



Marin County Employees' Retirement Association

GASB 67/68 Report as of June 30, 2022

Produced by Cheiron

November 2022

TABLE OF CONTENTS

<u>Section</u>	\underline{Pa}	age
Letter of Tran	smittal	. i
Section I	Board Summary	.1
Section II	Certification	.3
Section III	Determination of Discount Rate	.4
Section IV	Projection of Total Pension Liability	.5
Section V	GASB 67 Reporting Information	.6
Section VI	GASB 68 Collective Amounts	2
Section VII	GASB 68 Reporting Information for Participating Employers	17
<u>Appendices</u>		
Appendix A	Membership Information	28
Appendix B	Actuarial Assumptions and Methods	31
Appendix C	Summary of Plan Provisions	34
Appendix D	Glossary of Terms	35





November 30, 2022

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

Dear Members of the Board:

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

- Determination of the discount rate as of June 30, 2022,
- Projection of MCERA's Total Pension Liability from the valuation date to the measurement date,
- Note disclosures and required supplementary information under GASB 67 for MCERA,
- Determination of collective amounts under GASB 68, and
- Schedules for the financial reporting of participating employers under GASB 68.

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

Sincerely,

Cheiron

Graham A Schmidt, AŚA EA, FCA, MAAA

Consulting Actuary

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

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SECTION I – BOARD SUMMARY

Highlights

The measurement date for the Marin County Employees' Retirement Association is June 30, 2022. Measurements as are based on the fair value of assets as of June 30, 2022 and the Total Pension Liability (TPL) as of the valuation date, June 30, 2021, updated to June 30, 2022. To the best of our knowledge, there were no significant events between the valuation date and the measurement date, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

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

Table I-1 Summary of Collective Results											
Measurement Date											
		6/30/2022		6/30/2021							
Net Pension Liability	\$	312,688,342	\$	(162,401,177)							
Deferred Outflows		(115,606,706)		(43,674,542)							
Deferred Inflows		12,947,528		466,950,240							
Net Impact on Statement of Net Position	\$	210,029,164	\$	260,874,521							
Pension Expense (\$ Amount)	\$	34,320,065	\$	(36,526,162)							
Pension Expense (% of Payroll)		12.29%		-13.41%							

The Net Pension Liability (NPL) increased approximately \$475 million since the prior measurement date primarily due to losses on the investments. Actuarial gains on the Total Pension Liability decreased the NPL by about \$17 million.

The losses due to investment earnings being less than expected are recognized over five years. The gains due to liability experience are recognized over the average remaining service life as of the beginning of the measurement period, which is four years. Unrecognized amounts are reported as deferred inflows and deferred outflows.

As of the end of the reporting year, MCERA and its participating employers would report a Net Pension Liability of \$312,688,342, Collective Deferred Inflows of \$12,947,528, and Collective Deferred Outflows of \$115,606,706. Consequently, the net impact on the aggregate of participating employers' Statements of Net Position due to MCERA would be a net liability of \$210,029,164 (\$312,688,342 + \$12,947,528 – \$115,606,706) at the end of the measurement year. In addition, any contributions between the measurement date and each individual employer's reporting date would be reported as deferred outflows to offset the cash outflow reported.



SECTION I – BOARD SUMMARY

For the measurement year ending June 30, 2022, the collective annual pension expense is \$34,320,065 or 12.29% of covered payroll. This amount is not related to participating employers' contributions to MCERA (\$85,165,422), but instead represents the change in the net impact on participating employer's Statements of Net Position plus employer contributions (\$210,029,164 – \$260,874,521 + \$85,165,422). The collective pension expense is considerably larger than the prior year. Volatility in pension expense from year to year is to be expected. For the measurement year ending June 30, 2022, the volatility was largely due to the recognition of the 2022 investment loss. A breakdown of the components of the collective net pension expense is shown in Section VI of the report.



SECTION II - CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under Government Accounting Standards Board Statement 67 (GASB 67) for the Marin County Employees' Retirement Association (MCERA) and under GASB 68 for the employers that participate in MCERA. This report is for the use of MCERA, the participating employers, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user. This report is not appropriate for other purposes, including the measurement of funding requirements for MCERA.

In preparing our report, we relied on information (some oral and some written) supplied by MCERA. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23. The assumptions have been selected by the Board based on our recommendations and analysis. We believe the assumptions to be reasonable.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation software 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 and have a basic understanding of it and have used ProVal 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.

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.

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

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



SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 6.75%.

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

Effective with the June 30, 2013 valuation, the UAL as of June 30, 2013 is amortized over a closed 17-year period (9 years remaining as of June 30, 2021), except for the additional UAL attributable to the outstanding unfunded actuarial loss from 2009, which is being amortized over a separate closed period (17 years remaining as of June 30, 2021).

Effective with the June 30, 2014 valuation, any new sources of UAL due to actuarial gains and losses or method changes are amortized over a closed 24-year period, with a five-year ramp up period at the beginning of the period, a four-year ramp down at the end of the period, and 15 years of level payments as a percentage of payroll in conjunction with traditional five-year asset smoothing. Assumption changes are amortized over a closed 22-year period, with a 3-year ramp up period, 2-year ramp down period, and 17 years of level payments as a percentage of payroll.

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

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



SECTION IV - PROJECTION OF TOTAL PENSION LIABILITY

The Total Pension Liability (TPL) at the end of the measurement year, June 30, 2022 is measured as of a valuation date of June 30, 2021 and projected to June 30, 2022. The TPL shown in the prior report was measured as of June 30, 2020 and projected to June 30, 2021. Because the TPLs are based on different valuations, the TPL from the prior report will not match the amounts measured as of June 30, 2021 that are shown in this exhibit.

There were no significant events during the projection period of which we are aware.

