,378
75 to 79	11	\$21,739	1	\$29,210	1	\$15,284	0	\$0	13	\$21,818
80 to 84	2	\$18,268	0	\$0	0	\$0	0	\$0	2	\$18,268
85 to 89	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
90 to 94	1	\$3,259	0	\$0	0	\$0	0	\$0	1	\$3,259
95+	1	\$65,032	0	\$0	0	\$0	0	\$0	1	\$65,032
<Total>	29	\$23,039	8	\$45,963	2	\$27,455	0	\$0	39	\$27,968

Marin County and Special Districts: Beneficiaries

Age	Marin County				Marin Special Districts				Total	
	<u>Miscellaneous</u>		<u>Safety</u>		<u>Miscellaneous</u>		<u>Safety</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	1	\$17,139	0	\$0	0	\$0	0	\$0	1	\$17,139
25 to 29	1	\$48,562	0	\$0	0	\$0	0	\$0	1	\$48,562
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	\$29,199	1	\$33,322	0	\$0	0	\$0	3	\$30,573
45 to 49	5	\$18,480	0	\$0	0	\$0	0	\$0	7	\$22,874
50 to 54	4	\$15,622	6	\$33,242	0	\$0	0	\$0	12	\$24,825
55 to 59	14	\$21,655	12	\$53,816	0	\$0	0	\$0	28	\$35,838
60 to 64	19	\$18,735	6	\$54,267	1	\$4,042	0	\$0	30	\$32,342
65 to 69	40	\$29,431	14	\$43,400	0	\$0	0	\$0	56	\$33,812
70 to 74	54	\$29,856	12	\$49,859	0	\$0	0	\$0	69	\$33,193
75 to 79	46	\$29,561	14	\$62,848	0	\$0	0	\$0	66	\$36,784
80 to 84	39	\$26,706	8	\$36,331	0	\$0	0	\$0	52	\$30,024
85 to 89	35	\$36,048	7	\$38,520	0	\$0	0	\$0	42	\$36,460
90 to 94	19	\$28,141	0	\$0	0	\$0	0	\$0	20	\$26,997
95+	9	\$27,435	1	\$64,085	0	\$0	0	\$0	10	\$31,100
<Total>	288	\$28,376	81	\$48,325	1	\$4,042	0	\$0	397	\$33,109

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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	0	\$0	0	\$0
50 to 54	0	\$0	10	\$86,899	10	\$86,899
55 to 59	0	\$0	4	\$196,898	4	\$196,898
60 to 64	2	\$10,282	9	\$94,314	11	\$79,035
65 to 69	2	\$54,473	9	\$136,621	11	\$121,685
70 to 74	0	\$0	13	\$101,968	13	\$101,968
75 to 79	0	\$0	12	\$132,225	12	\$132,225
80 to 84	1	\$117,914	5	\$108,695	6	\$110,231
85 to 89	0	\$0	1	\$10,761	1	\$10,761
90 to 94	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0
<Total>	5	\$49,485	63	\$114,310	68	\$109,543

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	\$66,311	1	\$66,311
45 to 49	0	\$0	1	\$65,680	1	\$65,680
50 to 54	0	\$0	1	\$138,375	1	\$138,375
55 to 59	0	\$0	4	\$143,393	4	\$143,393
60 to 64	0	\$0	3	\$71,900	3	\$71,900
65 to 69	0	\$0	5	\$89,254	5	\$89,254
70 to 74	0	\$0	5	\$89,597	5	\$89,597
75 to 79	0	\$0	9	\$85,934	9	\$85,934
80 to 84	0	\$0	5	\$59,456	5	\$59,456
85 to 89	0	\$0	1	\$84,734	1	\$84,734
90 to 94	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0
<Total>	0	\$0	35	\$88,838	35	\$88,838

