

County of Marin Retiree Healthcare Plan



Actuarial Valuation as of July 1, 2023

Plan Funding

For Fiscal Years 2023/24 & 2024/25

March 2024

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ACTUARIAL VALUATION CERTIFICATION

This report presents the July 1, 2023 actuarial valuation for the County of Marin Retiree Healthcare Plan (“Plan”). The purpose of this valuation is to:

- determine the Plan benefit obligations and funded status as of July 1, 2023, and
- calculate the County’s 2023/24 & 2024/25 fiscal year Actuarially Determined Contributions for the Plan.

Use of this valuation for other purposes may not be appropriate.

This report includes the following sections:

- Section 1 presents a staff summary of the valuation results.
- Section 2 provides the results of the actuarial valuation.
- Sections 3, 4, 5 and 6 summarize the census data, premium rates, Plan provisions, funding method, and actuarial assumptions that form the basis for this valuation.

This report presents Foster & Foster’s valuation of the County of Marin Retiree Healthcare Plan in accordance with accepted actuarial principles. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the assumptions; changes in assumptions; changes expected as part of the natural progression of the plan; and changes in plan provisions or applicable law. Actuarial models necessarily rely on the use of estimates and are sensitive to changes. Small variations in estimates may lead to significant changes in actuarial measurements. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of such measurements.

We have relied on plan information, demographic and premium information supplied by the County and Marin County Employees’ Retirement Association, which has been reviewed for general reasonableness, but not audited.

The undersigned are members of the American Academy of Actuaries and meet Academy Qualification Standards to render the actuarial results and opinions in this report.

Respectfully submitted,
Foster & Foster, Inc.



Doug Pryor, ASA, EA, MAAA



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March 2024

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Actuarial and Accounting Terminology Used in this Report

- AAL – Actuarial Accrued Liability
- ADC – Actuarially Determined Contribution
- EAN – Entry Age Normal Cost Method
- GASBS 75 – Governmental Accounting Standards Board Statement No. 75
- NC – Normal Cost
- OPEB – Other (than pensions) Post-Employment Benefits
- PVPB – Present Value of Projected Benefits
- UAAL – Unfunded Actuarial Accrued Liability

SECTION 1

STAFF SUMMARY

Plan Provisions

Under the current practice, the County allows eligible service and disability retirees and their dependents to continue health coverage in the County’s medical and dental plans. The County pays a portion of the medical premiums based on date of hire:

- Plan 1 (hired before October 1, 1987)
County pays 100% of the retiree’s single health plan premiums, and Medicare Part B premiums.
- Plan 2 (hired between October 1, 1987 and September 30, 1993)
County pays the retiree’s single health plan premiums up to \$2,275 per year.
- Plan 3 (hired between October 1, 1993 and December 31, 2007)
County pays a percentage of retiree’s single premium up to \$9,118.60 based on years of service at retirement. Historical caps, which are reviewed each year, are as follows:

Dates	Cap
Through January 1, 2007	Cap increased to cover single Anthem Blue Cross Prudent Buyer Classic and Delta Dental premiums. Due to the amount of unfunded liability, the Board of Supervisors implemented a policy to have annual cap increases at Board discretion with 3% annual limit.
January 1, 2008 and January 1, 2009	3% cap increases
January 1, 2010 through January 1, 2023	No cap increases (cap remained \$8,853 per year).
January 1, 2024	3% increase to \$9,118.60 per year (Board of Supervisors adopted on September 12, 2023)

- Plan 4 (hired on or after January 1, 2008)
County pays \$150 (per month) per year of service up to \$3,000 per year for the retiree’s single health plan premiums only.

At retirement, retirees eligible for Plans 1 and 2 may elect Plan 3 instead; and retirees eligible for Plans 1, 2, or 3 may elect Plan 4 instead. Plan selection may not be changed after retirement. Retirees eligible for Plan 1 are eligible for Part B premium reimbursement even after electing another Plan.

Beginning in 2019, and subject to the caps above:

- Medicare Part A premiums are paid for retirees not eligible for premium-free Part A so that they can be enrolled in Medicare Advantage plans.
- Part B penalties for delayed enrollment for certain retirees.

Medical coverage is provided through Kaiser, Western Health Advantage HMO and Teamsters Anthem PPO for non-Medicare retirees; and Kaiser Senior Advantage and UnitedHealthcare Medicare Advantage PPO for Medicare retirees. For each medical plan, premiums are the same for employees and retirees not eligible for Medicare. This premium structure results in subsidies of retiree medical costs from premiums paid for employees by the County. This implicit subsidy is included in the County post-retirement healthcare calculations.



SECTION 1
STAFF SUMMARY

Funding Policy

The County currently contributes to the CalPERS California Employers' Retiree Benefit Trust (CERBT) with Asset Allocation Strategy 1. The CERBT approved revised asset allocations on March 14, 2022. Following are target asset allocations for portfolios available under the CERBT:

	Strategy 1	Strategy 2	Strategy 3
Global Equity	49%	34%	23%
Fixed Income	23%	41%	51%
TIPS	5%	5%	9%
Commodities	3%	3%	3%
REITs	20%	17%	14%
Total	100%	100%	100%

Actuarial Assumptions

We are recommending no change to the discount rate (long term return assumption on plan assets) of 5.50%. Consistent with the prior valuation, this assumption has a 0.75% margin for adverse deviation, i.e. we expect the long term return will be closer to 6.25%, but the assumption is set at a lower rate to build in some conservatism. The following actuarial assumptions were updated:

- Medical trend.
- Medical plan election.
- Demographic assumptions (updated to reflect the June 30, 2023 MCERA experience study).
- Aging factors for estimating claims costs.

Results

Following is a comparison of the previous July 1, 2021 valuation with the current July 1, 2023 valuation funded status. (Amounts in 000's)

	<u>July 1, 2021</u>	<u>July 1, 2023</u>
<p>■ Present Value of Projected Benefits (PVPB) The Present Value of Projected Benefits is the present value of expected retiree healthcare benefits due to both past and expected future service for current employees and retirees.</p>	\$303,013	\$313,749
<p>■ Actuarial Accrued Liability (AAL) The Actuarial Accrued Liability is a measure of the County obligation for benefits earned in or allocated to past service.</p>	273,773	283,452
<p>■ Plan Assets Plan Assets include funds that are segregated and restricted in a trust so that they can only be used to pay plan benefits.</p>	165,941	165,583
<p>■ Unfunded Actuarial Accrued Liability (UAAL) The Unfunded Actuarial Accrued Liability is the excess of the AAL over Plan Assets. This represents the amount of the Actuarial Accrued Liability at the valuation date that must still be funded.</p>	107,832	117,869