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

Table IV-1 Projection of Collective TPL from Valuation to Measurement Date											
Discount Rate	5.75%	6.75%	7.75%								
Valuation Collective TPL, 6/30/2	2021										
Actives	\$ 1,099,301,276	\$ 930,224,620	\$ 793,647,709								
Deferred Vested	178,172,751	146,259,987	122,188,589								
Retirees	2,357,408,299	2,140,462,726	1,956,968,240								
Total	\$ 3,634,882,326	\$ 3,216,947,333	\$ 2,872,804,538								
Service Cost	88,075,377	69,061,416	54,776,308								
Benefit Payments	177,001,703	177,001,703	177,001,703								
Interest	206,484,833	213,560,444	217,994,490								
Collective TPL, 6/30/2022	\$ 3,752,440,833	\$ 3,322,567,490	\$ 2,968,573,633								



SECTION V – GASB 67 REPORTING INFORMATION

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

Change in Collec	Table V-1 ctive Net Pensi	ion Liability								
	Increase (Decrease)									
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)							
Balances at 6/30/2021	\$3,233,119,109	\$3,395,520,286	\$ (162,401,177)							
Changes for the year:										
Service cost	69,061,416		69,061,416							
Interest	214,652,039		214,652,039							
Changes of benefits	0		0							
Differences between expected and actual										
experience	(17,263,371)		(17,263,371)							
Changes of assumptions	0		0							
Contributions - employer		85,165,422	(85,165,422)							
Contributions - member		33,878,121	(33,878,121)							
Net investment income		(322,722,434)	322,722,434							
Benefit payments	(177,001,703)	(177,001,703)	0							
Administrative expense		(4,960,544)	4,960,544							
Net changes	89,448,381	(385,641,138)	475,089,519							
Balances at 6/30/2022	\$3,322,567,490	\$3,009,879,148	\$ 312,688,342							

During the measurement year, the NPL increased by approximately \$475 million. The service cost and interest cost increased the NPL by approximately \$284 million while contributions offset by investment losses and administrative expenses increased the NPL by approximately \$209 million.

There were no changes in assumptions or benefits during the year. There were actuarial experience gains during the year that decreased the collective NPL by approximately \$17 million.



SECTION V – GASB 67 REPORTING INFORMATION

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

Table V-2 Sensitivity of Collective Net Pension Liability to Changes in Discount Rate										
	1%	Discount	1%							
	Decrease	Rate	Increase							
	5.75%	6.75%	7.75%							
Total Pension Liability Plan Fiduciary Net Position Collective Net Pension Liability	\$3,752,440,833	\$3,322,567,490	\$2,968,573,633							
	3,009,879,148	3,009,879,148	3,009,879,148							
	\$ 742,561,685	\$312,688,342	\$ (41,305,515)							
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	80.2%	90.6%	101.4%							

A one percent decrease in the discount rate increases the TPL by approximately 13%, while a one percent increase in the discount rate decreases the TPL by approximately 11%. The increase and decrease in the NPL from these respective discount rate changes are substantially higher.



SECTION V – GASB 67 REPORTING INFORMATION

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

				Table V-3						
Schedule of Cha	ng	es in Colle	ct	ive Net Per	ısi	on Liabilit	y a	and Relate	d 1	Ratios
	1	FYE 2022		FYE 2021		FYE 2020		FYE 2019		FYE 2018
Total Pension Liability										
Service cost (MOY)	\$	69,061,416	\$	68,379,239	\$	63,855,331	\$	63,587,459	\$	61,074,664
Interest		214,652,039		207,084,921		203,816,884		195,274,190		188,096,539
Changes of benefit terms Differences between expected and actual experience		0 (17,263,371)		0 8,570,419		15,620,886		0 16,721,629		0 (2.412.765)
Changes of assumptions				, ,						(3,412,765)
Benefit payments, including refunds		0 (177,001,703)		33,674,504 (167,679,802)		0 (158,293,527)		0 (149,212,983)		40,801,678 (139,856,672)
N-4 -b : TDI	<u> </u>		Φ.		Φ.		Φ.		Φ.	
Net change in TPL	Þ	89,448,381	\$	150,029,281	\$	124,999,574	\$	126,370,295	\$	146,703,444
TPL - beginning	3	,233,119,109		3,083,089,828		2,958,090,254		2,831,719,959		2,685,016,515
TPL - ending	\$ 3	,322,567,490	\$:	3,233,119,109	\$:	3,083,089,828	\$ 2	2,958,090,254	\$	2,831,719,959
Plan fiduciary net position										
Contributions - employer	\$	85,165,422	\$	80,359,731	\$	75,643,074	\$	78,738,814	\$	78,754,476
Contributions - member		33,878,121		32,019,007		30,913,996		30,010,459		28,628,627
Net investment income		(322,722,434)		829,890,325		89,273,498		136,483,513		221,839,196
Benefit payments, including										
refunds		(177,001,703)		(167,679,802)		(158,293,527)		(149,212,983)		(139,856,672)
Administrative expense		(4,960,544)		(4,383,839)		(4,607,760)		(5,056,351)		(4,203,705)
Net change in plan fiduciary net position	\$	(385,641,138)	\$	770,205,421	\$	32,929,281	\$	90,963,452	\$	185,161,922
Plan fiduciary net position - beginning Plan fiduciary net position -	_3	,395,520,286		2,625,314,865		2,592,385,584		2,501,422,132		2,316,260,210
ending	\$ 3	,009,879,148	\$:	3,395,520,286	\$:	2,625,314,865	\$ 2	2,592,385,584	\$:	2,501,422,132
Net pension liability - ending	\$	312,688,342	\$	(162,401,177)	\$	457,774,963	\$	365,704,670	\$	330,297,827
Plan fiduciary net position as a percentage of the TPL		90.59%		105.02%		85.15%		87.64%		88.34%
Covered payroll	\$	279,282,881	\$	272,441,885	\$	264,730,129	\$	253,964,938	\$	248,532,086
Net pension liability as a percentage of covered payroll		111.96%		-59.61%		172.92%		144.00%		132.90%



SECTION V – GASB 67 REPORTING INFORMATION

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

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



SECTION V – GASB 67 REPORTING INFORMATION

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

Table V-4 Schedule of Collective Employer Contributions										
	FYE 2022	FYE 2021	FYE 2020	FYE 2019	FYE 2018					
Actuarially Determined Contribution Contributions in Relation to the	\$ 85,165,422	\$ 80,359,731	\$ 75,643,074	\$ 78,738,814	\$ 78,754,476					
Actuarially Determined Contribution	85,165,422	80,359,731	75,643,074	78,738,814	78,754,476					
Contribution Deficiency/(Excess) Covered Payroll Contributions as a Percentage of	\$\frac{\$0}{\$279,282,881}	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					
Covered Payroll	30.49%	29.50%	28.57%	31.00%	31.69%					
	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013					
Actuarially Determined Contribution Contributions in Relation to the	\$ 77,502,945	\$ 75,260,980	\$ 68,915,072	\$ 69,660,201	\$ 69,853,000					
Actuarially Determined Contribution	77,502,945	75,260,980	68,595,072	69,980,201	69,853,000					
Contribution Deficiency/(Excess)	\$ 0	\$ 0	\$ 320,000	\$ (320,000)	\$ 0					
Covered Payroll	\$ 242,045,311	\$ 238,185,040	\$ 223,825,880	\$ 218,340,721	\$ 211,001,594					
Contributions as a Percentage of Covered Payroll	32.02%	31.60%	30.65%	32.05%	33.11%					



SECTION V – GASB 67 REPORTING INFORMATION

The following information on key methods and assumptions used to calculate the ADC for FYE 2021 should be presented as notes to the schedule.