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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	\$85,707	1	\$85,707
55 to 59	1	\$13,380	3	\$24,508	4	\$21,726
60 to 64	0	\$0	3	\$44,349	3	\$44,349
65 to 69	0	\$0	2	\$45,413	2	\$45,413
70 to 74	0	\$0	7	\$43,424	7	\$43,424
75 to 79	0	\$0	4	\$55,584	4	\$55,584
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	\$13,380	20	\$45,470	21	\$43,942

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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	\$8,948	6	\$25,570	3	\$79,679	12	\$34,942
55 to 59	30	\$36,897	14	\$60,128	10	\$100,149	54	\$54,633
60 to 64	34	\$50,875	13	\$77,104	19	\$93,526	66	\$68,320
65 to 69	75	\$48,781	19	\$73,136	21	\$124,517	115	\$66,635
70 to 74	71	\$45,952	17	\$114,773	8	\$147,174	96	\$66,574
75 to 79	48	\$39,858	11	\$83,767	12	\$98,468	71	\$56,567
80 to 84	20	\$32,429	3	\$50,447	8	\$75,282	31	\$45,232
85 to 89	14	\$19,526	2	\$68,387	3	\$100,793	19	\$37,501
90 to 94	2	\$37,270	0	\$0	0	\$0	2	\$37,270
95+	2	\$7,684	0	\$0	1	\$64,665	3	\$26,678
<Total>	299	\$42,507	85	\$77,033	85	\$105,420	469	\$60,167

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	5	\$68,288	0	\$0	5	\$68,288
45 to 49	0	\$0	5	\$67,315	0	\$0	5	\$67,315
50 to 54	2	\$22,151	4	\$56,652	1	\$56,927	7	\$46,834
55 to 59	2	\$43,420	3	\$66,952	1	\$68,806	6	\$59,417
60 to 64	1	\$12,008	2	\$49,913	3	\$125,986	6	\$81,632
65 to 69	2	\$17,449	6	\$94,455	5	\$110,141	13	\$88,641
70 to 74	4	\$38,017	7	\$79,880	5	\$98,180	16	\$75,133
75 to 79	4	\$36,000	3	\$60,954	8	\$100,884	15	\$75,595
80 to 84	3	\$35,546	3	\$37,359	0	\$0	6	\$36,453
85 to 89	0	\$0	1	\$30,320	0	\$0	1	\$30,320
90 to 94	0	\$0	0	\$0	0	\$0	0	\$0
95+	0	\$0	0	\$0	0	\$0	0	\$0
<Total>	18	\$32,264	39	\$68,114	23	\$102,277	80	\$69,870

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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	0	\$0	0	\$0	0	\$0	0	\$0
80 to 84	1	\$18,482	0	\$0	0	\$0	1	\$18,482
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>	1	\$18,482	0	\$0	0	\$0	1	\$18,482

City of San Rafael: Surviving Beneficiaries

Age	<u>Miscellaneous</u>		<u>Police</u>		<u>Fire</u>		<u>Total</u>	
	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit	Number	Average Annual Benefit
0 to 24	0	\$0	0	\$0	0	\$0	0	\$0
25 to 29	0	\$0	0	\$0	0	\$0	0	\$0
30 to 34	0	\$0	0	\$0	0	\$0	0	\$0
35 to 39	0	\$0	0	\$0	0	\$0	0	\$0
40 to 44	0	\$0	0	\$0	0	\$0	0	\$0
45 to 49	0	\$0	0	\$0	0	\$0	0	\$0
50 to 54	1	\$18,585	2	\$34,158	2	\$2,442	5	\$18,357
55 to 59	6	\$13,952	3	\$41,673	2	\$18,861	11	\$22,405
60 to 64	5	\$19,770	1	\$18,661	3	\$33,494	9	\$24,222
65 to 69	6	\$16,830	7	\$27,355	5	\$71,173	18	\$36,018
70 to 74	3	\$16,872	5	\$48,336	1	\$111,027	9	\$44,814
75 to 79	9	\$41,152	3	\$43,704	4	\$57,674	16	\$45,761
80 to 84	3	\$11,478	3	\$70,800	4	\$38,419	10	\$40,051
85 to 89	5	\$31,203	2	\$62,500	4	\$36,588	11	\$38,851
90 to 94	4	\$32,319	0	\$0	4	\$32,146	8	\$32,232
95+	1	\$8,420	0	\$0	0	\$0	1	\$8,420
<Total>	43	\$24,448	26	\$42,833	29	\$43,768	98	\$35,043