SECTION 1
STAFF SUMMARY

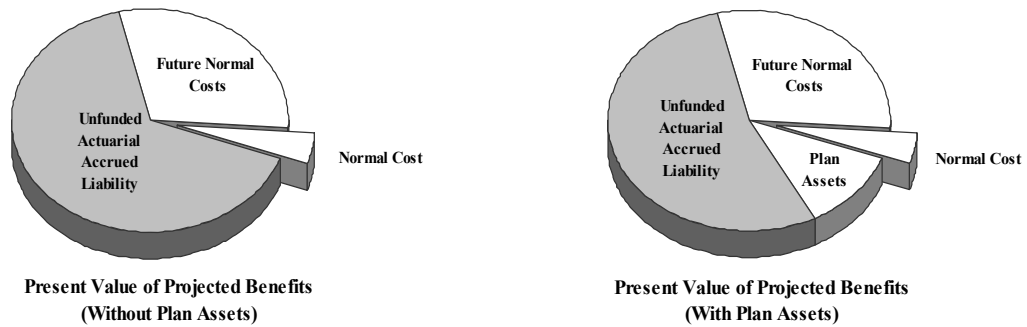
	<u>July 1, 2021</u>	<u>July 1, 2023</u>
■ Funded Ratio Ratio of Plan Assets to the Actuarial Accrued Liability.	60.6%	58.4%
	<u>2021/22</u>	<u>2023/24</u>
■ Normal Cost (NC) The Normal Cost is the value of County-provided benefits expected to be earned in or allocated to the fiscal year.	\$3,757	\$3,985
■ Actuarially Determined Contribution (ADC) The Actuarially Determined Contribution is the sum of the Normal Cost, administrative expenses, and amortization of the Unfunded Actuarial Accrued Liability.	13,987	13,070



SECTION 2 ACTUARIAL VALUATION RESULTS

Actuarial Obligations

The Actuarial Accrued Liability and Normal Cost use the Entry Age Normal actuarial cost method. It is designed to produce a Normal Cost that, if all assumptions are met and the plan is not changed, will generally be a level percent of payroll. The following charts illustrate a sample PVPB, both with and without plan assets, with the shaded area representing the unfunded AAL:



- **The Present Value of Projected Benefits (PVPB)** is a measure of the total County obligation for expected retiree healthcare benefits due to both past and future service for current employees and retirees.
- **The Actuarial Accrued Liability (AAL)** is a measure of the County obligation for benefits earned or allocated to past service.
- **The Normal Cost (NC)** is the value of County-provided benefits expected to be earned or allocated to the current fiscal year determined as of the middle of the fiscal year.
- **Plan Assets** must be segregated in a trust for the sole purpose of paying Plan benefits in order to be considered Plan Assets for GASBS 75.
- **The Unfunded Actuarial Accrued Liability (UAAL)** is the difference between the AAL and the Plan Assets.
- **Expected Benefit Payments** are the County-paid retiree healthcare benefit payments for the current fiscal year. They include payments for current retirees and active employees expected to retire during the year.
- **The Actuarially Determined Contribution (ADC)** is the sum of the Normal Cost and the amortization of the Unfunded Actuarial Accrued Liability (or less an amortization of excess assets) determined as of the middle of the fiscal year.
- An **Implicit Subsidy** exists when the premium for a group of employees is determined by aggregating the experience of the group.



SECTION 2
ACTUARIAL VALUATION RESULTS

Asset Reconciliation – Market Value of Assets
(amounts in 000's)

	<u>2021/22</u>	<u>2022/23</u>
■ Market Value of Assets (Beginning of Year)	\$165,941	\$147,748
• Contributions	4,300	8,300
• Disbursements ¹	-	-
• Administrative Expenses	(81)	(74)
• Investment Expenses	(59)	(54)
• Investment Earnings	<u>(22,352)</u>	<u>9,664</u>
■ Market Value of Assets (End of Year)	147,748	165,583
■ Approximate Return	(13.5%)	6.5%

¹ Benefit payments paid directly by the County outside of the trust.



SECTION 2
ACTUARIAL VALUATION RESULTS

Benefit Obligations as of July 1, 2023
(amounts in 000's)

■ Present Value of Benefits	
• Actives	\$131,688
• Retirees	<u>182,061</u>
• Total	313,749
■ Actuarial Accrued Liability	
• Actives	101,391
• Retirees	<u>182,061</u>
• Total	283,452
■ Market Value of Assets	<u>165,583</u>
■ Unfunded AAL @ 7/1/2023	117,869



SECTION 2
ACTUARIAL VALUATION RESULTS

Actuarially Determined Contribution (ADC) for 2023/24 and 2024/25²
(amounts in 000's)

	<u>2023/24</u>	<u>2024/25</u>
■ ADC - \$		
• Normal Cost	\$3,985	\$3,867
• Projected Administrative Expenses	83	87
• UAAL Amortization	<u>9,002</u>	<u>10,219</u>
• ADC	13,070	14,173
■ Projected Payroll³	242,064	248,721
■ ADC - %		
• Normal Cost	1.6%	1.6%
• Projected Administrative Expenses	0.0%	0.0%
• UAAL Amortization	<u>3.7%</u>	<u>4.1%</u>
• ADC	5.4%	5.7%

Schedule of Unfunded Actuarial Accrued Liability Amortization Bases
(amounts in 000's)

		<u>7/1/2023</u>	<u>7/1/2024</u>
■ Outstanding Balance			
• 7/1/2021 UAAL		\$99,106	\$95,179
• 7/1/2023 Investment (Gain)/Loss		31,865	32,648
• 7/1/2023 Other (Gain)/Loss		<u>(13,103)</u>	<u>(12,722)</u>
• Total		117,869	115,105
■ Amortization Payment⁴	Years Remaining	<u>2023/24</u>	<u>2024/25</u>
• 7/1/2021 UAAL	13	\$9,130	\$9,381
• 7/1/2023 Investment (Gain)/Loss	15	944	1,940
• 7/1/2023 Other (Gain)/Loss	15	<u>(1,072)</u>	<u>(1,102)</u>
• Total		9,002	10,219

² Payable at middle of fiscal year.

³ Payroll projected using aggregate payroll increase assumption.

⁴ Years remaining as of 2023/24. Amortized as a level percent of payroll. Investment gain/loss includes a 3-year phase-in.