	Notes to Schedule
Valuation date	June 30, 2020 (to determine FY2021-22 contribution)
Timing	Actuarially Determined Contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the plan year
Actuarial cost method	Entry age
Amortization method	Level percentage of payroll with separate periods for Extraordinary Actuarial Gains or Loss (18 years remaining as of (6/30/2020), the remaining UAL as of June 20, 2013 (10 years as of 6/30/2020), and additional layers for unexpected changes in UAL after 6/30/2013 (24 years for gains and losses with a 5-year phase in/out and 22 years for assumption changes with a 3-year phase in/out).
Discount rate	6.75%
Amortization growth rate	2.75%
Price Inflation	2.50%
Salary increases	3.00% plus merit component based on employee classification and years of service.
Base Mortality	Sex-distinct Public General 2010 Employee, Healthy Retiree, Disabled Retiree, and Contingent Survivor Mortality Tables, for Miscellaneous actives, healthy retirees (and their beneficiaries prior to the death of the member), disabled retirees, and all beneficiaries in pay status, respectively, with female beneficiaries in pay status adjusted by 105%.
	Sex-distinct Public Safety 2010 Above-Median Income Employee, Healthy Retiree, and Disabled Retiree Mortality Tables for Safety actives, healthy retirees (and their beneficiaries prior to the death of the member), and disabled retirees, respectively, with male disabled members adjusted by 95%.
Mortality Improvement	All base tables are projected with generational mortality improvements from a base year of 2010 using Projection Scale MP-2020.
A complete description of	the methods and assumptions used to determine contribution rates for

A complete description of the methods and assumptions used to determine contribution rates for the fiscal year ending June 30, 2022, can be found in the June 30, 2020 actuarial valuation report.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

We understand that MCERA's participating employers elected to use the 2014 measurement date for their initial reporting under GASB 68 on their June 30, 2015 reporting dates. As a result, the schedules in this section will be used by employers for their FYE 2023 reporting.

The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years and the total amount recognized thereafter.

Table Schedule of Collective Deferred In		and	l Outflows o	f Re	sources	
		0	Deferred Outflows of Resources	Deferred Inflows of Resources		
Differences between expected and actual experience Changes in assumptions Net difference between projected and actual earning pension plan investments Total		\$ \$ 1	8,190,429 16,837,252 90,579,025 115,606,706	\$	12,947,528 0 0 12,947,528	
Amounts reported as deferred outflows and deferred pension expense as follows:	ed inflows		<u> </u>	recog		
Measurement year ended J	une 30:					
·	2023		14,645,159			
	2024		3,329,981			
	2025		(25,282,207)			
	2026		109,966,245			
	2027		0			
Th	ereafter	\$	0			

The tables on the following pages provide details on the current balances of deferred inflows and outflows of resources along with the recognition of each base for each of the current and following five years, as well as the total for any years thereafter.



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

	Table VI-2 Recognition of Experience (Gains) and Losses													
Experience Year	Recognition Period	Total Amount	Beginning Remaining Amount	Ending Remaining Amount		2022		1 2023	Rec	ognition Yea	ar	2025		2026
2022 2021	4.0 4.0	\$ (17,263,371) 8,570,419	\$ (17,263,371) 6,427,814	\$ (12,947,528) 4,285,209	\$	(4,315,843) 2,142,605	\$	(4,315,843) 2,142,605	\$	(4,315,843) 2,142,604	\$	(4,315,842) 0	\$	0 0
2020 2019 Deferred O	4.0 4.0	15,620,886 16,721,629	7,810,442 4,180,408 18,418,664	3,905,220 0 8,190,429		3,905,222 4,180,408 10,228,235		3,905,220 0 6,047,825		0 0 2,142,604		0 0		0 0 0
Deferred (In		pense	(17,263,371) \$ 1,155,293	(12,947,528) \$ (4,757,099)	\$	(4,315,843) 5,912,392	\$	(4,315,843) 1,731,982	\$	(4,315,843) (2,173,239)	\$	(4,315,842) (4,315,842)	\$	0 0

	Table VI-3 Recognition of Assumption Changes										
Change Year	Recognition Period	Total Amount	Beginning Remaining Amount	Ending Remaining Amount	2022	2023	Recognition Ye 2024	ar 2025	2026		
2022 2021	4.0 4.0	\$ 0 33,674,504	\$ 0 25,255,878	\$ 0 16,837,252	\$ 0 8,418,626	\$ 0 8,418,626	\$ 0 8,418,626	\$ 0	\$ 0		
2020	4.0	0	0	0	0	0	0	0	0		
2019 Deferred O	4.0 outflows	0	25,255,878	16,837,252	8,418,626	8,418,626	8,418,626	0	0		
Deferred (I	nflows)		0	0	0	0	0	0	0		
Net Change	e in Pension Ex	pense	\$ 25,255,878	\$ 16,837,252	\$ 8,418,626	\$ 8,418,626	\$ 8,418,626	\$ 0	\$ 0		



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

	Table VI-4 Recognition of Investment (Gains) and Losses											
Beginning Ending Experience Recognition Total Remaining Remaining Recognition Year												
Year	Period	Amount	Amount	Amount	2022	2023	2024	2025	2026			
2022	5.0	\$ 549,831,221	\$ 549,831,221	\$ 439,864,977	\$ 109,966,244	\$ 109,966,244	\$ 109,966,244	\$ 109,966,244	\$ 109,966,245			
2021	5.0	(654,663,045)	(523,730,436)	(392,797,827)	(130,932,609)	(130,932,609)	(130,932,609)	(130,932,609)	0			
2020	5.0	90,254,799	54,152,879	36,101,919	18,050,960	18,050,960	18,050,959	0	0			
2019	5.0	37,049,780	14,819,912	7,409,956	7,409,956	7,409,956	0	0	0			
2018	5.0	(60,962,975)	(12,192,595)	0	(12,192,595)	0	0	0	0			
Net Change	in Pension Ex	pense	\$ 82,880,981	\$ 90,579,025	\$ (7,698,044)	\$ 4,494,551	\$ (2,915,406)	\$ (20,966,365)	\$ 109,966,245			