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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	1	1	0	0	0	0	0	0	1
Miscellaneous Tier 2	22	22	0	0	0	0	0	0	22
Miscellaneous Tier 3	488	351	22	18	13	14	15	43	476
Miscellaneous Tier 3A	66	23	4	1	5	4	0	9	46
Miscellaneous Tier 4	124	15	13	6	8	5	7	33	87
Miscellaneous Tier 5	1,044	105	38	36	45	34	66	146	470
Safety Tier 1A	1	1	0	0	0	0	0	0	1
Safety Tier 2A	39	22	2	0	3	1	1	9	38
Safety Tier 2B	147	60	11	13	8	7	9	29	137
Safety Tier 3	166	2	2	3	1	4	1	8	21
Total County	2,098	602	92	77	83	69	99	277	1,299
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	44	30	0	4	0	0	4	5	43
Courts Tier 4	4	2	0	0	0	0	1	1	4
Courts Tier 5	64	4	0	0	4	2	6	8	24
Total Courts	113	37	0	4	4	2	11	14	72
Special Districts									
South Marin Fire Miscellaneous	8	0	0	0	0	1	1	0	2
South Marin Fire Safety	50	15	1	1	3	2	2	7	31
Mosquito District	35	12	0	1	1	2	8	2	26
LAFCO	3	0	0	0	1	0	0	0	1
Tamalpais CSD	13	3	0	0	0	0	2	3	8
Marin CSD	2	0	0	0	0	1	0	0	1
Total Special Districts	111	30	1	2	5	6	13	12	69
Total County and Special Districts	2,322	669	93	83	92	77	123	303	1,440
Novato									
Miscellaneous	9	3	0	0	1	2	0	2	8
Safety	66	26	2	10	2	1	0	4	45
Total Novato	75	29	2	10	3	3	0	6	53
San Rafael									
Miscellaneous Tier 1	61	42	3	1	4	1	4	4	59
Miscellaneous Tier 2	16	4	1	0	0	1	1	6	13
Miscellaneous Tier 3	122	9	1	5	4	7	6	16	48
Fire Tier 1	23	11	1	1	0	4	2	4	23
Fire Tier 2	12	0	0	0	0	0	1	10	11
Fire Tier 3	28	0	0	0	0	0	0	3	3
Safety Tier 1	26	19	1	3	0	1	1	1	26
Safety Tier 2	5	0	0	0	0	0	0	2	2
Safety Tier 3	37	0	0	0	1	1	0	2	4
Total San Rafael	330	85	7	10	9	15	15	48	189

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the actuarial valuation as of June 30, 2022 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 (8 years remaining as of June 30, 2022), except for the additional UAL attributable to the extraordinary loss from 2008-2009, which is being amortized over a separate closed period (16 years as of June 30, 2022). 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 \$5,278,781 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, 2022**

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
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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
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APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS

13. Rates of Termination

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%		

Rates with < 5 Years of Service	
Service	Safety
0	9.00%
1	7.00%
2	5.00%
3	5.00%
4	5.00%

Rates with 5-19 Years of Service	
Age	Safety
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%

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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
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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%

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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.