SECTION 2
ACTUARIAL VALUATION RESULTS

Comparison of July 1, 2021 and July 1, 2023 Valuations
(amounts in 000's)

	<u>July 1, 2021</u>	<u>July 1, 2023</u>
■ Present Value of Benefits		
• Actives	\$129,031	\$131,688
• Retirees	<u>173,982</u>	<u>182,061</u>
• Total	303,013	313,749
■ Actuarial Accrued Liability		
• Actives	99,791	101,391
• Retirees	<u>173,982</u>	<u>182,061</u>
• Total	273,773	283,452
■ Assets	<u>165,941</u>	<u>165,583</u>
■ Unfunded AAL	107,832	117,869
■ Funded Ratio	60.6%	58.4%
	<u>2021/22</u>	<u>2023/24</u>
■ ADC - \$		
• Normal Cost	\$ 3,757	\$3,985
• Projected Administrative Expenses	83	83
• UAAL Amortization	<u>10,147</u>	<u>9,002</u>
• ADC	13,987	13,070
■ Projected Payroll⁵	204,038	242,064
■ ADC - %		
• Normal Cost	1.8%	1.6%
• Projected Administrative Expenses	0.0%	0.0%
• UAAL Amortization	<u>5.0%</u>	<u>3.7%</u>
• ADC	6.9%	5.4%

⁵ Payroll projected using aggregate payroll increase assumption.



SECTION 2
ACTUARIAL VALUATION RESULTS

Actuarial Gains/Losses
(amounts in 000's)

Changes in the Unfunded Actuarial Accrued Liability for experience gains and losses as well as assumption changes are shown below.

- Factors decreasing the Actuarial Accrued Liability included:
 - Lower 2023 and 2024 premiums than expected
 - No increases to the Plan 3 cap for 2023
 - Updated MCERA demographic assumptions
- Factors increasing the Actuarial Accrued Liability included:
 - Updated aging factors for estimated claims costs
 - Updated medical trend

	AAL	(Assets)	UAAL
■ Actual – 7/1/2021	\$273,773	\$(165,941)	\$107,832
■ Expected – 7/1/2023	284,031	(184,925)	99,106
■ Experience (Gains)/Losses			
• Contribution (gain)/loss	-	(12,524)	(12,524)
• Investment (gain)/loss	-	31,865	31,865
• Demographic & other	11	-	11
• Premium and Claims (gain)/loss	(17,529)	-	(17,529)
• Plan 3 cap	<u>(2,380)</u>	<u>-</u>	<u>(2,380)</u>
• Total	(19,898)	19,342	(556)
■ Assumptions Changes			
• Aging factors for claims cost updated	7,428	-	7,428
• MCERA demographic assumptions	(225)	-	(225)
• Medical trend	12,129	-	12,129
• Medical plan election	<u>(13)</u>	<u>-</u>	<u>(13)</u>
• Total	19,319	-	19,319
■ Total Change	(579)	19,342	18,763
■ Actual – 7/1/2023	283,452	(165,583)	117,869



SECTION 2
ACTUARIAL VALUATION RESULTS

Benefit Payment Projection
(amounts in 000's)

Fiscal Year	Estimated Cash Benefit Payments	Implicit Subsidy Benefit Payments	Total
2023/24	\$12,017	\$1,624	\$13,641
2024/25	12,672	1,741	14,413
2025/26	13,422	1,895	15,318
2026/27	14,206	2,088	16,295
2027/28	14,926	2,230	17,156
2028/29	15,604	2,383	17,987
2029/30	16,211	2,385	18,596
2030/31	16,768	2,537	19,305
2031/32	17,251	2,590	19,841
2032/33	17,710	2,691	20,402

10-Year Full Prefunding Projection
(amounts in 000's)

Fiscal Year	Benefit Payments		Trust Contributions/ (Disbursements)	ADC
	Cash Subsidy	Implicit Subsidy		
2023/24	\$12,017	\$1,624	\$(571)	\$13,070
2024/25	12,672	1,741	(240)	14,173
2025/26	13,422	1,895	29	15,346
2026/27	14,206	2,088	(732)	15,562
2027/28	14,926	2,230	(1,367)	15,789
2028/29	15,604	2,383	(1,952)	16,035
2029/30	16,211	2,385	(2,293)	16,303
2030/31	16,768	2,537	(2,719)	16,586
2031/32	17,251	2,590	(2,956)	16,885
2032/33	17,710	2,691	(3,195)	17,206



SECTION 2
ACTUARIAL VALUATION RESULTS

Discount Rate Sensitivity

July 1, 2023
(amounts in 000's)

	Discount Rate		
	4.50%	5.50%	6.50%
■ Present Value of Benefits			
• Actives	\$159,687	\$131,688	\$109,975
• Retirees	<u>201,780</u>	<u>182,061</u>	<u>165,470</u>
• Total	361,467	313,749	275,445
■ Actuarial Accrued Liability			
• Actives	118,528	101,391	87,426
• Retirees	<u>201,780</u>	<u>182,061</u>	<u>165,470</u>
• Total	320,308	283,452	252,896
■ Assets	<u>165,583</u>	<u>165,583</u>	<u>165,583</u>
■ Unfunded AAL	154,725	117,869	87,313
■ 2023/24 ADC - \$			
• Normal Cost	\$5,082	\$3,985	\$3,152
• Projected Administrative Expenses	83	83	83
• UAAL Amortization	<u>11,302</u>	<u>9,002</u>	<u>6,866</u>
• ADC	16,467	13,070	10,101
■ 2023/24 Projected Payroll	242,064	242,064	242,064
■ 2023/24 ADC - %			
• Normal Cost	2.1%	1.6%	1.3%
• Projected Administrative Expenses	0.0%	0.0%	0.0%
• UAAL Amortization	<u>4.7%</u>	<u>3.7%</u>	<u>2.8%</u>
• ADC	6.8%	5.4%	4.2%



SECTION 2
ACTUARIAL VALUATION RESULTS

Healthcare Trend Sensitivity

July 1, 2023
(amounts in 000's)

	Healthcare Trend		
	-1%	Current Assumption	+1%
■ Present Value of Benefits			
• Actives	\$118,912	\$131,688	\$138,274
• Retirees	<u>170,983</u>	<u>182,061</u>	<u>191,767</u>
• Total	289,895	313,749	330,041
■ Actuarial Accrued Liability			
• Actives	91,787	101,391	105,364
• Retirees	<u>170,983</u>	<u>182,061</u>	<u>191,767</u>
• Total	262,770	283,452	297,131
■ Assets	<u>165,583</u>	<u>165,583</u>	<u>165,583</u>
■ Unfunded AAL	97,187	117,869	131,548
■ 2023/24 ADC - \$			
• Normal Cost	\$3,634	\$3,985	\$4,226
• Projected Administrative Expenses	83	83	83
• UAAL Amortization	<u>7,309</u>	<u>9,002</u>	<u>10,122</u>
• ADC	11,026	13,070	14,431
■ 2023/24 Projected Payroll	242,064	242,064	242,064
■ 2023/24 ADC - %			
• Normal Cost	1.5%	1.6%	1.7%
• Projected Administrative Expenses	0.0%	0.0%	0.0%
• UAAL Amortization	<u>3.0%</u>	<u>3.7%</u>	<u>4.2%</u>
• ADC	4.6%	5.4%	6.0%