SECTION VI - GASB 68 COLLECTIVE AMOUNTS

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

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

Table Calculation of Collec	nsion Expens	e	
	Measurement 2022	Yea	r Ending 2021
Change in Net Pension Liability Change in Deferred Outflows Change in Deferred Inflows Employer Contributions	\$ 475,089,519 (71,932,164) (454,002,712) 85,165,422	\$	(620,176,140) 37,193,199 466,097,048 80,359,731
Pension Expense Pension Expense as % of Payroll	\$ 34,320,065 12.29%	\$	(36,526,162)
Operating Expenses Service cost Employee contributions Administrative expenses Total	\$ 69,061,416 (33,878,121) 4,960,544 40,143,839	\$ 	68,379,239 (32,019,007) 4,383,839 40,744,071
Financing Expenses Interest cost Expected return on assets Total	\$ 214,652,039 (227,108,787) (12,456,748)	\$ 	207,084,921 (175,227,279) 31,857,642
Changes Benefit changes Recognition of assumption changes Recognition of liability gains and losses Recognition of investment gains and losses Total	\$ 0 8,418,626 5,912,392 (7,698,044) 6,632,974	\$ 	0 18,619,044 9,375,042 (137,121,961) (109,127,875)
Pension Expense	\$ 34,320,065	\$	(36,526,162)



SECTION VI – GASB 68 COLLECTIVE AMOUNTS

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

Financing expenses equal the interest on the Total Pension Liability less the expected return on assets. Since, the discount rate is equal to the long-term expected return on assets, the financing expense is primarily the interest on the Net Pension Liability with an adjustment for the difference between the interest on the service cost and contributions.

The recognition of changes will drive most of the volatility in pension expense from year to year. Changes include any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses.

The total pension expense increased from the prior year by about \$71 million. In the current year pension expense, the recognition of changes increased by approximately \$116 million, operating expenses decreased by \$0.6 million, and financing expenses decreased by \$44 million compared to the prior year.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

Proportionate Shares

Because MCERA is a cost-sharing multiple-employer pension plan, each employer participating in MCERA must report a portion of the collective Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows in its financial statements. GASB 68 requires that the proportionate share for each employer be determined based on the "employer's projected long-term contribution effort to the pension ... as compared to the total projected long-term contribution effort of all employers"

Proportionate shares for each employer have previously been determined based on the employer's share of the Unfunded Actuarial Liability (UAL) reported in the most recent actuarial valuation. However, because the June 30, 2021 actuarial valuation reported positive UAL amounts for some employers and negative UAL amounts (i.e., surplus) for others, it would not be practical to determine proportionate shares based on each employer's share of the UAL from the 2021 valuation.

For the June 30, 2022 measurement date, proportionate shares have been determined based on the projected UAL as of the measurement date for each employer. We projected the liabilities for each employer from the June 30, 2021 actuarial valuation to June 30, 2022, using the same procedures used to update the TPL between these dates. We allocated the assets as of June 30, 2022 to each of the three main cost-sharing groups - the County and related employers, the City of San Rafael, and the Novato Fire Protection District - based on the reserves provided by MCERA as of the measurement date, and within each cost-sharing group allocated the assets using the policy adopted by the Board with the June 30, 2021 actuarial valuation to produce an equal funded ratio for each employer within the group.

In Table VII-1 on the following page, the determination of the proportionate shares as of June 30, 2022 is based on the procedure described above. The determination of the proportionate shares as of June 30, 2021 is based on the UAL amounts from the June 30, 2020 actuarial valuation. Going forward, we expect that each employer's proportionate share will be determined based on its share of the projected UAL as of the measurement date, using the roll-forward procedures described above.



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

De	Table VII-1 Determination of Employers' Proportionate Share*											
		June 30, 2022	2	June 30, 2021								
Employer	UAL (using liabilities rolled forward to June 30, 2022 from the June 20, 2021 valuation and assets Proportionate as of June 30, 2022) Share UAL (from the June 30, 2020 Actuarial Proportion Valuation)* Share											
County	\$	167,182,825	53.4663%	\$	279,082,561	55.8749%						
LAFCO		94,887	0.0303%		0	0.0000%						
Marin City		74,948	0.0240%		0	0.0000%						
Mosquito District		2,602,440	0.8323%		7,675,159	1.5366%						
South Marin Fire		7,896,941	2.5255%		17,578,363	3.5193%						
Tamalpais CSD		826,499	0.2643%		407,469	0.0816%						
Courts		6,842,623	2.1883%		11,570,299	2.3165%						
City of San Rafael		105,476,578	33.7322%		148,170,360	29.6650%						
Novato Fire		21,690,607	6.9368%		34,993,749	7.0061%						
Total	\$	312,688,348	100.0000%	\$ 4	199,477,960	100.0000%						

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

The table below shows the proportionate share of the collective NPL (under three discount rates), the collective deferred outflows, the collective deferred inflows, and the collective pension expense allocated to each participating employer as of June 30, 2022.

Sched	Table VII-2 Schedule of Employers' Proportionate Share of Collective Amounts at June 30, 2022*											
Employer		•	Share of NPL @ 6.75%		Share of Deferred Outflows	Share of Deferred Inflows	Pension Expense					
County	53.4663%	397,020,258	167,182,887	(22,084,531)	61,810,628	6,922,564	18,349,669					
LAFCO	0.0303%	224,996	94,745	(12,516)	35,029	3,923	10,399					
Marin City	0.0240%	178,215	75,045	(9,913)	27,746	3,107	8,237					
Mosquito District	0.8323%	6,180,341	2,602,505	(343,786)	962,195	107,762	285,646					
South Marin Fire	2.5255%	18,753,395	7,896,944	(1,043,171)	2,919,647	326,990	866,753					
Tamalpais CSD	0.2643%	1,962,591	826,435	(109,170)	305,549	34,220	90,708					
Courts	2.1883%	16,249,477	6,842,559	(903,889)	2,529,822	283,331	751,026					
City of San Rafael	33.7322%	250,482,393	105,476,657	(13,933,259)	38,996,685	4,367,486	11,576,913					
Novato Fire	6.9368%	51,510,019	21,690,565	(2,865,281)	8,019,406	898,144	2,380,714					
Total	100.0000%	\$742,561,685	\$312,688,342	\$ (41,305,515)	\$115,606,706	\$ 12,947,528	\$ 34,320,065					