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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%

PEPRA Miscellaneous Rates

2017 CalPERS 2.0% @ 62 Public Agency			
Miscellaneous Sample Rates			
Age	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%

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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Non-PEPRA Safety Rates

Age	3% @ 50 <20 Years of Service	3% @ 50 20-29 Years of Service	3% @ 50 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%

2017 CalPERS 3.0% @ 55 Public Agency Safety Police Sample Rates			
Age	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%

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PEPRA Safety Rates

2017 CalPERS 2.7% @ 57 Public Agency			
Safety Police Sample Rates			
Age	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%

24. Changes Since Last Valuation

No assumptions have been changed since the previous valuation.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
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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 (\$134,974 for 2022) 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 (\$161,969 for 2022). 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.

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

April 16, 1979:

Novato Fire Protection District

May 1, 1979:

County of Marin

Marin County Courts

Marin City Community Service District

Tamalpais Community Service District

Southern Marin Fire Protection District

Marin/Sonoma Mosquito and Vector Control District

Local Agency Formation Commission (LAFCO)

May 7, 1979:

City of San Rafael

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

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

Final Compensation

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

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

Miscellaneous Member

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

Safety Member

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

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Membership

Eligibility

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

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

Member Contributions

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

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

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

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

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

Benefit Amount

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

The percentage of Final Compensation for Non-PEPRA Members may not exceed 100%.

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

Table 1: Member Group Descriptions						
Description	Class	FAP	COLA	Code Section	Formula Retirement Age ¹	Benefit Factor
Special Districts Courts Tier 1	Miscellaneous	1	4	31676.14	55.50	2.00%
Special Districts Courts Tier 2	Miscellaneous	3	2	31676.1	61.25	2.00%
Special Districts Courts Tier 3	Miscellaneous	3	2	31676.16	55.00	2.00%
Special Districts Courts Tier 4 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
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Table 2: Age & Service Factors

Miscellaneous

Age	Misc 2% at Age 61.25 CERL \$: 31676.1		Misc 2% at Age 58.5 CERL \$: 31676.11		Misc 2% at Age 55.5 CERL \$: 31676.14		Misc 2% at Age 55 CERL \$: 31676.16		Misc 2.7% at Age 55 CERL \$: 31676.19		Misc 2.7% at Age 67 GC \$: 7522.20	
	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit	Age Factor	Age x Benefit
50	0.7091	1.18%	0.7454	1.24%	0.8850	1.48%	0.7130	1.43%	1.0000	2.00%	1.0000	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, 2022**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Table 3: Age & Service Factors

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
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

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

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

Form of Benefit

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

Actuarially equivalent optional benefit forms are also available.

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

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

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

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

Service-Connected Disability

Eligibility

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

Benefit Amount

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

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

Form of Benefit

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

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

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

Nonservice-Connected Disability

Eligibility

Members are eligible 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
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Pre-Retirement Death

Eligibility

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

Benefit Amount

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

In the event the Member was eligible for Service Retirement or Non-Service Connected Disability, the Death Benefit payable to the survivor will be 60% of the 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
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Form of Benefit

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

Deferred Vested Benefit

Eligibility

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

Benefit Amount

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

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

Form of Benefit

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

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

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

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Optional Benefit Forms

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

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

PEPRA: No change.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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.

**MARIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2022**

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, 2022**

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, 2022**

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, 2022**

APPENDIX E – MEMBER CONTRIBUTION RATES

County Miscellaneous and Courts: Tier 2 (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%	1.25%	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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

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, 2022**

APPENDIX E – MEMBER CONTRIBUTION RATES

PEPRA Rates					Prior
All Ages	Basic	COLA	Total		Total
PEPRA Misc 2% COLA	8.11%	1.71%	9.82%		9.74%
PEPRA Misc 4% COLA	8.04%	2.27%	10.31%		10.31%
PEPRA Safety 2% COLA	12.21%	3.20%	15.41%		15.26%
PEPRA Safety 3% COLA	12.39%	4.73%	17.12%		16.53%
PEPRA Safety 4% COLA	13.62%	4.93%	18.55%		18.23%



Classic Values, Innovative Advice