SECTION 3
DEMOGRAPHIC INFORMATION

Participant Statistics – July 1, 2023

	Miscellaneous	Safety	Total
Actives			
Count	1,834	348	2,182
Average Age	47.0	40.3	45.9
Average Service	8.9	10.9	9.2
Average Pay	\$106,642	\$133,571	\$110,937
Total Pay (000's)	195,582	46,483	242,064
Retirees			
Count	1,398	344	1,742
Average Age	74.3	66.3	72.8

Participant Statistics – July 1, 2021

	Miscellaneous	Safety	Total
Actives			
Count	1,646	350	1,996
Average Age	47.4	40.3	46.1
Average Service	9.5	11.2	9.8
Average Pay	\$97,855	\$122,768	\$102,223
Total Pay (000's)	161,069	42,969	204,038
Retirees			
Count	1,405	332	1,737
Average Age	73.8	65.8	72.2



SECTION 3
DEMOGRAPHIC INFORMATION

Medical Coverage – July 1, 2023

Medical Plan	Employees	Retirees Under 65	Retirees 65+	Total
Kaiser Plan L	1,024	165	756	1,945
Kaiser Plan S	643	44	64	751
Kaiser – Out of State	-	6	28	34
Western Health Advantage 15C HMO	28	-	1	29
Western Health Advantage 25C HMO	22	1	-	23
Teamsters Anthem PPO	233	109	-	342
UnitedHealthcare Medicare Advantage PPO	-	-	375	375
Waived	232	46	147	425
Total	2,182	371	1,371	3,924

Plan Coverage – July 1, 2023

Plan	Plan 1	Plan 2	Plan 3	Plan 4	Self-Paying⁶	Total
Retirees	539	10	1,047	62	84	1,742
Actives	4	31	515	1,632	-	2,182

Medical Coverage – July 1, 2021

Medical Plan	Employees	Retirees Under 65	Retirees 65+	Total
Kaiser Plan L	1,015	177	759	1,951
Kaiser Plan S	558	49	51	658
Kaiser – Out of State	-	7	29	36
Western Health Advantage 15C HMO	15	-	-	15
Western Health Advantage 25C HMO	11	-	-	11
Teamsters Anthem PPO	188	102	3	293
UnitedHealthcare Medicare Advantage PPO	-	-	383	383
Waived	209	42	135	386
Total	1,996	377	1,360	3,733

Plan Coverage – July 1, 2021

Plan	Plan 1	Plan 2	Plan 3	Plan 4	Self-Paying⁶	Total
Retirees	611	12	989	37	88	1,737
Actives	9	49	607	1,331	-	1,996

⁶ Includes surviving spouses and Plan 4 retirees with less than 5 years of service.



SECTION 3
DEMOGRAPHIC INFORMATION

Miscellaneous Employees
Age & Service Distribution

July 1, 2023

Age	County Service							Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	
Under 25	9	11	-	-	-	-	-	20
25-29	46	70	8	-	-	-	-	124
30-34	55	108	47	2	-	-	-	212
35-39	33	95	88	12	8	-	-	236
40-44	39	90	69	26	29	5	1	259
45-49	22	59	51	23	32	21	5	213
50-54	25	49	56	19	38	33	22	242
55-59	11	46	47	29	23	36	39	231
60-64	11	32	36	17	27	26	25	174
65 & Over	3	10	25	8	27	32	18	123
Total	254	570	427	136	184	153	110	1,834



SECTION 3
DEMOGRAPHIC INFORMATION

Safety Employees
Age & Service Distribution

July 1, 2023

Age	County Service							Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	
Under 25	3	6	-	-	-	-	-	9
25-29	8	24	7	-	-	-	-	39
30-34	10	32	28	-	-	-	-	70
35-39	5	13	20	20	4	-	-	62
40-44	-	6	8	16	19	3	1	53
45-49	-	2	2	5	21	23	-	53
50-54	2	3	3	1	4	17	13	43
55-59	1	1	-	-	1	5	3	11
60-64	1	-	3	-	2	1	-	7
65 & Over	-	1	-	-	-	-	-	1
Total	30	88	71	42	51	49	17	348



SECTION 3
DEMOGRAPHIC INFORMATION

All Employees
Age & Service Distribution

July 1, 2023

Age	County Service							Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	
Under 25	12	17	-	-	-	-	-	29
25-29	54	94	15	-	-	-	-	163
30-34	65	140	75	2	-	-	-	282
35-39	38	108	108	32	12	-	-	298
40-44	39	96	77	42	48	8	2	312
45-49	22	61	53	28	53	44	5	266
50-54	27	52	59	20	42	50	35	285
55-59	12	47	47	29	24	41	42	242
60-64	12	32	39	17	29	27	25	181
65 & Over	3	11	25	8	27	32	18	124
Total	284	658	498	178	235	202	127	2,182



**SECTION 4
PREMIUM RATES**

2023 Monthly Premium Rates

Actives

Plan	Single	2-Party	Family
Kaiser Plan L HMO	\$903.81	\$1,807.62	\$2,404.14
Kaiser Plan S HMO	816.48	1,632.96	2,171.83
Western Health Advantage 15C HMO	758.54	1,517.10	2,017.73
Western Health Advantage 25C HMO	713.04	1,426.07	1,896.67
Teamsters Anthem PPO	899.12	1,804.51	2,523.81

Retirees

Plan	Non-Medicare			Medicare		
	Single	2-Party	Family	Single	2-Party	Family
Kaiser Plan L HMO ⁷	\$903.81	\$1,807.62	\$2,404.14	\$338.89	\$677.78	n/a
Kaiser Plan S HMO ⁷	816.48	1,632.96	2,171.83	246.28	492.56	n/a
Western Health Advantage 15C HMO	758.54	1,517.10	2,017.73	n/a	n/a	n/a
Western Health Advantage 25C HMO	713.04	1,426.07	1,896.67	n/a	n/a	n/a
Western Health Advantage Medicare Advantage HMO	n/a	n/a	n/a	335.00	670.00	n/a
Teamsters Anthem PPO	899.12	1,804.51	2,523.81	n/a	n/a	n/a
UnitedHealthcare Medicare Advantage PPO	n/a	n/a	n/a	402.50	805.00	n/a

Delta Dental 2023 monthly premiums are \$54.09 for single coverage, \$102.01 for 2-party coverage and \$160.25 for family coverage.