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

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

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

	Table VII-3 Schedule of Employers' Changes in Proportion and Contribution Differences*										
	Proportion	ate Shares	In	pact of Chan	ge in Proporti	Contributions					
			Net Pension	Deferred	Deferred			Proportionate			
Employer	6/30/2021	6/30/2022	Liability	Outflows	Inflows	Net Effect	Actual	Share	Difference		
County	55.8749%	53.4663%	\$ 3,911,595	\$ (1,051,945)	\$ 11,246,963	\$ (6,283,424)	\$ 52,437,308	\$ 45,534,800	\$ 6,902,508		
LAFCO	0.0000%	0.0303%	(49,208)	13,233	(141,486)	79,045	53,739	25,805	27,934		
Marin City	0.0000%	0.0240%	(38,976)	10,482	(112,068)	62,610	50,241	20,440	29,801		
Mosquito District	1.5366%	0.8323%	1,143,791	(307,600)	3,288,731	(1,837,339)	1,130,973	708,832	422,141		
South Marin Fire	3.5193%	2.5255%	1,613,943	(434,038)	4,640,551	(2,592,571)	2,971,511	2,150,853	820,659		
Tamalpais CSD	0.0816%	0.2643%	(296,707)	79,793	(853,118)	476,618	310,325	225,092	85,232		
Courts	2.3165%	2.1883%	208,198	(55,991)	598,630	(334,441)	1,848,644	1,863,675	(15,031)		
City of San Rafael	29.6650%	33.7322%	(6,605,181)	1,776,331	(18,991,800)	10,610,289	21,785,726	28,728,170	(6,942,445)		
Novato Fire	7.0061%	6.9368%	112,544	(30,266)	323,597	(180,786)	4,576,956	5,907,755	(1,330,799)		
Total	100.0000%	100.0000%	\$ 0	\$ 0	\$ 0	\$ 0	\$85,165,422	\$85,165,422	\$ 0		

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

	Table VII-4 Reconciliation of Deferred Outflows and Inflows Due to Proportion Change*											
		Deferred	Outflows		Deferred Inflows							
		Current Year			Current Year							
Employer	6/30/2021	Net Effect	Recognition	6/30/2022	6/30/2021	Net Effect	Recognition	6/30/2022				
County	\$ 10,901,164	\$ 0	\$ 4,009,284	\$ 6,891,880	\$ (3,567,865)	\$ (6,283,424)	\$ (5,138,720)	\$ (4,712,568)				
LAFCO	12,570	79,045	26,046	65,569	(29,118)	0	(15,897)	(13,222)				
Marin City	2,321	62,610	17,974	46,957	(4,669)	0	(2,334)	(2,334)				
Mosquito District	793,504	0	396,752	396,752	(441,602)	(1,837,339)	(867,316)	(1,411,625)				
South Marin Fire	2,713,713	0	1,391,874	1,321,839	0	(2,592,571)	(648,143)	(1,944,428)				
Tamalpais CSD	41,365	476,618	132,943	385,040	(711,103)	0	(450,911)	(260,192)				
Courts	1,003,175	0	400,442	602,733	(195,987)	(334,441)	(279,598)	(250,831)				
City of San Rafael	2,797,308	10,610,289	5,449,880	7,957,716	(17,336,022)	0	(6,452,257)	(10,883,765)				
Novato Fire	4,021,247	0	2,075,178	1,946,068	0	(180,786)	(45,197)	(135,590)				
Total	\$22,286,366	\$11,228,561	\$13,900,374	\$19,614,554	\$(22,286,366)	\$(11,228,561)	\$(13,900,374)	\$(19,614,554)				

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

	Table VII-5 Reconciliation of Deferred Outflows and Inflows Due to Contribution Differences*														
	~	Oı				-		d Inflows							
Employer	6	/30/2021		rrent Year Difference	R	ecognition	6	5/30/2022	6	/30/2021		ent Year ference	Recognition		6/30/2022
County	\$	8,608,724	\$	6,902,508	\$	6,383,193	\$	9,128,038	\$	0	\$	0	\$ 0	5	0
LAFCO		46,074		27,934		28,273		45,735		0		0	0		0
Marin City		78,665		29,801		42,568		65,898		0		0	0		0
Mosquito District		28,602		422,141		134,138		316,606		(261,256)		0	(103,307)	(157,950)
South Marin Fire		270,180		820,659		374,114		716,725		(70,137)		0	(23,379)	(46,758)
Tamalpais CSD		369,516		85,232		186,638		268,111		0		0	0		0
Courts		225,224		0		153,739		71,484		0		(15,031)	(3,758)	(11,273)
City of San Rafael		0		0		0		0		(8,395,761)	((6,942,445)	(6,526,081)	(8,812,125)
Novato Fire		15,212		0		15,212		0		(915,042)	(1,330,799)	(661,350)	(1,584,490)
Total	\$	9,642,196	\$	8,288,275	\$	7,317,875	\$1	0,612,596	\$ (9,642,196)	\$ (8	,288,275)	\$ (7,317,875) \$	\$(10,612,596)

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

Table VII-6 Schedule of Employers' Deferred Outflows at June 30, 2022*										
Employer	Proportionate Shares	Experience	Assumption Changes	Investment Return	Proportion Change	Contribution Difference				
County	53.4663%	\$ 4,379,119	\$ 9,002,256	\$ 48,429,253	\$ 6,891,880	\$ 9,128,038				
LAFCO	0.0303%	2,482	5,102	27,445	65,569	45,735				
Marin City	0.0240%	1,966	4,041	21,739	46,957	65,898				
Mosquito District	0.8323%	68,169	140,136	753,889	396,752	316,606				
South Marin Fire	2.5255%	206,849	425,225	2,287,573	1,321,839	716,725				
Tamalpais CSD	0.2643%	21,647	44,501	239,400	385,040	268,111				
Courts	2.1883%	179,231	368,450	1,982,141	602,733	71,484				
City of San Rafael	33.7322%	2,762,812	5,679,576	30,554,298	7,957,716	0				
Novato Fire	6.9368%	568,154	1,167,966	6,283,286	1,946,068	0				
Total	100.0000%	\$ 8,190,429	\$ 16,837,252	\$90,579,025	\$ 19,614,554	\$ 10,612,596				