Medicare Part A monthly premiums for those not eligible for premium-free Medicare Part A are \$506 for those with fewer than 30 quarters of Medicare-covered employment and \$278 for those with 30-39 quarters of Medicare-covered employment, subject to late enrolment penalty.

Medicare Part B monthly premium is \$164.90 for most people (varies by income and subject to late enrollment penalty).

⁷ With Senior Advantage for Medicare.



**SECTION 4
PREMIUM RATES**

2024 Monthly Premium Rates

Actives

Plan	Single	2-Party	Family
Kaiser Plan L HMO	\$1,027.87	\$2,055.73	\$2,734.12
Kaiser Plan S HMO	945.52	1,891.04	2,515.08
Western Health Advantage 15C HMO	815.12	1,630.26	2,168.24
Western Health Advantage 25C HMO	766.23	1,532.44	2,038.15
Teamsters Anthem PPO	944.08	1,894.74	2,650.00

Retirees

Plan	Non-Medicare			Medicare		
	Single	2-Party	Family	Single	2-Party	Family
Kaiser Plan L HMO ⁸	\$1,027.87	\$2,055.73	\$2,734.12	\$353.24	\$706.48	n/a
Kaiser Plan S HMO ⁸	945.52	1,891.04	2,515.08	279.59	559.18	n/a
Western Health Advantage 15C HMO	815.12	1,630.26	2,168.24	n/a	n/a	n/a
Western Health Advantage 25C HMO	766.23	1,532.44	2,038.15	n/a	n/a	n/a
Western Health Advantage Medicare Advantage HMO	n/a	n/a	n/a	350.08	700.16	n/a
Teamsters Anthem PPO	944.08	1,894.74	2,650.00	n/a	n/a	n/a
UnitedHealthcare Medicare Advantage PPO	n/a	n/a	n/a	418.60	837.20	n/a

Delta Dental 2024 monthly premiums are \$52.46 for single coverage, \$97.70 for 2-party coverage and \$152.72 for family coverage.

Medicare Part A monthly premiums for those not eligible for premium-free Medicare Part A are \$505 for those with fewer than 30 quarters of Medicare-covered employment and \$278 for those with 30-39 quarters of Medicare-covered employment, subject to late enrolment penalty.

Medicare Part B monthly premium is \$174.70 for most people (varies by income and subject to late enrollment penalty).

⁸ With Senior Advantage for Medicare.



**SECTION 4
PREMIUM RATES**

Medical Plan Summaries

	Kaiser Plan L HMO	Kaiser Plan S HMO	Western Health Advantage 15C HMO	Western Health Advantage 25C HMO	Teamsters Anthem PPO
	In-Network	In-Network	In-Network	In-Network	In-Network
Calendar Year Deductible	None	None	None	None	\$250/member \$500/family
Annual Out-of-Pocket Maximums	\$1,500/ member \$3,000/family	\$1,500/ member \$3,000/family	\$1,500/ member \$3,000/family	\$1,500/ member \$3,000/family	\$2,000/ member \$2,000/family
Hospital					
Inpatient Services	No charge	No charge	No charge	No charge	20%
Outpatient Surgery	\$10/procedure	\$25/procedure	\$15/procedure	\$25/procedure	20%
Physician Services					
Physician Office Visit	\$10/visit	\$25/visit	\$15/visit	\$25/visit	\$20/visit
Preventive Care	No charge	No charge	No charge	No charge	No charge
Diagnostic X-Ray and Lab	No charge	No charge	\$15/visit	None	20%
Ambulance Service	\$50/trip	\$50/trip	No charge	No charge	20%
Emergency	\$50/visit	\$50/visit	\$75/visit	\$25/visit	20%
Prescription Drugs ⁹					
	\$5/generic \$5/brand	\$10/generic \$25/brand	\$5/generic \$20/brand	\$10/generic \$25/brand	\$10/generic \$20/brand

⁹ Up to 100-day supply for Kaiser Plan L and Teamsters Anthem PPO. Up to 30 day supply for Kaiser Plan S and Western Health Advantage.



**SECTION 4
PREMIUM RATES**

Medical Plan Summaries

	Kaiser Plan L Senior Advantage	Kaiser Plan S Senior Advantage	Western Health Advantage Medicare Advantage HMO	UHC Medicare Advantage PPO
	In-Network	In-Network	In-Network	In-Network
Calendar Year Deductible	None	None	None	None
Annual Out-of-Pocket Maximums	\$1,000/member	\$1,000/member	\$2,000	\$1,500
Hospital				
Inpatient Services	No charge	No charge	No charge	No charge
Outpatient Surgery	\$10/procedure	\$25/procedure	\$20/ procedure	\$5/procedure
Physician Services				
Physician Office Visit	\$10/visit	\$25/visit	\$20/visit	\$5/visit
Preventive Care	No charge	No charge	No charge	No charge
Diagnostic X-Ray and Lab	No charge	No charge	No charge	\$5/visit
Ambulance Service	\$50/trip	\$50/trip	\$50/trip	No charge
Emergency	\$50/visit	\$50/visit	\$50/visit	\$75/visit
Prescription Drugs ¹⁰				
	\$5/generic	\$10/generic	\$10/generic	\$5/generic
	\$5/brand	\$25/brand	\$30/pref-brand	\$20/pref-brand

¹⁰ Up to 100-day supply for Kaiser Plan L. Up to 30-day supply for Kaiser Plan S, Western Health Advantage, and UHC.



SECTION 5
PLAN PROVISIONS

Benefits

Under current practice, the County allows eligible service and disability retirees and their dependents to continue health coverage in the County’s medical and dental plans. The County pays a portion of the premiums based on date of hire. Retirees must retire directly from the County, have 5 years of County service, and continuity of coverage to be eligible. Retirees are not eligible for open enrollment and those waiving coverage may not re-enroll.

	Plan 1	Plan 2	Plan 3	Plan 4
Eligibility	Hired before 10/1/87	Hired between 10/1/87 and 9/30/93	Hired between 10/1/93 and 12/31/07	Hired on or after 1/1/08 and at least 5 years continuous coverage under the same medical plan
Benefits	The County pays 100% of the retiree’s single health plan premiums, and Medicare Part B premiums.	The County pays the retiree’s single health plan premiums up to \$2,275 per year.	The County pays a percentage of the retiree’s single premium (and those for spouses of eligible retirees with 30 years of service) up to a dollar cap (\$8,853 per year from 2009 through 2023, \$9,118.60 per year for 2024) based on years of service at retirement ¹¹	The County pays \$150 per year of service up to \$3,000 per year for the retiree’s single health plan premiums only.