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

	Table VII-7 Schedule of Employers' Deferred Inflows at June 30, 2022*												
Proportionate Assumption Investment Proportion Contribute Employer Shares Experience Changes Return Change Different													
County	53.4663%	\$ 6,922,564	\$ 0	\$ 0	\$ 4,712,568	\$ 0							
LAFCO	0.0303%	3,923	0	0	13,222	0							
Marin City	0.0240%	3,107	0	0	2,334	0							
Mosquito District	0.8323%	107,762	0	0	1,411,625	157,950							
South Marin Fire	2.5255%	326,990	0	0	1,944,428	46,758							
Tamalpais CSD	0.2643%	34,220	0	0	260,192	0							
Courts	2.1883%	283,331	0	0	250,831	11,273							
City of San Rafael	33.7322%	4,367,486	0	0	10,883,765	8,812,125							
Novato Fire	6.9368%	898,144	0	0	135,590	1,584,490							
Total	100.0000%	\$12,947,528	\$ 0	\$ 0	\$ 19,614,554	\$ 10,612,596							

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

Schedule of Employers'	Table VII-8 Schedule of Employers' Recognition of Deferred Outflows and Inflows at June 30, 2022*											
Employer	Recognition for Measurement Year Ending 2023 2024 2025 2026 Thereafter											
County	\$	14,770,354	\$	5,992,868	\$	(13,362,690)	\$	58,794,882	\$	0		
LAFCO		48,837		27,946		19,084		33,320		0		
Marin City		50,289		41,443		17,035		26,392		0		
Mosquito District		44,727		(397,538)		(564,223)		915,249		0		
South Marin Fire		746,148		198,170		(1,081,480)		2,777,198		0		
Tamalpais CSD		75,647		224,357		73,642		290,641		0		
Courts		697,036		195,795		(640,619)		2,406,391		0		
City of San Rafael		(3,267,480)		(3,324,244)		(7,611,284)		37,094,034		0		
Novato Fire		1,479,601		371,183		(2,131,672)		7,628,138		0		
Total	\$	14,645,159	\$	3,329,981	\$	(25,282,207)	\$	109,966,245	\$	0		

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

Employers that are using a June 30, 2022 measurement date for their June 30, 2023 financial statements can use this schedule for their annual pension expense.

	Schedule of	f Employe	rs' Pension		e VII-9 the Measurer	nent Year Ei	nding June 30), 2022*	
Employer	Collective Pension Expense	Change in Proportion	yer Deferred Inflows	Employer Contributions	Employer Pension Expense				
County	\$ 18,349,669	\$(1,129,436)	\$ 6,383,193	\$ 23,603,426	\$ 257,924,382	\$ (33,917,552)	\$ (252,840,712)	\$ 52,437,308	\$ 23,603,426
LAFCO	10,399	10,149	28,273	48,821	94,745	(87,689)	(11,974)	53,739	48,821
Marin City	8,237	15,640	42,568	66,444	75,045	(59,614)	773	50,241	66,444
Mosquito District	285,646	(470,565)	30,831	(154,088)	5,097,962	(182,343)	(6,200,679)	1,130,973	(154,088)
South Marin Fire	866,753	743,731	350,735	1,961,219	13,612,329	(437,280)	(14,185,341)	2,971,511	1,961,219
Tamalpais CSD	90,708	(317,968)	186,638	(40,623)	958,955	(512,180)	(797,722)	310,325	(40,623)
Courts	751,026	120,844	149,982	1,021,852	10,604,582	(963,919)	(10,467,455)	1,848,644	1,021,852
City of San Rafael	11,576,913	(1,002,377)	(6,526,081)	4,048,455	153,652,966	(31,201,041)	(140,189,196)	21,785,726	4,048,455
Novato Fire	2,380,714	2,029,982	(646,138)	3,764,557	33,068,554	(2,869,134)	(31,011,819)	4,576,956	3,764,557
Total	\$34,320,065	\$ 0	\$ 0	\$34,320,063	\$475,089,519	\$(70,230,752)	\$ (455,704,125)	\$85,165,422	\$34,320,063

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



SECTION VII – GASB 68 REPORTING INFORMATION FOR PARTICIPATING EMPLOYERS

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

	Table VII-10 Schedule of Employers' RSI Information at June 30, 2022*										
Employer	Proportionate Shares	Proportionate Share of NPL	Covered Payroll	Share of	Plan Fiduciary Net Position as % of TPL	Contractually Required		Contribution Deficiency	Contributions as a % of Payroll		
County	53.4663%	\$ 167,182,887	\$ 212,987,836	78.5%	90.6%	\$ 52,437,308	\$ 52,437,308	\$ 0	24.6%		
LAFCO	0.0303%	94,745	313,897	30.2%	90.6%	53,739	53,739	0	17.1%		
Marin City	0.0240%	75,045	87,202	86.1%	90.6%	50,241	50,241	0	57.6%		
Mosquito District	0.8323%	2,602,505	3,696,722	70.4%	90.6%	1,130,973	1,130,973	0	30.6%		
South Marin Fire	2.5255%	7,896,944	7,774,051	101.6%	90.6%	2,971,511	2,971,511	0	38.2%		
Tamalpais CSD	0.2643%	826,435	1,164,772	71.0%	90.6%	310,325	310,325	0	26.6%		
Courts	2.1883%	6,842,559	8,020,873	85.3%	90.6%	1,848,644	1,848,644	0	23.0%		
City of San Rafael	33.7322%	105,476,657	35,194,710	299.7%	90.6%	21,785,726	21,785,726	0	61.9%		
Novato Fire	6.9368%	21,690,565	10,042,818	216.0%	90.6%	4,576,956	4,576,956	0	45.6%		
Total	100.0000%	\$312,688,342	\$279,282,881	112.0%	90.6%	\$85,165,422	\$85,165,422	\$ 0	30.5%		