- The Plan 3 dollar cap is reviewed each year. Through January 1, 2007, the cap was increased to cover single Anthem Blue Cross Prudent Buyer Classic and Delta Dental premiums. Due to the amount of unfunded liability the County faces, the Board has implemented a policy to limit annual increases in the maximum allocation for Plan 3 to no more than 3%, subject to annual approval regarding whether any increase will be granted and, if so, the amount of the increase. The last cap increase before 2024 was at 3% on January 1, 2009.
- Retirees eligible for Plans 1 and 2 may elect Plan 3 instead; and retirees eligible for Plans 1, 2, or 3 may elect Plan 4 instead. Retirees eligible for Plan 1 are eligible for Medicare Part B premium reimbursement even after electing another Plan.
- Beginning in 2019, Medicare Part A premiums, subject to plan provisions above, are paid for retirees not eligible for premium-free Part A when they enroll in a Medicare Advantage plan. In addition, Part B penalties for delayed enrollment are paid for certain retirees.

The County also implicitly subsidizes a portion of retirees’ benefits because non-Medicare retirees are charged the same premiums as employees. Under Actuarial Standard of Practices, the value of the implicit subsidy must be included in the County’s ADC and AAL calculations.

The County also provides retirees with 20 years of service \$10,000 of life insurance and, on an 8-year phase-out basis, continuance of supplemental life coverage.

¹¹ 100% for 20 years of service, prorated for those with less than 20 years of service.



SECTION 6

ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Data

Results were based on the demographic data as of July 1, 2023 provided by the County and MCERA. Data has been reviewed for reasonability but not audited.

Actuarial Methods

Actuarial Cost Method

The actuarial cost method used for this valuation is the Entry Age Normal (EAN) cost method. Under the EAN cost method, the plan's Normal Cost is developed as a level percent of payroll payable throughout the participant's working lifetime. The Actuarial Accrued Liability (AAL) is the cumulative value, on the valuation date, of prior Normal Costs. For retirees, the AAL is the present value of all projected benefits.

Amortization of Unfunded AAL

July 1, 2021 UAAL was amortized over a closed 15-year period as a level percentage of payroll from July 1, 2021 (13 years remaining as of July 1, 2023). Subsequent gains and losses are amortized over closed 15-year periods as a level percentage of payroll with a 3-year contribution phase-in for investment gains and losses.

Actuarial Value of Assets

Market value of assets

Actuarial Assumptions – Economic Assumptions

Discount Rate

5.50%, assuming that the County continues to prefund with CERBT Asset Allocation Strategy 1 (49% global equity, 23% fixed income (5% long US treasuries, 5% mortgage-backed securities, 4% investment grade corporates, 4% high yield, 5% sovereigns), 5% TIPS, 20% REITs, and 3% commodities). The 5.50% assumption is based on a median long-term rate of return net of investment expenses of 6.25% with a margin for adverse deviation of 0.75%. Capital market real rates of return underlying the 6.25% rate are 4.6% global equity, 0.3% long US treasuries, 0.5% mortgage-backed securities, 1.6% investment grade corporates, 3.0% high yield, 2.8% sovereigns), -0.1% TIPS, 1.2% commodities, and 4.1% REITs and are based on a study of investment consultant and investment bank 2021 capital market short and long-term assumptions. Also considered in setting fixed income returns were Social Security long-term return projections.

CERBT Administrative Expenses

0.05% of trust balance included in the ADC

Inflation

Assumed to increase 2.50% per annum over the long-term.

Aggregate Payroll

Assumed to increase 2.75% per annum. (Used to amortize unfunded AAL.)



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Plan 3 Cap Trend Rate

Assumed to increase at 3.00% per year

Dental Care Cost Trend Rate

Assumed to increase at 3.50% per year.

Medical Care Cost Trend Rates

Based on short-term expectations blended into long-term medical trend. Long-term rates developed using the Society of Actuaries Getzen Model.

Year	Current Assumption				Prior Assumption			
	Non-Medicare	Medicare	Kaiser Senior Advantage	Medicare Part A & B Premiums	Non-Medicare	Medicare	Kaiser Senior Advantage	Medicare Part A & B Premiums
2023	n/a	n/a	n/a	n/a	6.50%	5.65%	4.60%	5.65%
2024	n/a	n/a	n/a	n/a	6.25%	5.45%	4.45%	5.45%
2025	8.50%	7.50%	6.25%	6.15%	6.00%	5.25%	4.35%	5.25%
2026	7.90%	6.90%	5.65%	8.00%	5.75%	5.05%	4.25%	5.05%
2027	7.35%	6.50%	5.45%	7.75%	5.55%	4.90%	4.20%	4.90%
2028	6.75%	6.10%	5.25%	5.95%	5.35%	4.75%	4.15%	4.75%
2029	6.20%	5.70%	5.05%	5.60%	5.15%	4.60%	4.10%	4.60%
2030	5.60%	5.25%	4.85%	5.25%	4.95%	4.45%	4.05%	4.45%
2031	5.05%	4.85%	4.65%	4.90%	4.80%	4.35%	4.00%	4.35%
2032-35	4.45%	4.45%	4.45%	4.45%	4.80%	4.35%	4.00%	4.35%
2036-38	4.45%	4.45%	4.45%	4.45%	4.65%	4.25%	3.95%	4.25%
2039-40	4.35%	4.35%	4.35%	4.35%	4.65%	4.25%	3.95%	4.25%
2041	4.30%	4.30%	4.30%	4.30%	4.65%	4.25%	3.95%	4.25%
2042-44	4.25%	4.25%	4.25%	4.25%	4.65%	4.25%	3.95%	4.25%
2045	4.20%	4.20%	4.20%	4.20%	4.65%	4.25%	3.95%	4.25%
2046-47	4.20%	4.20%	4.20%	4.20%	4.50%	4.20%	3.90%	4.20%
2048-50	4.15%	4.15%	4.15%	4.15%	4.50%	4.20%	3.90%	4.20%
2051-55	4.10%	4.10%	4.10%	4.10%	4.50%	4.20%	3.90%	4.20%
2056-61	4.05%	4.05%	4.05%	4.05%	4.35%	4.15%	3.85%	4.15%
2062-65	4.00%	4.00%	4.00%	4.00%	4.35%	4.15%	3.85%	4.15%
2066	4.00%	4.00%	4.00%	4.00%	4.05%	3.95%	3.80%	3.95%
2067	3.90%	3.90%	3.90%	3.90%	4.05%	3.95%	3.80%	3.95%
2068	3.85%	3.85%	3.85%	3.85%	4.05%	3.95%	3.80%	3.95%
2069	3.80%	3.80%	3.80%	3.80%	4.05%	3.95%	3.80%	3.95%
2070	3.75%	3.75%	3.75%	3.75%	4.05%	3.95%	3.80%	3.95%
2071	3.70%	3.70%	3.70%	3.70%	4.05%	3.95%	3.80%	3.95%
2072	3.65%	3.65%	3.65%	3.65%	4.05%	3.95%	3.80%	3.95%
2073	3.60%	3.60%	3.60%	3.60%	4.05%	3.95%	3.80%	3.95%
2074	3.55%	3.55%	3.55%	3.55%	4.05%	3.95%	3.80%	3.95%
2075	3.50%	3.50%	3.50%	3.50%	4.05%	3.95%	3.80%	3.95%
2076+	3.45%	3.45%	3.45%	3.45%	3.75%	3.75%	3.75%	3.75%