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



APPENDIX A – MEMBERSHIP INFORMATION

			Marin Co	ounty				Marin Special Districts					Total County and		
	Miscellaneous		Safety		To	Total		aneous	Safety		Tot	tal		Special Districts	
		6/30/2021								6/30/2021			6/30/2020		
Active Participants															
Number	1,727	1,706	361	356	2,088	2,062	155	163	51	52	206	215	2,294	2,27	
Average Age	47.49	47.39	40.47	40.28	46.27	46.16	49.05	47.79	42.71	41.31	47.48	46.23	46.38	46.1	
Average Service	9.50	9.55	11.06	10.75	9.77	9.75	11.51	10.44	10.20	9.46	11.18	10.20	9.89	9.8	
Average Pay*	\$95,252	\$97,358	\$119,454	\$123,044	\$99,437	\$101,792	\$86,957	\$87,666	\$130,847	\$132,414	\$97,823	\$98,489	\$99,292	\$101,48	
Service Retired															
Number	1,664	1,710	269	290	1,933	2,000	135	151	30	34	165	185	2,098	2,18	
Average Age	72.63	72.80	64.77	64.61	71.54	71.61	69.58	69.99	63.92	63.87	68.55	68.87	71.30	71.3	
Average Total Benefit*	\$39,463	\$40,184	\$71,999	\$72,947	\$43,990	\$44,935	\$38,855	\$39,403	\$73,208	\$72,909	\$45,101	\$45,561	\$44,078	\$44,98	
Beneficiaries															
Number	278	283	77	78	355	361	17	17	10	8	27	25	382	38	
Average Age	74.71	74.96	70.13	70.16	73.72	73.92	67.36	68.36	68.59	66.33	67.81	67.71	73.30	73.5	
Average Total Benefit*	\$27,293	\$27,432	\$42,501	\$45,530	\$30,591	\$31,342	\$26,460	\$26,895	\$46,563	\$52,394	\$33,906	\$35,055	\$30,826	\$31,58	
Duty Disabled															
Number	84	83	126	125	210	208	6	6	18	19	24	25	234	23:	
Average Age	68.97	69.85	63.72	64.39	65.82	66.57	65.88	66.88	66.71	66.72	66.50	66.76	65.89	66.59	
Average Total Benefit*	\$40,107	\$40,146	\$62,730	\$63,643	\$53,681	\$54,267	\$34,404	\$34,947	\$62,464	\$64,005	\$55,449	\$57,031	\$53,862	\$54,563	
Ordinary Disabled															
Number	28	28	8	8	36	36	2	2	0	0	2	2	38	3	
Average Age	71.37	72.37	56.14	57.14	67.98	68.98	65.85	66.85	0.00	0.00	65.85	66.85	67.87	68.8	
Average Total Benefit*	\$22,307	\$22,712	\$44,162	\$45,027	\$27,164	\$27,671	\$26,389	\$26,917	\$0	\$0	\$26,389	\$26,917	\$27,123	\$27,63	
Total In Pay															
Number	2,054	2,104	480	501	2,534	2,605	160	176	58	61	218	237	2,752	2,84	
Average Age	72.75	72.97	65.21	65.30	71.32	71.49	69.16	69.69	65.59	65.08	68.21	68.50	71.07	71.2	
Average Total Benefit*	\$37,608	\$38,235	\$64,370	\$65,911	\$42,677	\$43,558	\$37,215	\$37,901	\$65,280	\$67,445	\$44,682	\$45,505	\$42,836	\$43,720	
Terminated Vested															
Number	241	261	26	34	267	295	19	20	2	3	21	23	288	31	
Average Age	48.34	48.41	45.09	42.43	48.02	47.72	46.69	48.27	53.70	52.40	47.36	48.81	47.97	47.8	
Average Service	8.28	8.20	7.65	7.18	8.22	8.08	9.32	9.15	3.50	7.00	8.76	8.87	8.26	8.1	
Transfers															
Number	176	170	55	54	231	224	30	28	11	10	41	38	272	26	
Average Age	50.20	50.18	45.28	44.66	49.03	48.85	50.22	48.20	47.25	46.84	49.43	47.84	49.09	48.70	
Average Service	4.91	4.96	4.00	4.98	4.70	4.97	5.40	5.18	5.18	5.20	5.34	5.18	4.79	5.0	
Total Inactive															
Number	417	431	81	88	498	519	49	48	13	13	62	61	560	58	
Average Age	49.12	49.11	45.22	43.80	48.49	48.21	48.85	48.23	48.25	48.12	48.73	48.20	48.52	48.2	
Average Service	6.86	6.92	5.17	5.83	6.59	6.74	6.92	6.83	4.92	5.62	6.50	6.57	6.58	6.7	

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

APPENDIX A – MEMBERSHIP INFORMATION

	Miscellaneous 6/30/2020 6/30/2021		Police 6/30/2020 6/30/2021		Fire 6/30/2020 6/30/2021		Total Safety		Total 6/30/2020 6/30/2021	
Active Participants	0/30/2020	0/30/2021	0/30/2020	0/30/2021	0/30/2020	0/30/2021	0/30/2020	0/30/2021	0/30/2020	0/30/202
Number	205	188	60	68	67	70	127	138	332	320
Average Age	45.01	46.14	39.69	38.38	39.38	39.08	39.53	38.74	42.91	43.0
Average Service	9.07	9.22	10.35	9.26	10.06	9.37	10.20	9.32	9.50	9.26
Average Service Average Pay*	\$83,143	\$85,235	\$126,558	\$125,863	\$134,591	\$128,265	\$130,796	\$127,082	\$101,372	\$102,949
Average I ay	\$65,145	\$65,255	\$120,556	\$125,005	\$134,371	\$120,203	\$130,770	\$127,002	\$101,372	\$102,747
Service Retired										
Number	278	289	80	82	86	86	166	168	444	457
Average Age	69.96	70.41	66.91	66.93	68.73	68.95	67.86	67.96	69.18	69.51
Average Total Benefit*	\$39,832	\$41,223	\$73,645	\$77,125	\$97,541	\$101,395	\$86,025	\$89,549	\$57,103	\$58,988
Beneficiaries										
Number	43	43	24	26	22	22	46	48	89	91
Average Age	75.39	74.00	69.04	69.92	74.18	75.18	71.50	72.33	73.38	73.12
Average Total Benefit*	\$22,467	\$23,880	\$35,984	\$39,991	\$41,596	\$42,833	\$38,668	\$41,293	\$30,841	\$33,065
Duty Disabled										
Number	18	18	43	41	24	24	67	65	85	83
Average Age	67.93	68.93	62.16	62.40	68.81	69.81	64.54	65.14	65.26	65.96
Average Total Benefit*	\$30,412	\$31,312	\$63,027	\$65,564	\$97,086	\$99,999	\$75,227	\$78,278	\$65,737	\$68,093
Ordinary Disabled										
Number	3	2	0	0	0	0	0	0	3	2
Average Age	73.53	88.45	0.00	0.00	0.00	0.00	0.00	0.00	73.53	88.45
Average Total Benefit*	\$18,526	\$13,586	\$0	\$0	\$0	\$0	\$0	\$0	\$18,526	\$13,586
Total In Pay										
Number	342	352	147	149	132	132	279	281	621	633
Average Age	70.57	70.88	65.87	66.21	69.65	70.14	67.66	68.06	69.26	69.63
Average Total Benefit*	\$36,966	\$38,440	\$64,390	\$67,464	\$88,134	\$91,381	\$75,624	\$78,699	\$54,334	\$56,312
Terminated Vested										
Number	46	48	20	18	5	6	25	24	71	72
Average Age	48.19	47.93	43.37	45.17	37.29	37.42	42.15	43.23	46.06	46.36
Average Service	6.00	6.50	10.45	10.50	5.60	6.50	9.48	9.50	7.23	7.50
Transfers										
Number	64	78	14	14	5	6	19	20	83	98
Average Age	44.80	43.31	47.11	48.18	42.95	42.23	46.02	46.40	45.08	43.94
Average Service	3.20	2.72	3.64	4.43	3.60	3.67	3.63	4.20	3.30	3.02
Total Inactive										
Number	110	126	34	32	10	12	44	44	154	170
Average Age	46.22	45.07	44.91	46.49	40.12	39.83	43.82	44.67	45.53	44.90
Average Service	4.37	4.16	7.65	7.84	4.60	5.08	6.95	7.09	5.11	4.92