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Monthly Claims Costs

Monthly claims costs are based on the monthly premium rates reported by the County for 2024 by health plan and covered population.

Age-/gender-dependent rates were developed using the monthly premium rates, supporting demographics, and benefit values for each plan. Benefit values were determined premium relativities.

Demographics for the Kaiser pre-Medicare retiree plans reflect the full plan pool as reported in Kaiser’s renewal material. Demographics for the Western Health Advantage plans reflect CalPERS PEMHCA Region 1 as a proxy. For the Teamsters plan, we used plan-specific demographics as reported by the County.

Age	2024 Age/Gender Claims Costs					
	Kaiser Plan L Non-Medicare		Kaiser Plan S Non-Medicare		Teamsters Anthem PPO Non-Medicare	
	Male	Female	Male	Female	Male	Female
30	\$453	\$836	\$429	\$781	\$383	\$686
35	531	916	500	854	444	749
40	626	936	588	873	520	765
45	748	990	700	922	617	807
50	925	1,111	863	1,034	757	904
55	1,163	1,269	1,082	1,179	945	1,029
60	1,457	1,467	1,352	1,361	1,177	1,185
64	1,728	1,668	1,601	1,546	1,391	1,344

Age	2024 Age/Gender Claims Costs			
	Western Health Advantage 15C HMO Non-Medicare		Western Health Advantage 25C HMO Non-Medicare	
	Male	Female	Male	Female
30	\$372	\$686	\$357	\$652
35	436	751	417	714
40	514	768	490	729
45	614	812	584	770
50	759	911	721	864
55	954	1,041	904	986
60	1,195	1,203	1,131	1,138
64	1,417	1,368	1,339	1,293



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Demographic Assumptions – Health Plans

Participation, Medical Plan Coverage, and Health Plan Election assumptions below were based on a study of experience between 2011 and 2023.

Percentage of Future Retirees Participating in Medical Plans

	<10	10-14	15-19	20+
Plan 1	100.0%	100.0%	100.0%	100.0%
Plan 2/3	37.5%	85.0%	90.0%	100.0%
Plan 4	35.0%	40.0%	45.0%	55.0%

Percentage of Future Retirees Participating in Dental Plans

	Current Employees
Plan 1	97.5%
Plan 2/3	95.0%
Plan 4	95.0%

Medical Plan Coverage after Retirement

Current medical plan election. If currently waived, employees are assumed to elect Kaiser Plan L. Teamsters Anthem participants are assumed to elect UnitedHealthcare once Medicare eligible.

(Prior assumption – Employees:

	Plan 1	Plan 2/3	Plan 4
Kaiser Plan L	60.0%	65.0%	60.0%
Kaiser Plan S	5.0%	15.0%	30.0%
Teamsters Anthem	<u>35.0%</u>	<u>20.0%</u>	<u>10.0%</u>
Total	100.0%	100.0%	100.0%

Teamsters Anthem participants are assumed to elect UnitedHealthcare once Medicare eligible.)

Current Retirees and Beneficiaries:

Current medical plan election. Annual open enrollment is only available for employees and does not apply to retirees.

Election of Plan 3 at Retirement by Currently Employed Plan 1 and 2 Members

Plan 1 members with 30 years' service and eligible spouses are assumed to elect Plan 3. All Plan 2 members are assumed to elect Plan 3.

Medicare Coverage

100% except 10% of those hired between July 1, 1967 and March 31, 1986 are assumed to be ineligible for premium-free Medicare Part A coverage.



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Fewer than 30 quarters of Medicare-covered employment is assumed for those ineligible for premium-free Medicare Part A.

The most common Medicare Part B premiums (\$164.90/month in 2023, \$174.70/month in 2024) are assumed for future Medicare enrollees.

Spouse Coverage

30 years of service at retirement: 80% of male retirees and 50% of female retirees cover a spouse.

All others: 35% of male retirees and 15% of female retirees cover a spouse.

Female spouses are assumed to be 2 years younger than male spouses.

(Prior assumption –

30 years of service at retirement: 80% of male retirees and 50% of female retirees cover a spouse.

All others: 35% of male retirees and 15% of female retirees cover a spouse.

Male members are assumed to be 3 years older than their spouses and female members are assumed to be 2 years younger than their spouses.)

Supplemental Life Insurance

Based on current election.



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Demographic Assumptions –Turnover, Disablement, Salary Merit and Longevity Increases, Retirement, Mortality

Assumptions are based on the Marin County Employees’ Retirement Association 2020-2023 Experience Study except for the allowance for future mortality improvement, which is based on a more recent mortality projection scale (MP-2021) developed by the Society of Actuaries.

The prior assumptions (used in the July 1, 2021 valuation) were based on the Marin County Employees’ Retirement Association 2017-2020 Experience Study except for the allowance for future mortality improvement, which is based on a more recent mortality projection scale (MP-2021) developed by the Society of Actuaries. See July 1, 2021 actuarial valuation report for this plan for more details.

Terminations

Service	Rates of Termination	
	Miscellaneous	Safety
0	14.00%	10.00%
1	13.00%	8.00%
2	12.00%	6.00%
3	9.50%	6.00%
4	8.25%	5.00%
5	7.50%	4.50%
6	6.75%	4.00%
7	6.25%	3.50%
8	5.75%	3.00%
9	5.25%	2.75%
10	5.00%	2.50%
11	4.75%	2.00%
12	4.50%	1.75%
13	4.25%	1.50%
14	4.00%	1.25%
15	3.50%	1.00%
16	3.25%	1.00%
17	3.00%	1.00%
18	2.75%	1.00%
19	2.50%	1.00%
20+	1.00%	0.00%

Termination rates do not apply once a member is eligible for retirement.