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



APPENDIX A – MEMBERSHIP INFORMATION

	Miscella	neous	Saf	etv	Total		
		6/30/2021		6/30/2021	6/30/2020		
Active Participants	0/20/2020	0/20/2021	0/20/2020	0/20/2021	0/20/2020	0,00,202	
Number	10	10	67	69	77	79	
Average Age	46.77	47.77	43.84	43.99	44.22	44.40	
Average Service	9.70	10.70	13.52	13.33	13.03	13.00	
Average Pay*	\$107,682	\$108,769	\$136,217	\$138,224	\$132,511	\$134,49	
Service Retired							
Number	6	5	58	58	64	6.	
Average Age	64.67	67.06	68.41	68.78	68.06	68.6	
Average Total Benefit*	\$40,297	\$48,044	\$112,801	\$115,401	\$106,004	\$110,055	
Beneficiaries							
Number	1	1	19	20	20	2	
Average Age	57.67	58.67	66.77	68.35	66.31	67.89	
Average Total Benefit*	\$12,798	\$12,990	\$43,558	\$44,783	\$42,020	\$43,269	
Duty Disabled							
Number	0	0	33	33	33	33	
Average Age	0.00	0.00	68.81	69.81	68.81	69.8	
Average Total Benefit*	\$0	\$0	\$85,116	\$86,393	\$85,116	\$86,393	
Ordinary Disabled							
Number	0	0	0	0	0	(
Average Age	0.00	0.00	0.00	0.00	0.00	0.00	
Average Total Benefit*	\$0	\$0	\$0	\$0	\$0	\$0	
Total In Pay							
Number	7	6	110	111	117	117	
Average Age	63.67	65.66	68.24	69.01	67.97	68.84	
Average Total Benefit*	\$36,369	\$42,201	\$92,535	\$94,053	\$89,175	\$91,394	
Terminated Vested							
Number	1	1	1	1	2	-	
Average Age	45.12	46.12	48.64	49.63	46.88	47.88	
Average Service	12.00	12.00	9.00	9.00	10.50	10.50	
Transfers							
Number	0	0	11	11	11	1	
Average Age	0.00	0.00	45.07	46.07	45.07	46.0	
Average Service	0.00	0.00	3.91	4.27	3.91	4.27	
Total Inactive							
Number	1	1	12	12	13	1:	
Average Age	45.12	46.12	45.37	46.37	45.35	46.33	
Average Service	12.00	12.00	4.33	4.67	4.92	5.23	

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

Please refer to the June 30, 2021 actuarial valuation report for a more complete summary of the data.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

A summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of June 30, 2022 is provided below, including any assumptions that differ from those used in the July 1, 2021 actuarial valuation. Please refer to the June 30, 2021 actuarial valuation report for a complete description of all other assumptions. The economic and demographic assumptions were adopted by the Board, based on an experience study performed by Cheiron covering the period from July 1, 2017 through June 30, 2020. The experience study report contains the rationale for all recommended assumptions.

Key Actuarial Assumptions

Expected Return on

Assets

6.75 percent per year, net of investment expenses

Discount Rate 6.75 percent per year

Price Inflation 2.50% per year

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

classification and years of service

Administrative

Expenses

Administrative expenses in the actuarial valuation are assumed to be \$5.1375 million for FY2021-22 to be split between employees and employers based on their share of the overall contributions. Administrative expenses shown in this report are based on the actual

FY2021-22 amounts.

Post-retirement COLA Post-retirement 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.

Mortality Rates for Active Members

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.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rates for Retired Healthy Members

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.

Mortality Rates for Retired Disabled Members

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.

Mortality Rates 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.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Methods

1. Actuarial Cost Method

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

The UAL (or Surplus Funding) is amortized as a percentage of the projected salaries of present and future members of MCERA. Effective with the June 30, 2013 valuation, the UAL as of June 30, 2013 is amortized over a closed 17-year period (9 years remaining as of June 30, 2021), except for the additional UAL attributable to the extraordinary loss from 2008-2009, which is being amortized over a separate closed period (17 years as of June 30, 2021). Surplus Funding is only amortized if the Plan's Funding Ratio exceeds 120%.

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

2. Valuation 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. As of the June 30, 2021 valuation, the assets for each employer are allocated based on the reserves maintained by MCERA for each of the three main cost-sharing groups – the County and related employers, the City of San Rafael, and the Novato Fire Protection District. Within each cost-sharing group, the assets are allocated such that all employers within the group have the same funded ratio.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

The plan provisions are the same as those summarized in the June 30, 2021 actuarial valuation report.



APPENDIX D – GLOSSARY OF TERMS

1. Actuarially Determined Contribution

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

2. Actuarial Valuation Date

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

3. Deferred Inflow of Resources

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

4. Deferred Outflow of Resources

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

5. Entry Age Actuarial Cost Method

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

6. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the actuarial valuation date to the measurement date. The measurement date must be the same as the reporting date for the plan.



APPENDIX D – GLOSSARY OF TERMS

7. Net Pension Liability

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

8. Plan Fiduciary Net Position

The fair or Market Value of Assets.

9. Reporting Date

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

10. Service Cost

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

11. Total Pension Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the Actuarial Liability calculated under the Entry Age Actuarial Cost Method.