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Disability

Miscellaneous: 2017 CalPERS Public Agency Miscellaneous Ordinary Disability rates for males and females without adjustment.

Safety: 2017 CalPERS Peach Officers and Fire Fighter Industrial and Ordinary Disability rates, multiplied by 120%.

75% of all Miscellaneous and 100% of all Safety disabilities are assumed to be service-connected.

Salary Merit and Longevity Increases

Service	Miscellaneous	Safety
0	6.00%	5.25%
1	6.00%	5.25%
2	5.00%	5.00%
3	4.00%	4.75%
4	3.00%	4.50%
5	2.25%	2.25%
6	1.75%	1.75%
7	1.40%	1.25%
8	1.20%	1.25%
9	1.00%	1.25%
10	0.85%	1.25%
11	0.85%	1.25%
12	0.85%	1.25%
13	0.85%	1.25%
14	0.85%	1.25%
15	0.85%	1.25%
16	0.85%	1.25%
17+	0.50%	1.25%



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Retirement

Retirement rates do not apply until a member is eligible for retirement.

Age	Miscellaneous (by service)			Safety (by service)		
	Classic and PEPRAs			Classic 3%@50		
	<20	20-29	30+	<20	20-29	30+
40-48	n/a	n/a	n/a	n/a	3.00%	50.00%
49	n/a	n/a	n/a	n/a	15.00%	50.00%
50	3.00%	3.00%	3.00%	5.00%	15.00%	50.00%
51	3.00%	3.00%	3.00%	5.00%	10.00%	50.00%
52	3.00%	3.00%	3.00%	5.00%	10.00%	50.00%
53	5.00%	5.00%	10.00%	10.00%	10.00%	50.00%
54	5.00%	5.00%	15.00%	10.00%	10.00%	50.00%
55	5.00%	10.00%	15.00%	10.00%	25.00%	50.00%
56	5.00%	10.00%	15.00%	10.00%	30.00%	50.00%
57	5.00%	10.00%	15.00%	10.00%	35.00%	50.00%
58	5.00%	10.00%	15.00%	10.00%	40.00%	50.00%
59	5.00%	10.00%	15.00%	10.00%	45.00%	50.00%
60	10.00%	10.00%	30.00%	50.00%	50.00%	50.00%
61	10.00%	10.00%	30.00%	50.00%	50.00%	50.00%
62	12.00%	20.00%	30.00%	50.00%	50.00%	50.00%
63	14.00%	20.00%	30.00%	50.00%	50.00%	50.00%
64	16.00%	20.00%	30.00%	50.00%	50.00%	50.00%
65	18.00%	20.00%	30.00%	100.00%	100.00%	100.00%
66	20.00%	30.00%	30.00%	100.00%	100.00%	100.00%
67	20.00%	30.00%	30.00%	100.00%	100.00%	100.00%
68	20.00%	30.00%	30.00%	100.00%	100.00%	100.00%
69	20.00%	30.00%	30.00%	100.00%	100.00%	100.00%
70	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
71	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
72	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
73	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
74	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
75	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
76	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
77	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
78	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
79	25.00%	30.00%	30.00%	100.00%	100.00%	100.00%
80+	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Age	Safety (by service)					
	Classic 3%@55			PEPRA 2.7%@57 (2017 CalPERS 2.7%@57)		
	<20	20-29	30+	15	20	25
45-49	n/a	8.00%	50.00%	n/a	n/a	n/a
50	2.00%	8.00%	50.00%	5.00%	5.00%	5.00%
51	2.00%	8.00%	50.00%	4.00%	4.00%	5.75%
52	2.00%	8.00%	50.00%	3.80%	3.80%	5.80%
53	2.00%	8.00%	50.00%	3.80%	3.80%	7.74%
54	2.00%	8.00%	50.00%	3.80%	4.37%	9.31%
55	10.00%	40.00%	50.00%	6.84%	9.12%	13.40%
56	10.00%	15.00%	50.00%	6.27%	8.36%	12.28%
57	10.00%	15.00%	50.00%	6.00%	8.00%	11.75%
58	10.00%	15.00%	50.00%	8.00%	8.80%	13.75%
59	10.00%	15.00%	50.00%	8.00%	9.20%	14.00%
60	10.00%	15.00%	50.00%	15.00%	15.00%	15.00%
61	10.00%	15.00%	50.00%	14.40%	14.40%	14.40%
62	10.00%	15.00%	50.00%	15.00%	15.00%	15.00%
63	10.00%	15.00%	50.00%	15.00%	15.00%	15.00%
64	10.00%	15.00%	50.00%	15.00%	15.00%	15.00%
65+	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%



SECTION 6
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Mortality

Pre-retirement:

Miscellaneous: Sex distinct Public 2010 General Employee Amount-Weighted Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, with no adjustments.

Safety: Sex distinct Public 2010 Safety Employee Amount-Weighted Above-Median Income Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, with no adjustments.

Post-retirement for Service Retirees:

Miscellaneous: Sex distinct Public 2010 General Healthy Retiree Amount-Weighted Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, with no adjustments.

Safety: Sex distinct Public 2010 Safety Healthy Retiree Amount-Weighted Above-Median Income Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, with no adjustments.

Post-retirement for Disabled Retirees:

Miscellaneous: Sex distinct Public 2010 General Disabled Retiree Amount-Weighted Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, adjusted by 95% for males and females.

Safety: Sex distinct Public 2010 Safety Disabled Retiree Amount-Weighted Mortality Table, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, adjusted by 95% for males with no adjustments for females.

Post-retirement for Beneficiaries:

Sex distinct Public 2010 Contingent Survivor Amount-Weighted Mortality Table, using General 2010 Healthy Retiree Amount-Weighted Mortality Table before age 45, with generational mortality improvements projected from 2010 using Projection Scale MP-2021, adjusted by 105% for females and no adjustments for males.

Sample life expectancies are shown below.

7/1/2023 Age	Miscellaneous				Safety			
	Service		Disability		Service		Disability	
	Male	Female	Male	Female	Male	Female	Male	Female
50	35.5	38.5	26.9	29.9	36.9	38.1	34.7	36.3
55	30.6	33.5	23.4	26.2	31.8	33.0	29.8	31.5
60	25.9	28.6	20.2	22.8	26.9	28.0	25.1	26.8
65	21.4	23.9	17.2	19.5	22.2	23.4	20.7	22.5
70	17.2	19.3	14.3	16.1	17.8	18.9	16.6	18.3
75	13.2	15.1	11.5	12.7	13.8	14.8	12.8	14.4
80	9.7	11.3	8.8	9.7	10.2	11.2	9.6	10.9
85	6.9	8.0	6.6	7.3	7.3	8.1	6.9	7.8

